

# **Master of Business Administration (MBA)**

**CHOICE BASED CREDIT SYSTEM (CBCS)**

**Curriculum and Syllabus  
Regular (2023 – 2024)**



**DEPARTMENT OF MANAGEMENT  
FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT (FASCM)**

**KARPAGAM ACADEMY OF HIGHER EDUCATION  
(Deemed to be University)  
(Established Under Section 3 of UGC Act, 1956)  
(Accredited with A+ Grade by NAAC in the Second cycle)  
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## **FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT (FASCM) POST- GRADUATE PROGRAMME (MBA) (REGULAR PROGRAMME)**

### **REGULATIONS**

**(2023)**

### **CHOICE BASED CREDIT SYSTEM (CBCS)**

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**Coimbatore - 641 021, Tamil Nadu, India**

## **FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT POST-GRADUATE PROGRAMME (MBA DEGREE PROGRAMME)**

### **REGULAR MODE CHOICE BASED CREDIT SYSTEM (CBCS)**

#### **REGULATIONS - 2023**

The following regulations are effective from the academic year 2023 -2024 and are applicable to the candidates admitted in MBA Degree programme in the Faculty of Arts, Science, Commerce and Management, Karpagam Academy of Higher Education (KAHE).

#### **1 PROGRAMMES OFFERED, MODE OF STUDY AND ADMISSION REQUIREMENTS**

##### **1.1 MODE OF STUDY**

###### **Full-Time**

All programmes are offered under Full-Time Regular mode. Candidates admitted under 'Full-Time' should be present in the KAHE during the complete working hours for curricular, co-curricular and extra-curricular activities assigned to them.

##### **1.2 ADMSSION REQUIREMENTS (ELIGIBILITY)**

A candidate for admission to the first semester Master's Degree Programme shall be required to have passed an appropriate Degree Examination of this Karpagam Academy of Higher Education or any other University accepted by the KAHE as equivalent thereto. Admission shall be offered only to the candidates who possess the qualification prescribed against each course as given in the table below.

#### **QUALIFICATIONS FOR ADMISSION**

<b>S. No.</b>	<b>Name of the Programme Offered</b>	<b>Eligibility</b>
1	MBA	Any UG Degree

## 2 DURATION OF THE PROGRAMMES

2.1 The minimum and maximum period for completion of the P.G. Programmes are given below:

Programme	Min. No. of Semesters	Max. No. of Semesters
MBA	4	8

2.2 Each semester normally consists of 90 working days or 450 Instructional hours for full-time mode of study. Examination shall be conducted at the end of every semester for the respective courses.

## 3. CHOICE BASED CREDIT SYSTEM

3.1 MBA programmes is offered under Choice Based Credit System with a total credit of 102 for the programme.

### 3.2 Credits

Credits means the weightage given to each course of study by the experts of the Board of Studies concerned.

## 4 STRUCTURE OF THE PROGRAMME

Every Programme will have a curriculum and syllabus consisting of core courses, elective courses, open elective, Internship and project work.

### a. Core course

Core course consists of theory and practical and the examinations shall be conducted at the end of each semester.

### b. Elective course

Elective courses are to be chosen with the approval of the Head of Department concerned from the list of elective courses mentioned in the curriculum.

Specializations are offered in ten functional areas.

- They are Finance, Marketing, Human Resources, Management information systems, Operations Management, Business Analytics, Entrepreneurship, Logistics and Supply Chain Management, Tourism Management and Event Management, Infrastructure and Real Estate Management.
- A candidate has to select any two specialization of his/her choice.
- Each specialization consists of five electives each specialization in third semester and fourth semester respectively.
- A candidate has to select three electives in the third and two electives in fourth semester.

### c. Project Work

The candidates shall undertake the project work in the Fourth Semester either in the Department concerned or in Industries, Research Institute or any other Organizations (National / International) and the project report has to be submitted at the end of the fourth semester.

In case the candidate undertakes the project work outside the Department, the teacher concerned within the Department shall be the Main guide and the teacher/scientist under whom the work is carried out will be the Co-guide. The candidate shall bring the attendance certificate from the place where the project work carried out.

#### **d. Value Added Courses**

Courses of varying durations but not less than 30 hours which are optional and offered outside the curriculum that add value and help the students in getting placement. Students of all programmes are eligible to enroll for the Value Added Courses. The student shall choose one Value Added Course per semester from the list of Value Added Courses available in KAHE. The examinations shall be conducted at the end of the Value Added Course at the Department level and the student has to secure a minimum of 50% of marks to get a pass. The certificate for the Value Added Course for the passed out students shall be issued duly signed by the HOD and Dean of the Faculty concerned.

#### **e. Internship**

The student shall undergo 15 days internship in the end of second semester. Internship report will be evaluated and marks will be awarded in the third semester. Students have to earn 2 credits for the Internship. 100 marks are awarded for Internship through Continuous Internal Assessment.

#### **f. Open Elective**

He / She may select one of the open elective courses from the list given below offered by other departments in the third semester. Students have to earn 02 credits for this course. (The student cannot select a course offered by the parent department).

<b>S.No.</b>	<b>Name of the Department</b>	<b>Course Code</b>	<b>Name of the Course</b>
1	English	23EGPOE301	English for Competitive Examinations
2	Commerce	23CMPOE301	Personal Finance and Planning
3	Management	23MBAPOE301	Organizational Behavior
4	Computer Applications	23CAPOE301	Robotics Process Automation
5	Computer Science	23CSPOE301	Cyber Forensics
6	Mathematics	23MMPOE301	Coding theory
7	Physics	23PHPOE301	Material Characterization

8	Chemistry	23CHPOE301	Chemistry in Everyday Life
9	Microbiology	23MBPOE301	Fermentation Technology
10	Biochemistry	23BCPOE301	Nutrition and Dietetics
11	Biotechnology	23BTPOE301	Sericulture

### **Online Course**

Student shall study at least one online course from SWAYAM / NPTEL / MOOC in any one of the first three semesters for which examination shall be conducted at the end of the course by the respective external agencies if any. The student can register to the courses which are approved by the Department. The student shall produce a Pass Certificate from the respective agencies before the end of the third semester. The credit(s) earned by the students will be considered as additional credit(s) over and above the credits minimum required to earn a particular Degree.

## **5 MEDIUM OF INSTRUCTION**

The medium of instruction for all courses, examinations, seminar presentations and project/thesis/dissertation reports should be in English.

## **6 MAXIMUM MARKS**

The maximum marks assigned to different courses shall be as follows:

- (i) Each of the theory and practical courses shall carry maximum of 100 marks. Out of which 40 marks are for Continuous Internal Assessment (CIA) and 60 marks for End Semester Examinations (ESE).

### **(ii) Maximum Marks for Project work**

S. No	Programme	Maximum Marks	CIA	ESE
1	MBA	200	80	120

## **7 a. FACULTY MENTOR**

To help students in planning their courses of study and for general advice on the academic programme, the HoD shall allot a certain number of students to a faculty who will function as mentor throughout their period of study. Faculty mentors shall advise the students and monitor their behavior and academic performance. Problems if any shall be counseled by them periodically. The Faculty mentor is also responsible to inform the parents of their wards progress. Faculty mentor shall display the cumulative attendance particulars of his / her ward students' periodically (once in 2 weeks) on the Notice Board to enable the students to know their attendance status and satisfy the **clause 7** of this regulation.

## **b. ONLINE COURSE COORDINATOR**

To help students in planning their online courses and for general advice on online courses, the HOD shall nominate a coordinator for the online courses. The Online course coordinator shall identify the courses which the students can select for their programme from the available online courses offered by different agencies periodically and inform the same to the students. Further, the coordinators shall advise the students regarding the online courses and monitor their course.

## **8 CLASS COMMITTEE**

Every class shall have a Class Committee consisting of teachers of the class concerned, student representatives (Minimum two boys and 2 girls of various capabilities and Maximum of 6 students) and the concerned HoD / senior faculty as a Chairperson. The objective of the class committee Meeting is all about the teaching – learning process. Class Committee shall be convened at least once in a month. The functions of the Class Committee shall include

1. The class committee shall be constituted during the first week of each semester.
2. The Class Committee of a particular class of any department is normally constituted by the HoD/Chairperson of the Class Committee. However, if the students of different departments are mixed in a class, the Class Committee shall be constituted by the respective Dean of the Faculty.
3. The HoD/Chairperson of the Class committee is authorized to convene the meeting of the class committee.
4. The respective Dean of the Faculty has the right to participate in any Class committee meeting.
5. The Chairperson is required to prepare the minutes of every meeting, and submit the same to the Dean concerned within two days after having convened the meeting. Serious issues if any shall be brought to the notice of the Registrar by the HoD/Chairperson immediately.
6. Analyzing and solving problems experienced by students in the class room and in the laboratories.
7. Analyzing the performance of the students of the class after each test and finding the ways and means to improve the performance.

## **9 COURSE COMMITTEE FOR COMMON COURSES**

Each common theory course offered to more than one discipline or group shall have a “Course Committee” comprising all the teachers handling the common course with one of them nominated as course coordinator. The nomination of the course coordinator shall be made by the Dean depending upon whether all the teachers handling the common course belong to a single department or to various other departments. The ‘Course Committee’ shall meet in order to arrive at a common scheme of

evaluation for the tests to ensure a uniform evaluation of the tests. If feasible, the course committee shall prepare a common question paper for the Internal Assessment test(s).

## **10 REQUIREMENTS TO APPEAR FOR THE END SEMESTER EXAMINATION**

- a. Ideally every student is expected to attend all classes and secure 100% attendance. However, in order to allow for certain unavoidable circumstances, the student is expected to attend at least 75% of the classes and the conduct of the candidate should be satisfactory during the course.
- b. A candidate who has secured attendance between 65% and 74% (both included), due to medical reasons (Hospitalization / Accident / Specific Illness) or due to participation in University / District / State / National / International level sports or due to participation in Seminar / Conference / Workshop / Training Programme / Voluntary Service / Startup Activity / Extension activities or similar programmes with prior permission from the Registrar shall be given exemption from prescribed minimum attendance requirements and shall be permitted to appear for the examination on the recommendation of the Head of Department concerned and Dean to condone the shortage of attendance. The Head of Department has to verify and certify the genuineness of the case before recommending to the Dean concerned. However, the candidate has to pay the prescribed condonation fee to KAHE.
- c. However, a candidate who has secured attendance less than 65% in the current semester due to any reason shall not be permitted to appear for the current semester examinations. But he/she will be permitted to appear for his/her supplementary examinations, if any and he/she has to re-do the same semester with the approval of the Dean, Students Affairs and Registrar.

## **11 PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT**

- 11.1 Every Faculty is required to maintain an **Attendance and Assessment Record (Log book)** which consists of attendance of students marked for each lecture/practical/ project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the HoD once in a week for checking the syllabus coverage, records of test marks and attendance. The HoD shall sign with date after due verification. The same shall be submitted to respective Dean once in a fortnight. After the completion of the semester the HoD should keep this



record in safe custody for five years as records of attendance and assessment shall be submitted for inspection as and when required by the KAHE/any other approved body.

- 11.2 **Continuous Internal Assessment (CIA):** The performance of students in each course will be continuously assessed by the respective faculty. The Retest will be conducted and considered based on the requirements and recommendations by the Head of the Department. The guidelines for the Continuous Internal Assessment (CIA) are given below:

#### **Theory Courses**

<b>S. No.</b>	<b>Category</b>	<b>Maximum Marks</b>
1	Attendance	5
2	Test – I (first 2 ½ units)	10
3	Test – II (last 2 ½ units)	10
4	Journal Paper Analysis & Presentation*	15
<b>Continuous Internal Assessment : Total</b>		<b>40</b>

\*Evaluated by two faculty members of the department concerned. Distribution up of marks for one Journal paper analysis: Subject matter 5 marks, Communication/PPT Presentation 4 marks, Visual aid 2 marks and Question and Discussion 4 marks

#### **Practical Courses**

<b>S. No.</b>	<b>Category</b>	<b>Maximum Marks</b>
1	Attendance	5
2	Observation work	5
3	Record work	5
4	Model practical examination	15
5	<i>Viva – voce</i> [Comprehensive]*	10
<b>Continuous Internal Assessment: Total</b>		<b>40</b>

\* *Viva - voce* conducted during model practical examination.

Every practical Exercise / Experiment shall be evaluated based on the conduct of Exercise/ Experiment and records maintained.

### 11.3 Pattern of Test Question Paper

Instruction	Remarks
Maximum Marks	50 marks
Duration	2 Hours
Part – A	15 One mark Questions ( <b>15 x 1 = 15 Marks</b> ) Question No. 1 to 15 Multiple Choice Questions
Part- B	3 Eight mark Questions ( <b>3 x 8 = 24 Marks</b> ) Question No. 16 to 18 will be ‘either-or’ type, Question No. 16: either 16 (a) or 16(b), Question No. 17: either 17 (a) or 17(b), Question No. 18: either 18 (a) or 18 (b)
Part- C Compulsory	One Eleven marks Question ( <b>1 x 11 = 11 Marks</b> ) Question No.19: <b>Case Study</b>

### 11.4 Attendance

#### Marks Distribution for Attendance

S. No.	Attendance (%)	Maximum Marks
1	91 and above	5.0
2	81 - 90	4.0
3	76 - 80	3.0
4	Less than or equal to 75	0

## 12 ESE EXAMINATIONS

**12.1 End Semester Examination (ESE):** ESE will be held at the end of each semester for each course. The question paper is for a maximum of 60 marks.

#### Pattern of ESE Question Paper

Instruction	Remarks
Maximum Marks	60 marks for ESE
Duration	3 hours (½ Hr for Part – A Online & 2 ½ Hours for Part – B, C and D)

Part – A	20 Questions of 1 mark each (20 x 1 = 20 Marks ) Question No. 1 to 20 Online Multiple Choice Questions
Part- B	5 Two Mark Questions ( <b>5 x 2 =10 Marks</b> ) Question No. 21 to 25 will be compulsory questions, covering all five UNITS of the syllabus; i.e., Question No. 21: UNIT -I, Question No. 22: UNIT - II, Question No. 23: UNIT - III, Question No. 24: UNIT -IV, Question No. 25: UNIT –V.
Part- C	4 Five mark Questions ( <b>4 x 5 =20 Marks</b> ) Question No. 26 to 29 will be ' <b>either-or</b> ' type, one Question each from any four UNITS of the syllabus; i.e., Question No. 26: either 26 (a) or 26(b), Question No. 27: either 27 (a) or 27(b), Question No. 28: either 28 (a) or 28(b), Question No. 29: either 29 (a) or 29 (b)
Part- D Compulsory	One Ten marks Question ( <b>1 x 10 = 10 Marks</b> ) Question No.30: <b>Case Study</b> from the remaining one UNIT

**12.2 Practical:** There shall be combined valuation. The pattern of distribution of marks shall be as given below.

Experiments	: 40 Marks
Record	: 10 Marks
<i>Viva-voce</i>	: 10 Marks
<b>Total</b>	<b>: 60 Marks</b>

### **Record Notebooks for Practical Examination**

Candidate taking the Practical Examination should submit Bonafide Record Notebook prescribed for the practical examination, failing which the candidate will not be permitted to take the practical examination.

In case of failures in Practical Examination, the marks awarded for the Record at the time of first appearance of the Practical Examination shall remain the same at the subsequent appearance also by the candidate.

### **12.3 Evaluation of Project Work**

12.3.1. The project shall carry a maximum marks as per clause 6 (ii). ESE will be a combined evaluation of Internal and External Examiners.

12.3.2. The project report prepared according to the approved guidelines and

duly signed by the supervisor(s) shall be submitted to HoD.

Guidelines to prepare the project report

- a. Cover page
- b. Bonafide certificate
- c. Declaration
- d. Acknowledgement
- e. Table of contents
- f. Chapters
  - Introduction
  - Aim and Objectives
  - Materials and Methods (Methodology)
  - Results (Analysis of Data) and Discussion (Interpretation)
  - Summary
  - References

12.3.3. The evaluation of the project will be based on the project report submitted and *Viva-Voce* Examination by a team consisting of the supervisor, who will be the Internal Examiner and an External Examiner who shall be appointed by the COE. In case the supervisor is not available, the HoD shall act as an Internal Examiner.

12.3.4. If a candidate fails to submit the project report on or before the specified date given by Examination Section, the candidate is deemed to be failed in the project work and shall re-enroll for the same in a subsequent semester.

If a candidate fails in the *viva-voce* examinations he/she has to resubmit the project report within 30 days from the date of declaration of the results. For this purpose the same Internal and External examiner shall evaluate the resubmitted report.

12.3.5. Copy of the approved project report after the successful completion of *viva voce* examinations shall be kept in the KAHE library.

### **13 PASSING REQUIREMENTS**

13.1 Passing minimum: There is a passing minimum 20 marks out of 40 marks for CIA and the passing minimum is 30 marks out of 60 marks in ESE. The overall passing in each course is 50 out of 100 marks (Sum of the marks in CIA and ESE examination).

13.2 If a candidate fails to secure a pass in a particular course (either CIA or ESE or Both) as per clause 13.1, it is mandatory that the candidate has to register and reappear for the examination in that course during the subsequent semester when examination is conducted for the same till he/she secures a pass both in CIA and ESE (vide Clause 2.1).

13.3 Candidate failed in CIA will be permitted to improve CIA marks in the subsequent semesters by writing tests and by re-submitting assignments.

- 13.4 CIA marks (if it is pass) obtained by the candidate in the first appearance shall be retained by the Office of the Controller of Examinations and considered valid for all subsequent attempts till the candidate secures a pass in ESE.
- 13.5 A candidate who is absent in ESE in a Course / Practical / Project work after having enrolled for the same shall be considered to have Absent (AAA) in that examination.

#### **14 IMPROVEMENT OF MARKS IN THE COURSE ALREADY PASSED**

Candidates desirous to improve the marks secured in a passed course in their first attempt shall reappear once (**only in ESE**) in the subsequent semester. **The improved marks shall be considered for classification but not for ranking.** If there is no improvement there shall be no change in the marks awarded earlier.

#### **15 AWARD OF LETTER GRADES**

All assessments of a course will be done on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain number of points, will be awarded as per the range of total marks (out of 100) obtained by the candidate in each course as detailed below:

<b>Letter grade</b>	<b>Marks Range</b>	<b>Grade Point</b>	<b>Description</b>
O	91 - 100	10	OUTSTANDING
A+	81- 90	9	EXCELLENT
A	71-80	8	VERY GOOD
B+	66- 70	7	GOOD
B	61 – 65	6	ABOVE AVERAGE
C	55 - 60	5	AVERAGE
D	50 - 54	4	PASS
RA	<50	-	REAPPEARANCE
AAA	-	-	ABSENT

#### **16 GRADE SHEET**

After the declaration of the results, Grade Sheets will be issued to each student which will contain the following details:

- The list of courses enrolled during the semester and the corresponding grade scored.
- The Grade Point Average (**GPA**) for the semester and
- The Cumulative Grade Point Average (**CGPA**) of all courses enrolled from first semester onwards.

### *GPA of a Semester*

$$= \frac{\text{sum of the product of the GP by the corresponding credits of the courses offered in that semester}}{\text{sum of the credits of the courses of that semester}}$$

GPA of a Semester and CGPA of a programme will be calculated as follows.

$$\text{i.e. GPA of a Semester} = \frac{\sum_i C_i G P_i}{\sum C_i}$$

### *CGPA of the entire programme*

$$= \frac{\text{sum of the product of the GPs by the corresponding credits of the courses offered for the entire programme}}{\text{sum of the credits of the courses of the entire programme}}$$

$$\text{i.e. CGPA of the entire programme} = \frac{\sum_n \sum_i C_{ni} G P_{ni}}{\sum_N \sum_i C_{ni}}$$

where,

$C_i$  is the credit fixed for the course 'i' in any semester

$G P_i$  is the grade point obtained for the course 'i' in any semester 'n' refers to the Semester in which such courses are credited

**Note:** RA grade will be excluded for calculating GPA and CGPA.

## 17 REVALUATION

Candidate can apply for revaluation or retotalling of his / her semester examination answer script (**theory courses only**), within 2 weeks from the date of declaration of results, on payment of a prescribed fee. For the same, the prescribed application has to be sent to the Controller of Examinations through the HoD. **A candidate can apply for revaluation of answer scripts not exceeding 5 courses at a time.** The Controller of Examinations will arrange for the revaluation and results will be intimated to the candidate through the HODs concerned. Revaluation is not permitted for supplementary theory courses.

## 18 TRANSPARENCY AND GRIEVANCE COMMITTEE

Revaluation and Re-totalling is allowed on representation (clause 17). Student may get the Xerox copy of the answer script on payment of prescribed fee, if he / she wish. The student may represent the grievance, if any, to the Grievance Committee, which consists of Dean of the Faculty, (if Dean is HoD, the Dean of another Faculty nominated by the KAHE), the HoD of

Department concerned, the faculty of the course and Dean from other discipline nominated by the KAHE and the CoE. If the Committee feels that the grievance is genuine, the script may be sent for external valuation; the marks awarded by the External examiner will be final. The student has to pay the prescribed fee for the same.

## **19 ELIGIBILITY FOR THE AWARD OF THE DEGREE**

**A student shall be declared to be eligible for the conferment of the Degree if he / she has**

- Successfully completed all the components in clause 3 and gained the required number of total credits as specified in the curriculum corresponding to his / her Programme within the stipulated period.
- Not any disciplinary action pending against him / her.
- The award of the degree must be approved by the Board of Management.

## **20 CLASSIFICATION OF THE DEGREE AWARDED**

**20.1** Candidate who qualifies for the award of the Degree (vide clause 13) having passed the examination in all the courses in his / her first appearance, within the specified minimum number of semesters and securing a **CGPA not less than 8.0** shall be declared to have passed the examination in **First Class with Distinction**.

**20.2** Candidate who qualifies for the award of the Degree (vide clause 13) having passed the examination in all the courses within the specified maximum number of semesters (vide clause 2.1), securing a **CGPA not less than 6.5** shall be declared to have passed the examination in **First Class**.

**20.3** All other candidates (not covered in clauses 20.1 and 20.2) who qualify for the award of the degree (vide Clause 19) shall be declared to have passed the examination in **Second Class**.

## **21 PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION**

**21.1** A candidate due to valid reason on prior application may be granted permission to withdraw from appearing for the examination of any one course or consecutive examinations of more than one course in a semester examination.

**21.2** Such withdrawal shall be permitted only once during the entire period of study of the degree programme.

**21.3** Withdrawal of application is valid only if it is made within 10 days prior to the commencement of the examination in that course or courses and

recommended by the HoD / Dean concerned and approved by the Registrar.

21.3.1 Notwithstanding the requirement of mandatory TEN days notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

21.4 Withdrawal shall not be construed as an appearance for the eligibility of a candidate for First Class with Distinction. This provision is not applicable to those who seek withdrawal during IV semester.

21.5 Withdrawal from the End semester examination is **NOT** applicable to arrears courses of previous semesters.

21.6 The candidate shall reappear for the withdrawn courses during the examination conducted in the subsequent semester.

## **22 PROVISION FOR AUTHORISED BREAK OF STUDY**

22.1 **Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme.** However, in extraordinary situation the candidate may apply for additional break of study not exceeding another one year by paying prescribed fee for break of study. If a candidate intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to rejoin the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Registrar, but not later than the last date for registering for the end semester examination of the semester in question, through the HoD stating the reasons therefore and the probable date of rejoining the programme.

22.2 The candidate thus permitted to rejoin the Programme after the break shall be governed by the Curriculum and Regulations in force at the time of rejoining. Such candidates may have to do additional courses as per the Regulations in force at that period of time.

22.3 The authorized break of study (for a maximum of one year) will not be counted for the duration specified for passing all the courses for the purpose of classification. (Vide Clause 20). However, additional break of study granted will be counted for the purpose of classification.

22.4 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 2.1 irrespective of the period of break of study (vide clause 22.3) in order that he/she may be eligible for the award of the degree.



22.5 If any student is detained for want of requisite attendance, progress and good conduct, the period spent in that semester shall not be considered as permitted 'Break of Study' or 'Withdrawal' (Clause 21 and 22) is not applicable for this case.

## **23 RANKING**

A candidate who qualifies for the PG Degree programme passing all the Examinations in the first attempt, within the minimum period prescribed for the programme of study from Semester I through Semester IV to the programme shall be eligible for ranking. Such ranking will be confined to 10% of the total number of candidates qualified in that particular programme of Study subject to a maximum of 10 ranks.

**The improved marks will not be taken into consideration for ranking.**

## **24 SUPPLEMENTARY EXAMINATION**

Supplementary Examination will be conducted only for the final semester students within ten days from the date of publication of results for students who have failed in one theory course only. Such students shall apply with prescribed fee to the Controller of Examinations within the stipulated time.

## **25 DISCIPLINE**

If a student indulges in malpractice in any of the Internal / External Examinations he / she shall be liable for punitive action as prescribed by the KAHE from time to time.

Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity which will tend to bring down the prestige of the KAHE. The erring students will be referred to the disciplinary committee constituted by the KAHE, to enquire into acts of indiscipline and recommend the disciplinary action to be taken.

## **26 REVISION OF REGULATION AND CURRICULUM**

Karpagam Academy of Higher Education may from time to time revise, amend or change the Regulations, Scheme of Examinations and syllabi if found necessary.

# Karpagam Innovation and Incubation Council (KIIC)

(A Section 8 Company)

Based on the 2019 National Innovation and Startup Policy and the 2019–2023 Tamil Nadu Startup Policy, KIIC has recommended to the KAHE students who are affiliated with the KIIC that it be incorporated in the university Program Regulations 2023-24 and implement from this academic year.

## Norms to Student Start-Ups

- a) Any (UG/PG / (Ph.D.) Research scholars, student, right from the first year of their program is allowed to set a startup (or) work part time/ full time in a startup or work as intern in a startup
- b) Any (UG/PG / (Ph.D.) Research scholars) student right from the first year of their program is allowed to earn credit for working on Innovative prototypes/business Models/ Pre incubation (case to case basis).
- c) Start Up activities will be evaluated based on the guidelines being given by the expert committee of the KIIC
- d) Student Entrepreneurs may use the address of incubation center (KIIC) to register their venture while studying in KAHE.
- e) Students engaged in startups affiliated with the KIIC or those who work for them may be exempted from KAHE's attendance requirements for academic courses under current regulations, up to a maximum of 30% attendance per semester, including claims for ODs and medical emergencies Potential Students who have been incubated at KIIC may be permitted to take their University semester exams even if their attendance is below the minimum acceptable percentage, with the proper authorization from the head of the institution.  
(On case-to-case basis depends upon the applicability strength, societal benefits and quality of the Innovation and Subsequent engagement of the students with the/ her business)
- f) Any Students Innovators/entrepreneurs are allowed to opt their startup in place mini project /major project, /seminar and summer training etc. (In plant training, Internship, value added Course.). The area in which the student wishes to launch a Startup may be interdisciplinary or multidisciplinary.
- g) Student's startups are to be evaluated by Expert committee, formed by KIIC and KAHE

## Guide lines to award Credits/ Marks to a Student startup

Student's startup stages are divided into five phases and these startup phases can be considered equally in place of the course title as mentioned below with the same credits allotted to the course title in a University curriculum.

Sl. No.	Description/Startup phases	In place of the Subject / Course title	Grades/Credits /Marks
1	Idea stage/Problem Identification	Seminar	Same Marks/Credits can be awarded that are listed in the course title's curriculum for the respective startup phases.
2	Proof of Concept (POC) /Solution development	In-plant training /Internship	
3	Product Development (Lab scale) /Prototype Model/ Company Registered	Mini Project/ Value added Course	
4	Validation/Testing	Main Project phase I	
5	Business Model/Ready for Commercialization/Implementation	Main Project phase II,	

## **PROGRAM OUTCOMES**

### **On successful completion of the programme the students attains**

- a. Postgraduate students will be able to acquire in-depth management and functional domain knowledge with an ability to differentiate, evaluate, analyze existing knowledge and apply the new knowledge relevant to the changing business environment.
- b. Postgraduate students will be able to analyze complex business problems critically by applying intellectual and creative developments gained through research based or project based approach of learning.
- c. Postgraduate's students will be able to excerpt information from various sources and apply appropriate management techniques and tools to analyze and interpret data demonstrating a higher order thinking skill.
- d. Postgraduates will communicate day-to-day managerial activities confidently and effectively in written and oral communication in the organisation and society at large.
- e. Postgraduates will possess knowledge and understanding of working in teams in order to achieve common goals to exhibit their leadership skills.
- f. Postgraduates will acquire managerial positions or take up entrepreneurial ventures by applying the skills and knowledge gained.
- g. Postgraduates will be able to evaluate the implications of changing environmental factors in global perspective and cross cultural issues that affect the functioning of the organization.
- h. Postgraduates will acquire professional and intellectual integrity, professional code of conduct, ethics and values to contribute for sustainable development of society by becoming socially responsible citizen.

### **PROGRAMME SPECIFIC OUTCOMES (PSO)**

- i. Postgraduates will develop lateral thinking and conceptualization of functional knowledge and put into consideration ethics, safety, diversity, cultural, society and environmental factors while evaluating potential solutions options to solve managerial problems.
- j. Postgraduates will apply the lifelong learning and exhibit high level of commitment to identify a timely opportunity and use business innovation to pursue that

opportunity to create value and wealth for the betterment of the individual and society at large.

### **PROGRAMME EDUCATIONAL OBJECTIVES (PEO)**

- I. Postgraduates will acquire knowledge of management science and apply it to solve the real-time business problems.
- II. Postgraduates will attain professional skills to develop and communicate strategic, creative and innovative ideas to excel in diverse career path.
- III. Postgraduates will be able to apply the management tools and techniques to implement systematic decision making process.
- IV. Postgraduates will be able to adapt to a rapidly changing global environment and become socially responsible and value driven citizens committed to sustainable growth.

### **MAPPING OF PEOs and POs**

Program Educational Objectives	Programme Outcomes									
	a	b	c	d	e	f	g	h	i	J
Postgraduates will acquire knowledge of management science and apply it to solve the real-time business problems.	√					√			√	√
Postgraduates will attain professional skills to develop and communicate strategic, creative and innovative ideas to excel in diverse career path.		√	√	√	√	√			√	√
Postgraduates will be able to apply the management tools and techniques to implement systematic decision making process.		√	√	√					√	√
Postgraduates will be able to adapt to a rapidly changing global environment and become socially responsible and value driven citizens committed to sustainable growth.							√	√	√	√

**DEPARTMENT OF MANAGEMENT**  
**FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT (FASCM)**  
**PG PROGRAMME (CBCS)**  
**MASTER OF BUSINESS ADMINISTRATION (M.B.A)**  
**(2023–2024 Batch and onwards)**

Course Code	Name of the Course	Objectives and Outcomes		Instruction hours / week			Credit(s)	Maximum Marks			Page Number
		PEOs	POs	L	T	P		CIA	ESE	Total	
								40	60	100	
SEMESTER – I											
23MBAP101	Fundamentals of Management	I,II	a,b,c,d,e,f,i,j	4	0	0	4	40	60	100	17
23MBAP102	Organizational Behaviour	I,II	a,b,c,d,e,f,i,j	4	0	0	3	40	60	100	20
23MBAP103	Managerial Economics	I,II,I II,IV	a,b,d,e,f,g,i,j	4	0	0	3	40	60	100	23
23MBAP104	Legal Aspects of Business	I,II,I V	a,c,d,f,g,h,i,j	4	0	0	3	40	60	100	27
23MBAP105	Accounting for Managers	I,II,I V	a,b,c,d,e,f,h,i,j	4	1	0	4	40	60	100	30
23MBAP106	Data Driven Decision Making	I,III	a,b,c,d,e,f,i,j	4	1	0	4	40	60	100	33
23MBAP111	IT Tools for Managers (Practical)	I,II,I II	a,b,c,d,f,i,j	0	0	4	2	40	60	100	36
23MBAP112	BusinessCommuni cation(Practical)	I,II,I II,IV	a,b,c,d,e,f,g,i,j	0	0	2	1	50	0	50	39
23MBAP113	Team Building and Leadership skills (Practical)	I,II	a,b,c,d,e,f,i,j	0	0	2	1	50	0	50	42

Course Code	Name of the Course	Objectives and		Instruction hours /				Cre dit(s)	Maximum Marks			Page Num
	Journal paper Analysis and Presentation	I,II	a,b,c, d,j	1	0	0	0	0	0	0	0	
<b>Semester Total</b>				<b>25</b>	<b>2</b>	<b>8</b>	<b>25</b>	<b>380</b>	<b>420</b>	<b>800</b>		
<b>SEMESTER – II</b>												
23MBAP201	Production and Operations Management	I,II,II I,IV	a,b,c, d,e,f, g,h,i, j	4	0	0	3	40	60	100	45	
23MBAP202	Marketing Management	I,II,II I,IV	a,b,c, d,e,f, g,h,i, j	4	0	0	4	40	60	100	48	
23MBAP203	Human Resource Management	I,II,II I,IV	a,b,c, d,e,f, g,h,i, j	4	0	0	4	40	60	100	51	
23MBAP204	Operations Research	I,II,II I	a,b,c, d,e,f, i,j	4	1	0	4	40	60	100	54	
23MBAP205	Financial Management	I,II,II I,IV	a,b,c, d,e,f, g,h,i, j	4	0	0	4	40	60	100	57	
23MBAP206	Research Methodology for Management	I,II,II I,IV	a,b,c, d,e,f, g,h,i, j	4	0	0	4	40	60	100	60	
23MBAP207	Management Information System	I,II,I V	a,f,g, h,i,j	3	0	0	3	40	60	100	63	
23MBAP211	Decision Making Using Statistical Package (Practical)	I,II,II I	a,b,c, d,f,i, j	0	0	4	2	40	60	100	66	
23MBAP212	Campus to Corporate Communication (Practical)	I,II,II I	a,b,c, d,f,i, j	0	0	2	1	50	0	50	68	
-	Journal paper Analysis and Presentation	I,II	a,b,c, d,j	1	0	0	0	0	0	0		

Course Code	Name of the Course	Objectives and		Instruction hours /			Credits	Maximum Marks			Page Num
Semester Total				28	1	6	29	370	480	850	
SEMESTER – III											
23MBAP301	Entrepreneurship Development	I,II,II I,IV	a,b,c ,d,f,g ,h,i,j	4	0	0	4	40	60	100	71
23MBAP302	International Business	I,II,II I,IV	a,c,d ,f,g,h ,i,j	3	0	0	3	40	60	100	74
	Specialization I Elective 1			4	0	0	3	40	60	100	
	Specialization I Elective 2			4	0	0	3	40	60	100	
	Specialization I Elective 3			4	0	0	3	40	60	100	
	Specialization II, Elective 1			4	0	0	3	40	60	100	
	Specialization II Elective 2			4	0	0	3	40	60	100	
	Specialization II Elective 3			4	0	0	3	40	60	100	
23XXXPOE 301	Open Elective			3	0	0	2	40	60	100	
23MBAP321	Internship	I,II,II I,IV	a,b,c ,d,e,f ,g,h,j	0	0	0	2	40	60	100	241
-	Journal paper Analysis, and Presentation	I,II	a,b,c ,d,j	1	0	0	0	0	0	0	
Semester Total				35	0	0	29	400	600	1000	
SEMESTER – IV											
23MBAP401	Business Strategy	I,II,II I,IV	a,b,c, d,e,f,, g,h,j	4	0	0	3	40	60	100	244
	Specialization I Elective 4			4	0	0	3	40	60	100	
	Specialization II Elective 4			4	0	0	3	40	60	100	
23MBAP403	Indian Ethos, Values and Business Ethics	I,II,I V	a,f,g, h,i,j	2	0	0	1	50	0	50	331

Course Code	Name of the Course	Objectives and	Instruction hours /	Credits	Maximum Marks	Page Num
23MBAP491	Capstone Project	I,II,II I,IV	a,b,c, d,e,f,, g,h,j	0 0 20	9 80 120 200	334
-	Journal paper Analysis and Presentation	I,II	a,b,c, d,j	1 0 0	0 0 0	-
<b>Semester Total</b>				<b>15 0 20</b>	<b>19 250 300 550</b>	<b>-</b>
<b>Programme Total</b>				<b>100 4 36</b>	<b>102 1400 1800 3200</b>	<b>-</b>

Category		SEME STER I	SEMESTER II	SEMESTER III	SEMESTE R IV	TOTA L
Programme Core Courses	Credit(s)	23	28	7	3	61
	No. of Courses	7	8	2	1	18
Programme Elective Courses (Specialization 1)	Credit(s)	-	-	9	3	12
	No. of Courses	-	-	3	1	4
Programme Elective Courses (Specialization 2)	Credit(s)	-	-	9	3	12
	No. of Courses	-	-	3	1	4
Employability Enhancement Courses	Credit(s)	2	1	2	10	15
	No. of Courses	2	1	1	2	6
Open Elective	Credit(s)	-	-	2	-	2
	No. of Courses	-	-	1	-	1
<b>TOTAL</b>	Credit(s)	<b>25</b>	<b>29</b>	<b>29</b>	<b>19</b>	<b>102</b>
	No. of Courses	<b>9</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>33</b>



<b>SPECIALISATION OFFERED</b>	<b>NO.OF COURSES IN BASKET</b>	<b>COURSES IN SEMESTER 3</b>	<b>COURSES IN SEMESTER 4</b>	<b>CREDIT(S)</b>
<b>Finance</b>	8	3	1	12
<b>Marketing Management</b>	8	3	1	12
<b>Human Resource Management</b>	8	3	1	12
<b>Management Information System</b>	8	3	1	12
<b>Operations Management</b>	8	3	1	12
<b>Entrepreneurship</b>	8	3	1	12
<b>Business Analytics</b>	8	3	1	12
<b>Logistics and Supply Chain Management</b>	8	3	1	12
<b>Tourism and Event Management</b>	8	3	1	12
<b>Infrastructure and Real Estate Management</b>	8	3	1	12

### ELECTIVE LIST - SEMESTER III

Semester	List of Specializations	Course Code	Name of the Elective Course	PEO	PO	Page No
III	Finance	23MBAPF303A	Investment Analysis and Portfolio Management	I,II,III,IV	a,b,c,d,e,f,g,j	77
		23MBAPF303B	Merchant Banking and Financial Services	I,II,IV	a,b,c,d,e,f,g,j	80
		23MBAPF303C	Financial Reporting – I	I,II,III,IV	a,b,c,d,e,f,g,i	83
		23MBAPF303D	Corporate Restructuring, Mergers and Acquisitions	I,II,III,IV	a,b,c,d,e,f,g,i	86
		23MBAPF303E	Behavioural Finance	I,II,III,IV	a,b,c,d,e,f,g,h,j	89
	Marketing Management	23MBAPM303A	Services Marketing	I,II,IV	a,b,c,d,e,f,g,i,j	92
		23MBAPM303B	Integrated Marketing Communication	I,II,IV	a,b,c,d,e,f,g,i,j	95
		23MBAPM303C	Retail Management	I,II,III,IV	a,b,c,d,e,f,g,j	98
		23MBAPM303D	Consumer Behaviour	I,II,III,IV	a,b,c,d,e,f,g,h,j	101
		23MBAPM303E	Marketing Research	I,II,III,IV	a,b,c,d,e,f,g,h,j	104

	<b>Human Resource Management</b>	23MBAPH303A	Human Resource Development	I,II,III,IV	a,b,c,d,e,f,g,h,i,j	107
		23MBAPH303B	Compensation Management	I,II,III,IV	a,b,c,d,e,f,g,h,i,j	110
		23MBAPH303C	Organizational Change and Development	I,II,III,IV	a,b,c,d,e,f,g,h,j	113
		23MBAPH303D	Performance Management and Appraisal	I,II,III,IV	a,b,c,d,e,f,g,h,j	116
		23MBAPH303E	Competency Mapping	I,II,III,IV	a,b,c,d,e,f,g,h,j	119
	<b>Management Information System</b>	23MBAPS303A	Enterprise Resource Planning	I,II,III	a,b,c,d,e,f,g,i,j	122
		23MBAPS303B	Managing Software Projects	I,II,III,IV	a,b,c,d,e,f,g,i,j	125
		23MBAPS303C	E-Commerce	I,II,III,IV	a,b,c,d,e,f,g,i,j	128
		23MBAPS303D	Information Security and Privacy	I,II,III,IV	a,b,c,d,e,f,g,i	131
		23MBAPS303E	Digital and Social Media Marketing	I,II,III,IV	a,b,c,d,e,f,g,i	134
	<b>Operations Management</b>	23MBAPO303A	Supply Chain Management	I,II,III,IV	a,b,c,d,e,f,g,h,i	137
		23MBAPO303B	Operations Strategy	I,II,III,IV	a,b,c,d,e,f,g,h,i	140
		23MBAPO303C	Total Quality Management	I,II,III,IV	a,b,c,d,e,f,g,h,i	143

		23MBAPO303D	Procurement Management	I,II,III,IV	a,b,c,d,e,f,g,h,i,j	146
		23MBAPO303E	Services Operations Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	149
	<b>Business Analytics</b>	23MBAPA303A	Human Resource Metrics and Analytics	I,II,III,IV	a,b,c,d,e,f,g,h,j	152
		23MBAPA303B	Marketing Analytics	I,II,III,IV	a,b,c,d,e,f,g,h,j	155
		23MBAPA303C	Big Data Analytics	I,II,III,IV	a,b,c,d,e,f,g,h,j	158
		23MBAPA303D	Financial Analytics	I,II,III,IV	a,b,c,d,e,f,g,h,j	161
		23MBAPA303E	Data Mining and Data warehousing	I,II,III,IV	a,b,c,d,e,f,g,h,j	163
	<b>Entrepreneurship</b>	23MBAPE303A	Managing Startups	I,II,III,IV	a,b,c,d,e,f,g,h,j	166
		23MBAPE303B	Social Entrepreneurship	I,II,III,IV	a,b,c,d,e,f,g,h,j	169
		23MBAPE303C	Financial Aspects in Entrepreneurship	I,II,III,IV	a,b,c,d,e,f,g,h,j	172
		23MBAPE303D	Innovation and Creativity in Business	I,II,III,IV	a,b,c,d,e,f,g,h,j	174
		23MBAPE303E	Family Business Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	176

	<b>Logistics and Supply Chain Management</b>	23MBAPL303A	Principles of Logistics and Supply Chain Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	179
		23MBAPL303B	Export and Import Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	181
		23MBAPL303C	Rail, Road and Air Cargo Logistics	I,II,III,IV	a,b,c,d,e,f,g,h,j	183
		23MBAPL303D	Procurement, Storage and Warehouse Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	186
		23MBAPL303E	Port and Airport Management for Logistics	I,II,III,IV	a,b,c,d,e,f,g,h,j	189
	<b>Tourism and Event Management</b>	23MBAPT303A	Tourism Principles, Policies and Practices	I,II,III,IV	a,b,c,d,e,f,g,h,j	192
		23MBAPT303B	Tourism Products of India	I,II,III,IV	a,b,c,d,e,f,g,h,j	194
		23MBAPT303C	Recreation Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	196
		23MBAPT303D	Travel Agency and Tour Operations	I,II,III,IV	a,b,c,d,e,f,g,h,j	199
		23MBAPT303E	Ecotourism	I,II,III,IV	a,b,c,d,e,f,g,h,j	201
	<b>Infrastructure and Real Estate</b>	23MBAPI303A	Infrastructure Planning Scheduling and Control	I,II,III,IV	a,b,c,d,e,f,g,h,j	203

	<b>Management</b>	23MBAPI303B	Contracts and Arbitration	I,II,III,IV	a,b,c,d,e,f,g,h,j	205
		23MBAPI303C	Project Management for Infrastructure	I,II,III,IV	a,b,c,d,e,f,g,h,j	207
		23MBAPI303D	Management of Human Resources, Safety and Quality	I,II,III,IV	a,b,c,d,e,f,g,h,j	210
		23MBAPI303E	Economics and Financial Management in Construction	I,II,III,IV	a,b,c,d,e,f,g,h,j	213

### ELECTIVE LIST - SEMESTER IV

Semester	List of Specializations	Course Code	Name of the Elective Course	PEO	PO	Page No
IV	Finance	23MBAPF402A	Financial Derivatives	I,II,III,IV	a,b,c,d,e,f,g,j	247
		23MBAPF402B	International Finance	I,II,IV	a,b,c,d,e,f,g,j	250
		23MBAPF402C	Financial Reporting – II	I,II,III,IV	a,b,c,d,e,f,g,i	253
	Marketing Management	23MBAPM402A	Product and Brands	I,II,IV	a,b,c,d,e,f,g,i,j	256
		23MBAPM402B	Sales and Distribution Management	I,II,IV	a,b,c,d,e,f,g,i,j	259
		23MBAPM402C	International Marketing	I,II,III,IV	a,b,c,d,e,f,g,j	262
	Human Resource Management	23MBAPH402A	Industrial Relations and Labour Welfare	I,II,III,IV	a,b,c,d,e,f,g,h,i,j	265
		23MBAPH402B	Strategic Human Resource Management	I,II,III,IV	a,b,c,d,e,f,g,h,i,j	268
		23MBAPH402C	International Human Resource Management	I,II,III,IV	a,b,c,d,e,f,g,h,j	271
	Management Information System	23MBAPS402A	System Analysis and Design	I,II,III	a,b,c,d,e,f,g,i,j	274
		23MBAPS402B	Knowledge Management	I,II,III,IV	a,b,c,d,e,f,g,i,j	277
		23MBAPS402C	Decision Support Systems	I,II,III,IV	a,b,c,d,e,f,g,i,j	280
	Operations Management	23MBAPO402A	Materials Management	I,II,III,IV	a,b,c,d,e,f,g,h,i	283
		23MBAPO402B	World Class Manufacturing	I,II,III,IV	a,b,c,d,e,f,g,h,i	286
		23MBAPO402C	Technology Management and Intellectual Property Right	I,II,III,IV	a,b,c,d,e,f,g,h,i	289
	Business Analytics	23MBAPA402A	Machine Language	I,II,III,IV	a,b,c,d,e,f,g,h,j	292
		23MBAPA402B	Data Visualization for	I,II,III,IV	a,b,c,d,e	295

			Managers – Using R and Tableau	V	f,g,h,j	
		23MBAPA402C	Supply Chain Analytics	I,II,III,I V	a,b,c,d,e, f,g,h,j	298
	<b>Entrepreneurship</b>	23MBAPE402A	Corporate Culture and Intrapreneurship	I,II,III,I V	a,b,c,d,e, f,g,h,j	301
		23MBAPE402B	Rural Entrepreneurship	I,II,III,I V	a,b,c,d,e, f,g,h,j	304
		23MBAPE402C	Indian Models of Economy, Business and Management	I,II,III,I V	a,b,c,d,e, f,g,h,j	307
	<b>Logistics and Supply Chain Management</b>	23MBAPL402A	Supply Chain Softwares	I,II,III,I V	a,b,c,d,e, f,g,h,j	310
		23MBAPL402B	Global Supply Chain Management	I,II,III,I V	a,b,c,d,e, f,g,h,j	312
		23MBAPL402C	Applied GIS and Spatial Data Analytics	I,II,III,I V	a,b,c,d,e, f,g,h,j	316
	<b>Tourism and Event Management</b>	23MBAPT402A	Event Management	I,II,III,I V	a,b,c,d,e, f,g,h,j	318
		23MBAPT402B	Healthcare Tourism	I,II,III,I V	a,b,c,d,e, f,g,h,j	319
		23MBAPT402C	Destination Marketing	I,II,III,I V	a,b,c,d,e, f,g,h,j	323
	<b>Infrastructure and Real Estate Management</b>	23MBAPI402A	Urban Environmental Management	I,II,III,I V	a,b,c,d,e, f,g,h,j	325
		23MBAPI402B	Real Estate Marketing and Management	I,II,III,I V	a,b,c,d,e, f,g,h,j	327
		23MBAPI402C	Valuation of Real Estate and Infrastructure Assets	I,II,III,I V	a,b,c,d,e, f,g,h,j	329

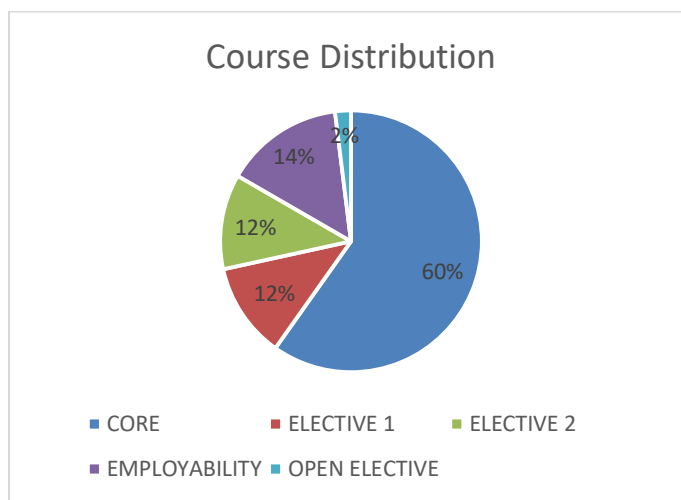


### OPEN ELECTIVE COURSES OFFERED BY OTHER DEPARTMENTS

S.No.	Name of the Department	Course Code	Name of the Open Elective Course	PEO	PO	Page No
1	English	23EGPOE301	English for Competitive Examinations	I,II,III, IV	a,b,c,d,e, f,g,h,j	215
2	Commerce	23CMPOE301	Personal Finance and Planning	I,II,III, IV	a,b,c,d,e, f,g,h,j	217
3	Management	23MBAPOE301	Organizational Behavior	I,II,III, IV	a,b,c,d,e, f,g,h,j	219
4	Computer Applications	23CAPOE301	Robotics Process Automation	I,II,III, IV	a,b,c,d,e, f,g,h,j	222
5	Computer Science	23CSPOE301	Cyber Forensics	I,II,III, IV	a,b,c,d,e, f,g,h,j	224
6	Mathematics	23MMPOE301	Coding theory	I,II,III, IV	a,b,c,d,e, f,g,h,j	226
7	Physics	23PHPOE301	Material Characterization	I,II,III, IV	a,b,c,d,e, f,g,h,j	228
8	Chemistry	23CHPOE301	Chemistry in Everyday Life	I,II,III, IV	a,b,c,d,e, f,g,h,j	230
9	Microbiology	23MBPOE301	Fermentation Technology	I,II,III, IV	a,b,c,d,e, f,g,h,j	232
10	Biochemistry	23BCPOE301	Nutrition and Dietetics	I,II,III, IV	a,b,c,d,e, f,g,h,j	235
11	Biotechnology	23BTPOE301	Sericulture	I,II,III, IV	a,b,c,d,e, f,g,h,j	238

## Course Distribution

S.No	Categories	Credits
1	CORE	61
2	ELECTIVE 1	12
3	ELECTIVE 2	12
4	EMPLOYABILITY	15
5	OPEN ELECTIVE	2



23MBAP101

**FUNDAMENTALS OF  
MANAGEMENT****Semester – I  
4H – 4C****Instruction  
Hours/week****L:4T:0 P:0****Marks: Internal: 40****External: 60****Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To understand the traditional management school of thoughts, roles, responsibilities, and skills required for modern managers.
2. To know the importance of planning, and decision-making process.
3. To recognize the need of organizing and staffing functions in organization.
4. To identify the role of directing, leadership and motivation in the performance of the organization.
5. To realize the need of controlling in improving the performance of the organization.
6. To enable students to synthesize related information and evaluate options for the most logical and optimal solution such that they would be able to predict and control human behaviour and improve results

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Interpret the management function and roles of the manager and become an effective planner and decisionmaker	Understand
CO2	Discover the knowledge and apply the skills of organizing, allocating, monitoring and controlling in the organization.	Apply
CO3	Connect different motivational theories and evaluate motivational strategies used in a variety of organizational settings.	Analyze
CO4	Criticize the qualities of various leadership styles and follow the apt one.	Evaluate
CO5	Design and Communicate the case analysis effectively in oral and written forms.	Create
CO6	Develop the complexities associated with management of the group behavior in the organization	Create

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M							
CO4		M								
CO5	S									
CO6			M							

**S-Strong; M-Medium; L-Low**

#### **UNIT I Management Concept and School of Thoughts (10 hours)**

Management Overview– Concept, Nature, Importance - Management Vs Administration.- Evolution of Management - Taylor and Scientific Management, Fayol's Administrative Management - Functions of management - Forms of Business Organization –Sole Proprietorship – Partnership – Company - The manager - Role of manager- Mintzberg's Roles - Social Responsibility of Managers and Ethics in Management – Ethical role of the Manager - Corporate Social Responsibility.

#### **UNIT II Planning and Decision Making (9 hours)**

Planning: Meaning -The Nature – Objectives – Steps in Planning - Strategies, Policies - Procedures and methods - Management by Objectives - Decision making: Meaning – Need - Characteristics of good decision or effective decision – Decision Making Process.

#### **UNIT III Organising and Staffing (9 hours)**

Organizing: Concept, Organizational Structure, Departmentation, Span of Control, Delegation of Authority, Authority and Responsibility - Organizational designs.

Staffing: Importance - Need - Elements of staffing- Functions – Processing - Proper staffing- Advantage of Proper staffing- Manpower planning- Process of recruitment and selection- Placement and Orientation- Training and Development.

#### **UNIT IV Directing, Leadership and Motivation (10 hours)**

Directing: Concept of Direction and Supervision. Functions and qualities of supervisor. Human Factors and Motivation – Theories: Traditional theories and Contemporary theories of Motivation - Leadership - Trait, Behavior, and contingency approaches – Transactional and Transformational leadership.

## **UNIT V Controlling**

**(10 hours)**

Controlling: Need - The System and Process of Controlling – Techniques - Budgetary and non budgetary Control. Managing Productivity – Cost Control – Purchase Control – Maintenance Control – Quality Control – Planning Operations. Contemporary trends and challenges In Business World Scenario.

### **SUGGESTED READINGS:**

1. James A. F. Stoner, R. Edward Freeman, Amitabh DeoKodwani Daniel R. Gilbert, RanjeetNambudiri (2018), Management, 6th edition, Pearson Education, New Delhi.
2. Stephen P. Robbins, Coulter Mary (2017), Management, 13th edition, Pearson Education, NewDelhi.
3. Stephen P. Robbins, Coulter Mary and David De Cenzo (2017), Fundamentals of Management, 9th edition, Pearson Education, NewDelhi.
4. Tripathy.PC. & Reddy.PN. (2017). Principles of Management. Tata McGraw Hill, New Delhi:
5. Koontz and Weihrich. (2015). Essentials of Management. (10<sup>th</sup> edition)Tata McGrawHill, New Delhi:

### **E- Resource:**

<https://nptel.ac.in/courses/122108038/>

Instruction Hours /  
week: L: 4 T: 0 P: 0

Marks: Internal: 40

External: 60

Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

To make the students

1. To understand the basic concepts of organizational behavior.
2. To analyze the individual behavior traits required for performing as an individual or group.
3. To obtain the perceiving skills to judge the situation and communicate the thoughts and ideas.
4. To understand how to perform in group and team and how to manage the power, politics and conflict.
5. To recognize the importance of organizational culture and organizational change.
6. To realise the importance of groups and teamwork and managing of conflict between the members of the organization

**COURSE OUTCOMES:**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Connect organizational behavior issues in the context of the organizational behavior theories and concepts.	Understand
CO2	Assess the behavior of the individuals and groups in organization and manage the stress.	Apply
CO3	Categorize team, power, politics and conflict arising between the members.	Analyze
CO4	Explain how organizational change and culture affect the working relationship within organizations.	Evaluate
CO5	Plan and exhibit the communication skills to convey the thoughts and ideas of case analysis to the individuals and group.	Create
CO6	Collaborate the application of OB using appropriate concepts, logic and theoretical conventions.	Create

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2									S	
CO3					S					
CO4							S			
CO5				S						
CO6									M	

**S-Strong; M-Medium; L-Low**

#### **UNIT I Organization behavior : Introduction**

**(10 hours)**

Organization Behavior: Meaning and definition - Fundamental concepts of Organization Behavior - Contributing disciplines to the Organization Behavior field – Organization Behavior Model - Significance of Organization Behavior in the organization success - Challenges and Opportunities for Organization Behavior.

#### **UNIT II Behaviour, Personality and Learning Theories**

**(9 hours)**

Attitudes – Sources - Types - Functions of Attitudes – Attitude and Job satisfaction, Emotions and Moods – Emotional Intelligence – Organization Behavior Applications of Emotions and Moods, Learning – Theories of Learning. Personality – Determinants of personality- Theories of Personality - psycho-analytical, social learning, job-fit, and trait theories. Values – Importance - Types of Values – Linking Individual personality and values to the work place.

#### **UNIT III Perception and Communication**

**(9 hours)**

Perception – factors influencing perception - Person Perception – Attribution Theory – Frequently Used Shortcuts in Judging Others- Perceptual Process- Perceptual Selectivity - Organization Errors of perception – Linkage between perception and Decision making. Communication – Process – Directions of communication – interpersonal and organizational communication – Barriers to effective communication – Leadership- Styles – Theories.

#### **UNIT IV Group, Team, Power politics and Conflict**

**(10 hours)**

Foundation of Group Behavior - Concept of Group - Types of Groups - Stages of Group Development - Group Norms - Group Cohesiveness – Group Decision making –

Understanding working teams – types of teams- creating effective teams- Turning individuals to team players.

Power and Politics - Bases of Power – Power tactics. Conflict – Meaning –Transition in conflict thoughts- Conflict Process- Negotiation

### **UNIT V Organization Culture, Change and Stress Management (10 hours)**

Organizational culture- Definitions and Characteristics of Culture- Types of Culture – Creating and Maintaining an Organizational Culture. Organizational change –Meaning- Forces for Change- Managing Planned Change - Factors in Organizational Change - Resistance to change- Overcoming resistance to change. Stress – Causes of stress – Effects of Occupational Stress- Coping Strategies for Stress.-Organisational citizenship behavior and its dimensions.

#### **SUGGESTED READINGS:**

1. Fred Luthans. (2017). *Organizational Behavior: An Evidence - Based Approach*, 12<sup>th</sup> edition, Mcgraw Hill Education, NewDelhi.
2. Steven Mcshane and Mary Ann VonGlinow (2017), *Organizational Behavior*, 6th edition, McGraw Hill Education, NewDelhi
3. Robbins, S. P., and Judge, T.A. (2016). *OrganizationalBehaviour*.(16<sup>th</sup> edition).Prentice Hall of India, NewDelhi:.
4. Laurie J. Mullins (2016), *Management and Organisationalbehaviour*, 10<sup>th</sup> edition, Pearson Education, NewDelhi
5. Robbins, S. P., and Judge, T.A. (2016). *Essentials of Organizational Behavior*.13<sup>th</sup> edition, Pearson Education.

#### **E- Resources:**

- <https://nptel.ac.in/courses/110/105/110105033/>



<b>MBA</b>		<b>2023-2024</b>
<b>23MBAP103</b>	<b>MANAGERIAL ECONOMICS</b>	<b>Semester – I</b>
		<b>4H – 3C</b>

**Instruction**      **L: 4T: 0P: 0**    **Marks: Internal: 40**                      **External: 60**    **Total: 100**  
**Hours/week**

**End Semester Exam: 3 Hours**

### **COURSE OBJECTIVES:**

To make the students

1. To obtain fundamental knowledge on economic concepts and tools that have direct managerial applications.
2. To illustrate the application of economic theory and methodology as an alternative in managerial decisions.
3. To gain a rigorous understanding of competitive markets as well as alternative market structures.
4. To understand the forces determining macroeconomic variables such as inflation, unemployment, interest rates, and the exchange rate.
5. To obtain familiarity on the macro level business components like money, banking, monetary policy, fiscal policy, trade, business cycles and balance of payments.
6. To illustrate the application of economic theory and methodology as an alternative in managerial decisions.

### **COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Identify the economic way of thinking to individual decisions and business decisions.	Knowledge
CO2	Interpret the responsiveness of consumers' demand to changes in the price of a goods or service, and understand how prices get determined in markets.	Understand
CO3	Articulate the different costs of production and how they affect short and long run decisions and derive the equilibrium conditions for cost minimization and profit maximization.	Apply
CO4	Correlate an understanding of monetary and fiscal policy options as they relate to economic stabilization in the short run and in the long run.	Analyze

CO5	Develop and exhibit the communication skills to convey the thoughts and ideas of case analysis to the individuals and group.	Create
CO6	Critically evaluate the consequences of basic macroeconomic policy options under differing economic conditions within a business cycle.	Evaluate

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2	S									
CO3			M							
CO4	S									
CO5				M						
CO6							M			

**S-Strong; M-Medium; L-Low**

### UNIT I Managerial Economics: Law of Demand and Supply

**(10 hours)**

Introduction - Meaning, nature and scope of Managerial Economics, Significance in decision making. Consumer's Behaviour and Demand: Meaning of Consumer's Equilibrium – Utility approach – The cardinal approach to consumer equilibrium – The Law of Diminishing Marginal utility - Law of Equi-Marginal utility – The ordinal approach – Indifference curve approach – Revealed Preference theory - Consumer's surplus. Demand function - Concept of Demand – Types of Demand – Determinants – Law of Demand – Exceptions to Law of Demand – Change in Demand – Elasticity of Demand – Types – Measurement of Price elasticity of demand. Concept of Supply – Determinants of Supply – Law of Supply – Change in Supply – Elasticity of Supply – Types.

### UNITII Production, Cost and Revenue Function

**(9 hours)**

Producer's Behaviour and Supply: Production Function - Basic concepts in production – Firm – Fixed and Variable Factors – Total Product – Marginal Product – Average Product. Production Function – Short-run production function – Long-run production function – Economies and Diseconomies of Scale – Producer's Equilibrium  
Cost and Revenue Function: Cost of Production – Types of costs – opportunity cost – Fixed and Variable costs – Total Cost curves – Average cost curves – Marginal cost - Cost curves – Short run and Long run Cost Curves – Revenue function - Total Revenue –

Average Revenue – Marginal Revenue – Break Even Point Analysis.

### **UNIT III Market Competition and Price structures (9 hours)**

Main forms of Market – Basis of Classification – Perfect Competition – Features – Short Run and Long Run Equilibrium – Price Determination – Monopoly Market – Features – Short Run and Long Run Equilibrium – Price Discrimination – Degrees of Price Discrimination. Oligopoly Market Competition – Features – Price Leadership – Price Rigidity – Cartel – Collusive and Non-Collusive oligopoly – Oligopsony – Features – Monopolistic Competition – Features – Product Differentiation – Selling Cost – Short Run and Long Run Equilibrium – Monopsony – Duopoly Market Equilibrium.

### **UNIT IV Macro Economic Indicators (10 hours)**

Components of the Macro Economy – Circular flow of economic activities and income – Two-sector model – Four- sector model – IS-LM analysis – National income – Difference between Normal residents and Non- residents – Domestic territory - Gross and Net Concepts of Income and Product – market price and Factor Cost – Factor Payments and Transfer Payments – National Income Aggregates– Private Income – Personal Income – Personal Disposable Income – National Disposable Income – Measurement of National Income – Production Method – Income Method – Expenditure Method. Phases of Business Cycle – Causes of cyclical movements – Price Movements: Inflation and Deflation – Types of Inflation – Effects of Inflation – Control of Inflation. Balance of trade, advance of payment- equilibrium, disequilibrium

### **UNIT V Monetary Policy and Fiscal Policy (10 hours)**

Government in the Macro Economy – Monetary policy - Objectives of Monetary Policy – Types of Monetary Policy – Instruments of monetary policy. Fiscal policy - Objectives of Fiscal Policy – Types of Fiscal Policy – Instruments of Fiscal Policy – Budget Preparation – Deficit Budget.

### **SUGGESTED READINGS:**

1. Geetika and Piyali Ghosh (2017), *Managerial Economics*, 3rd edition, McGraw Hill Education, New Delhi.
2. Christopher R.Thomas and S.Charles Maurice (2017), *Managerial Economics : foundation of business analysis and strategy*, 10th edition, McGraw Hill Education, New Delhi.
3. Varshney,R.L and Maheshwari, K.L(2012), *Managerial Economics*, Sultan chand and sons, New Delhi.
4. Paul Samuelson, William D. Nordhaus (2017), *Micro Economics*, 19th edition, McGraw Hill Education, New Delhi
5. William F. Samuelson, Stephen G. Marks (2013), *Managerial Economics*, 6th

edition, Wiley, New Delhi,

6. Paul Samuelson, William D. Nordhaus (2011), *Macro Economics*, 19th edition, McGraw Hill Education, New Delhi.

### **E-Resources**

- <https://nptel.ac.in/courses/110/101/110101005/>
- <https://nptel.ac.in/courses/110/104/110104093/>
- <https://nptel.ac.in/courses/109/104/109104073/>
- <https://nptel.ac.in/courses/110/103/110103093/>

**LEGAL ASPECTS OF  
BUSINESS**

**23MBAP104** **Semester – I  
4H – 3C**

Instruction  
Hours/week

L: 4 T: 0 P : 0

Marks: Internal: 40

External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

To make the students

1. To understand the nature and importance of Indian Contract Act and Sales of Goods Act.
2. To provide an overview of important laws that have a bearing on the conduct of business in India
3. Understand the legal and fiscal structure of different forms of business organizations and their responsibilities as an employer.
4. To acquire knowledge of income tax act and sales tax act and its applications in business
5. To understand the existing law and practice relating to consumer protection and cyber law.
6. To make the students understand the basics of legal concept and environment in which the present-day business is carried.

**COURSE OUTCOMES:**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Identify the nature of Contract Law, Company Law and cyber laws and its application in business.	Knowledge
CO2	Assess the legal forms of business organization and its modus operandi.	Evaluate
CO3	Recognize the application and appropriate regulations of factories act and wages act in business scenario.	Knowledge
CO4	Discover and apply the concept and laws pertaining to income tax and sales tax, intellectual property rights and cyber laws and evaluate its impact on business and social environment.	Apply
CO5	Effectively communicate ideas, devise procedures in oral and written forms to different audiences.	Analyze
CO6	Illustrate the consumer legislations towards consumer protection and Environment protection.	Analyze

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M							
CO4								M		
CO5				M						
CO6								M		

**S-Strong; M-Medium; L-Low**

### **UNIT I Indian Contract Act 1872**

**(10 hours)**

The Indian Contract Act 1872 - Definition of contract, essentials elements and types of a contract, Formation of a contract, performance of contracts, breach of contract and its remedies, Discharge of contract - Quasi contracts- The Sale of Goods Act 1930 - Nature of Sales contract, Documents of title, risk of loss, Guarantees and Warranties, performance of sales contracts, conditional sales and rights of an unpaid seller.

### **UNIT II Law of Agency, Partnership Act 1932 and LLP Act 2008**

**(9 hours)**

Contract of Agency- Essentials of Contract of Agency – Creation of Agency – Kinds of Agents – Comparison Between an Agent and Servant – Comparison Between an Agent and Independent Contractor – Relationship of Principal and Agent – Duties of an Agent – Rights of an Agent – Duties and Rights of the Principal – Delegation of authority by an Agent – Sub Agent – Position of Principal and Agent in relation to third Parties – Termination of Agency.Partnership – Meaning, Definition, Features – Types of partners. Liability – Limited Liability Partnership Act 2008.

### **UNIT III Companies Act 2013**

**(9 hours)**

Company – Nature and Types of Companies - Formation – Memorandum – Articles – Prospective Shares – debentures – Directors – appointment – Powers and duties. Meetings – Proceedings – Management – Accounts – audit – oppression & mismanagement – winding up.

### **UNIT IV Consumer Protection Act 2019 and Other Laws**

**(10 hours)**

Consumer Protection Act 2019 – Consumer rights, Procedures for Consumer grievances redressal, Types of consumer Redressal Machineries and Forums- Cybercrimes, IT Act 2000 and 2002, Cyber Laws, Introduction of IPR – Copy rights, Trade marks, Patent Act.- Negotiable Instruments Act 1881: Nature and requisites of negotiable instruments.

Types of negotiable instruments, liability of parties, holder in due course, special rules for Cheque and drafts, discharge of negotiable instruments.

## **UNIT V Tax System**

**(10 hours)**

Tax – Direct Tax – Income Tax – Salary Income – House Property Income – Profits and gains of Business or Profession – Capital Gain – Income from other sources. Indirect tax structure in India - Goods and Services Tax Act 2017 - Need for GST in India - Dual GST Model - Goods and Services Tax Network (GSTN) - Levy and Collection of Tax - Scope of supply (Section 7 of CGST Act, 2017) - Input Tax Credit under GST and Returns - Eligibility for taking Input Tax Credit (ITC) - Registration under GST Law - Procedure for Registration - Computation of Tax Liability and Payment of Tax - Furnishing of Returns - Audit under GST.

### **SUGGESTED READINGS:**

1. Akhileshwar Pathak (2017), *Legal Aspects of Business*, 6th Edition, Mcgraw hill, New Delhi.
2. Daniel Albuquerque (2017), *Legal Aspects of Business*, 2nd Edition, Oxford University Press, NewDelhi,
3. Kapoor, N.D. (2017). *Elements of Mercantile Law*. S Chand Publishing, New Delhi.
4. P.C. Tulsian, (2017), *Mercantile Laws for CA-CPT*, 2nd edition, Mcgraw hill, New Delhi.
5. RohiniAggarawal (2014), *Mercantile and Commercial Laws*, Taxmann Publications Private Limited, New Delhi.

### **E-Resources**

- <https://nptel.ac.in/courses/110/105/110105139/>
- <https://nptel.ac.in/courses/109105098/>

**COURSE OBJECTIVES:**

To make the students

- 1.To understand the financial accounting standards, conventions and principles in preparation of financial reports
- 2.To prepare financial statements for the organization.
- 3.To understand the tools and techniques used for analyzing the financial statements.
- 4.To recognize the cost concepts and prepare cost sheets.
- 5.To know the cost-volume-profit techniques and its application to determine optimal managerial decisions.
- 6.To facilitate an understanding about accounting as an information system and also the language of the business

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Illustrate the accounting standards and realize the difference in the GAAP and IFRS.	Knowledge
CO2	Ability to prepare, read, interpret and analyse financial statements to assess the financial performance and position of accompany	Understand
CO3	Interpret and apply cost concepts to analyse common business management decisions such as pricing and outsourcing decisions from a financial perspective;	Understand
CO4	Discover the importance and application of budgeting in organizational planning and control.	Apply
CO5	Appraise how financial transactions are processed through the accounting information system each accounting period.	Evaluate
CO6	Demonstrate capabilities of problem-solving, critical thinking, and communication skills related to the accounting decisions.	Create



### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3		M								
CO4			M							
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

#### **UNIT I Accounting**

**(12 hours)**

Accounting – Meaning - Definition – Objectives – Functions – Branches of Accounting - to Financial, Cost and Management Accounting - Ethical practices for Cost and Management Accountant- Generally Accepted Accounting Principles (GAAP), Concepts and Conventions – IFRS- Accounting Equation – Accounting Cycle – Journal – Ledger – Trial balance.

#### **UNIT II Final Accounts and Depreciation**

**(12 hours)**

Final Accounts – Preparing Trading Account - Profit and Loss account - Balance sheet (with and without adjustments) - Final Accounts of Company - Maintenance of Books of Accounts. Depreciation – Depreciation Methods.

#### **UNIT III Financial Statement Analysis**

**(12 hours)**

Financial Statement Analysis - Comparative Statements, Common-size statement, Trend Percentages, Financial ratio analysis - Classification of Ratios- Liquidity, Solvency, Turnover ratios, Profitability ratios, Market ratios, DuPont Analysis, Interpretation of Ratios- Cash flow and Fund flow preparations – Cashflow AS 3 Standard.

#### **UNIT IV Cost Accounting**

**(12 hours)**

Cost Accounts -Costing –Types of costing-Job costing, Batch Costing, Process costing, Activity Based Costing, Target costing - Elements of Costs–Cost Centre - Preparation of Cost Sheet, items to be excluded while preparing cost sheet. Process Costing – Activity based Costing – Target Costing (Theory Only).

Marginal Costing and profit planning – Cost, Volume, Profit Analysis – Break Even Analysis –Decision making problems -Make or Buy decisions -Determination of sales mix – Exploring new markets - Add or drop products -Expand or contract.

## **UNIT V Budgeting and Variance Analysis**

**(12 hours)**

Budgetary Control – Need and its application - Zero Based Budgeting (Theory) – Cash budget, sales budget, master budget and Flexible budgets (Theory and Problems)

Standard Costing – Materials Cost and Labour cost variances.

**Note:** Problems 60 Marks and Theory 40 Marks.

### **SUGGESTED READINGS:**

1. Narayanaswamy R. (2017), Financial Accounting: A Managerial Perspective, 6th edition, PHI Learning Private Limited, New Delhi
2. Ramachandran, Kakani(2017), Financial Accounting for Management, 4th edition, Mcgraw Hill, Publications, New Delhi.
3. M.Y. Khan, P.K. Jain (2017), Management Accounting, 7th edition, Mcgraw Hill, Publications, New Delhi.
4. Alnoor Bhimani, CharlesT. Horngren, Srikant M.Datar, Madhav Rajan(2015),Management and Cost Accounting, 6th edition, Pearson Education, India.
5. S.N. Maheshwari, SuneelMaheshwari, Sharad K. Maheshwari (2018), A Textbook of Accounting for Management, S Chand Publishing, New Delhi
6. R.Narayanaswamy, Financial Accounting – A managerial perspective, PHI Learning, New Delhi, 2008.
7. M.Y. Khan & P.K. Jain, Management Accounting, Tata McGraw Hill, 8<sup>th</sup>edition, 2018.
8. T.S. Reddy & A. Murthy, Financial Accounting, Margham Publications, 2014
9. Jan Williams, Susan Haka, Mark S bettner, Joseph V Carcello, Financial and Managerial Accounting - The basis for business Decisions, 18th edition, Tata McGraw HillPublishers, 2017

### **E- Resources**

- <https://nptel.ac.in/courses/110/106/110106135/>
- <https://nptel.ac.in/courses/110101003/>
- <https://nptel.ac.in/courses/110101004/>

**COURSE OBJECTIVES:**

To make the students

1. To understand the classification and analysis of the data with statistical tools and techniques.
2. To know the descriptive and inferential statistics, and apply them to examine business and economic data.
3. To realize the applications of probability and distributions in the analytical decision making.
4. To conduct statistical estimation and hypothesis testing with statistical tools and techniques.
5. To understand the index number concepts and its applications.
6. To understand the assumptions of cost of living index number

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Interpret the basic statistical tools and techniques and its application in business decision-making.	Understand
CO2	Articulate basic statistical estimation and hypothesis testing for interpret the results.	Apply
CO3	Connect to specify, estimate, and use statistical models to predict and obtain reliable forecasts.	Analyze
CO4	Develop an ability to analyse and interpret the collected data to provide meaningful information in making management decisions.	Create
CO5	Criticize skills to design business model and Analytics projects.	Evaluate
CO6	Design capabilities of problem-solving, critical thinking, and communication skills related to the discipline of statistics.	Create

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2			M							
CO3		M								
CO4		M								
CO5			M							
CO6		M								

**S-Strong; M-Medium; L-Low**

### Unit I Univariate Analysis

**(12 hours)**

Introduction to Descriptive Statistics, Univariate Analysis: Measures of Central Tendency and Dispersion: Introduction, Objectives of statistical average, Requisites of a Good Average, Statistical Averages - Arithmetic Mean, Positional Averages – Median and Mode, Measures of Dispersion – Range - Quartile deviations, Standard Deviation and Coefficient of Variance.

### Unit II Bivariate Analysis

**(12 hours)**

Introduction to Bivariate Analysis: Simple Correlation and Regression: Correlation - Causation and Correlation - Types of Correlation, degrees of correlation, Measures of Correlation: Scatter diagram, Karl Pearson's correlation coefficient, Spearman's Rank Correlation Coefficient. Regression: Regression analysis – Regression lines, Regression equations – Regression coefficients and its Properties, Methods of solving Regression equations.

### Unit III Probability Theory and Distributions

**(12 hours)**

Introduction - Definition of probability - Basic terminologies used in probability theory, Approaches to probability, Rules of Probability - Addition rule - Multiplication rule, Solving Problems on Probability, Conditional Probability and Bayes' theorem.

Probability Distributions: Random variables, Bernoulli trial, discrete probability distributions: Binomial distribution and Poisson distribution. Continuous probability distributions: Uniform, Normal Distribution and its properties, Standard Normal Distribution.

### Unit IV Hypothesis Testing

**(12 hours)**

Testing Hypothesis - Null and alternate hypothesis - Significance Level - type I and type II error, One and Two – Tailed Tests, Parametric Tests: Concept of a statistical test, Small and Large sample tests, Small sample test: t- test, two sample t- test, Large sample

tests, Z- test - one tailed test about population mean when sigma known, two tailed test about population mean when sigma known

Non-parametric Tests: Difference between Parametric and Non-parametric tests. Non-parametric tests - Chi-square test - Goodness of fit test, Independence Tests by contingency tables, Kolmogorov and Smirnov test for comparing two populations, Wilcoxon-Mann-Whitney tests.

### **Unit V Estimation, Analysis of Variance and Data Analytics (12 hours)**

Estimation and Analysis of Variance (ANOVA): Preliminary notion-Consistency estimation-Unbiased estimates -Sufficiency- Efficiency, methods of finding estimates - confidence Interval. Standard Error of Estimate, Reliability of Estimates. Analysis of Variance: One way classification and two-way classification. Introduction to Artificial Intelligence and Machine Learning, Classification of Data Analytics and Popular Software used for Data Analytics - EXCEL, SPSS, Python and R- Programming.

**Note:** Problems 60 Marks and Theory 40 Marks

.

#### **Suggested Readings:**

1. Levin Richard, H. Siddiqui Masood, S. Rubin David, Rastogi Sanjay, (2017), Statistics for Management, 8th edition, Pearson education, New Delhi.
2. Amir Aczel, Jayavel Sounder pandian, P Saravanan (2017), Complete Business Statistics, 7th edition, Mcgraw Hill Education, New Delhi.
3. T N Srivastava and Shailaja Rego (2015), Statistics for Management, 2<sup>nd</sup> edition, Mcgraw Hill Education, New Delhi.
4. Anderson et.al (2015), Statistics for Business and Economics, Cengage, New Delhi.
5. SP Gupta (2012), Statistical Methods, S Chand Publishing, New Delhi.
6. R. Evans James (2017), Business Analytics, 2nd edition, Pearson Education, New Delhi.

#### **E-Resources**

- <https://nptel.ac.in/courses/110107114/>

#### **KAHE – Learning Management System**

- <http://172.16.25.76/course/view.php?id=1655>

**COURSE OBJECTIVES:**

To make the students

1. To provide insight on importance of technology for communication and decision-making.
2. To provide hands-on usage of MS-office to creating new word documents including features like tables, charts and references.
3. To enable students to enter data and analyse the data with the support of Excel tools.
4. To design presentation using animation, special effects and graphics.
5. To facilitate the understanding of accounting package and its application.
6. To Provide foundational or “computer literacy” curriculum that prepares students for life-long learning of computer concepts and skills.

**COURSE OUTCOMES:**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Develop new word documents using inbuilt features like tables, charts and references.	Create
CO2	Create a datasheet from collected data and analyses the data using inbuilt functions and tools.	Create
CO3	Design a presentation using animation, special effects and graphics.	Create
CO4	Discover the Internet Web resources for communication.	Apply
CO5	Extract the vouchers and prepare the company's final account and reports.	Understand
CO6	Articulate their Critical thinking by designing and developing clean and lucid writing skills.	Apply

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1			M							
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

### EXPERIMENTS

#### PRACTICALS ON WORD PROCESSOR

**(10 hours)**

**Exercise 1: Getting Started:** Creating new document, formatting text and open the existing document, cut, copy, paste, saving and printing document.

**Exercise 2:** Creating Tables & Graphics-creating basic headers and footers and Creating hyperlinks

**Exercise 3:** Creating Resume, Creating Blog, Creating Product Brochure and Project Report

**Exercise 4:** Mail Merge

#### PRACTICALS ON SPREADSHEET

**(10 hours)**

**Exercise 1:** Getting Started: creating new worksheet, Spreadsheet Formatting

**Exercise 2:** Functions, Creating Charts & Graphics

**Exercise 3:** Creating Pivot Table & Pivot Charts

**Exercise 4:** Creating Daily and Monthly Sales Reports

#### PRACTICALS ON POWER POINT PRESENTATION

**(9 hours)**

**Exercise 1: Getting Started :**Creating Presentations, Adding Slides, Deleting a slide, Numbering a Slide ,Saving and Printing Presentation

**Exercise 2: Graphics & Visual Effects :**Importing the images into presentation, Building Transition Effects

**Exercise 3:**Creating Company Profile Presentation, Creating Product Presentation, Creating Project Presentation

## **PRACTICALS ON INTERNET AND SERVICES(9 hours)**

**Exercise 1: WWW and Web Browser-** Connecting to World Wide Web (WWW), Accessing Web Browser, Using Favorites Folder, Downloading Web Pages, Understanding URL

**Exercise 2: Email-**Creating and Sending a new E-mail

## **PRACTICALS ON TALLY ERP.9**

**(10 hours)**

**Exercise 1: Creating** a New Company in Tally ERP.9

**Exercise 2: Creating** Accounting Vouchers in Tally ERP.9

**Exercise 3:** Creating Financial Reports in Tally ERP.9

**Exercise 4:**Tax Deducted at Source (TDS) in Tally ERP.9

## **SUGGESTED READINGS:**

1. Wayne L. Winston, (2017), Microsoft Excel 2016 - Data Analysis and Business Modeling, Prentice Hall India Learning Private Limited, New Delhi
2. FaitheWempen (2016), Microsoft Office 2016 at Work for Dummies, Wiley India, New Delhi
3. Dinesh Maidasani(2015), Learning Computer Fundamentals, MS Office and Internet & Web Technology, 3rd Edition, Laxmi Publications, New Delhi.
4. John Walkenbach (2015), Microsoft Excel 2016 Bible: The Comprehensive Tutorial Resource, Wiley India, New Delhi.
5. Cox (2013), Microsoft Access 2013 Step by Step, Prentice Hall India Learning Private Limited, New Delhi
6. Tally education, (2018), Official Guide to Financial Accounting Using Tally. ERP 9 with GST (Release 6.4), 4th revised and updated edition, BPB Publications; New Delhi
7. Asok K. Nadhani (2018), Tally ERP Training Guide - 4TH edition, BPB Publications; New Delhi
8. Sajee Kurian, (2017) Learning Tally ERP 9 with GST, 1st edition, Blessings Inc, Mumbai.
9. Ajay Maheshwari and ShubhamMaheshwari (2017), Implementing GST in Tally.ERP 9, 1<sup>st</sup> edition, Tally E-learning.
10. Shraddha Singh, NavneetMehra (2014), Tally ERP 9 (Power of Simplicity): Software for Business and Accounts, V&S Publishers, New Delhi



**Course objectives**

1. To apply the grammar in the daily usage of business communication.
2. To form meaningful sentences for communicating the thoughts and ideas.
3. To choose appropriate words and tones to communicate
4. To converse and make presentations effectively in all business situations
5. To inculcate interpersonal skills for communication.
6. To prepare error free business correspondences

**COURSE OUTCOMES:**

At the end of this course, students will be able to

Cos	Course Outcomes	Blooms Level
CO1	Articulate the grammar in the daily usage of business communication.	Apply
CO2	Outline meaningful sentences for communicating the thoughts and ideas.	Understand
CO3	Extract appropriate words and tones to communicate	Understand
CO4	Criticize and make presentations effectively in all business situations	Evaluate
CO5	Modify themselves to various situations prevailing in the society.	Create
CO6	Write error free business correspondences	Create

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1				M						
CO2				M						
CO3				M						
CO4				M						
CO5				M						
CO6				M						

**S-Strong; M-Medium; L-Low**

## **Unit I Grammar**

**( 5 hours)**

Remedial Grammar and Usage, Important Aspects of English Grammar and Usage- Parts of speech and their uses – word formation – Noun and their uses pronoun and their uses, Adjective and their uses – Verb and their uses – tenses and their uses – articles and their uses – Preposition – Conjunction and their uses – Punctuation – types of sentences and sentence patterns – synonyms and their uses – antonyms.

Idioms, **Phrases and Clauses**, Words Often Confused, One Word Substitutes, Word Formation: Prefixes, Bases and Suffixes (Derivational & Inflectional). Word Choice: Right Words, Appropriate Words.

## **Unit II Phonology in English**

**( 5 hours)**

Phonemes: Consonants – vowels and Diphthongs – Phonetic transcription of words and sentences – syllables and CVC pattern – Rules for word accents – Weak forms and Strong forms – Accent patterns in connected speech. Intonation: Rising tone – falling tone – Rise-fall – Fall-rise.

## **Unit III Conversation in English**

**(5 hours)**

Greeting – introduction oneself – Invitation – making oneself – making request – expressing gratitude – complementing and congratulating- Expressing sympathy – Apologizing – Asking for Information – Seeking permission – complaining and Expressing regret.

## **Unit IV Presentation**

**(5 hours)**

Impromptu Presentation Exercise - Interpersonal Communication Exercise - Dramatic Interpretation Exercise - Ceremonial Presentation - Demonstration Presentation - Narrative Presentation - PowerPoint Presentation - Group Presentation Persuasive - Individual Persuasive Presentation - Group Presentation Informative - Group Presentation Informative - Performance Outline Submission.

## **Unit V Effective Writing Skills:**

**(4 hours)**

Elements of Effective Writing, Main Forms of Written Communication: Agenda, Minutes, Notices, Writing of CV, Memo, Drafting an E-mail, Press Release. Correspondence: Personal, Official and Business, Report Writing. Personal communication, employability skills, work place communication

### **SUGGESTED READINGS:**

1. Geoffrey leech, Margaret Deushar, *English Grammar Today*.
2. P.C Wren and H. Martin. Highschool English grammar and composition. S. Chand company Mumbai, 2006.
3. W.S. Allen. *Living English Structure*.
4. Bansal R.K. and Harrison J.B Spoken English for India. Orient Longman, Mumbai..
5. Adler, R. B., G. Rodman, & A. du Pre`. (2013) Understanding Human Communication. 12th Edition. New York: Oxford University Press.
6. Beebe, S.A., and S. J. Beebe. (2013) Public Speaking Handbook. 4th Edition. Pearson Education, Inc.

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<b>TEAM BUILDING AND LEADERSHIP</b>	<b>Semester - I</b>
<b>23MBAP113</b>	<b>SKILLS (PRACTICAL)</b>
	<b>2H - 1C</b>

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**Instruction Hours / week: L: 0 T: 0 P: 2****Marks: Internal: 50 Total: 50****COURSE OBJECTIVES:**

To make the students

1. To understand the tools and techniques to build and maintain high performance teams
2. To understand the importance of clear goals, roles, and processes for conducting effective and productive teams
3. To gain the ability to use the resources of the team to identify and overcome obstacles.
4. To gain ability to run effective team meetings that produce results
5. To obtain the skills for team communication strategies, tools, and techniques to assure positive outcomes.
6. To give Feedback for Improved Performance

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Relate facilitative leadership skills to promote team communication, collaboration, and performance.	Apply
CO2	Define Confidence and ability to deal effectively with challenging team situations.	Understand
CO3	Correlate the ongoing evaluation and feedback tools to monitor team progress, tools for team problem-solving and goal attainment.	Analyze
CO4	Develop teamwork tools that are used to align individuals to be as effective as team members.	Create
CO5	Appraise and integrate feedback on decision-making practices, conflict resolution skills, and teamwork behaviors with the support of a team-based coach.	Evaluate
CO6	Connect and manage Conflict in Organization	Analyze

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1					M					
CO2					M					
CO3		M								
CO4					M					
CO5					M					
CO6		M								

**S-Strong; M-Medium; L-Low**

### UNIT – I

#### Course Content Team Building Skills

**(12 hours)**

Goals, Roles and Processes, The Leader's Role, Definitions, What Teams Need, Your Best and Worst Experiences, Team Building Stages, Team Requirements, Team Connections, Team Roles and Resources, Ground Rules, Utilizing Team Resources, Team Building Process, Symptoms of Team Stress, The Five Dysfunctions of Teams, Team Meetings, Facilitation Skills, Decision Strategies, Goal Setting and Problem Solving, Team Assessment.

### UNIT – II

#### Communication Skills

**(12 hours)**

Developing Trust, Mapping Your Stakeholders, Communication Planning, Choice and Control, Building Blocks of Effective Communication, Influencing Skills, Successful Delegation, Giving Feedback for Improved Performance, Managing Conflict

## SUGGESTED READINGS

1. Uday Kumar Halder (2010), Leadership and Team Building, Oxford University PressDelhi.
2. Justin Hughes (2016), The Business of Excellence: Building high-performance teams and organizations, Bloomsbury Business, NewDelhi.
3. D.K. Tripathi (2011), Team Building And Leadership (With Text & Cases), 1<sup>st</sup>edition, Himalaya Publishing House Pvt. Ltd, NewDelhi
4. Brian Cole Miller (2015), Quick Team-Building Activities for Busy Managers: 50 Exercises That Get Results in Just 15 Minutes, 2<sup>nd</sup> edition, AMACOM, McGraw-Hill Education Asia,Singapore.
5. Mary Scannell , Jim Cain (2012), Big Book of Low-Cost Training Games: Quick,

Effective Activities that Explore Communication, Goal Setting, Character Development, Teambuilding, and More—And Won't Break the Bank! , McGraw-Hill Education, New Delhi.

6. Craig E. Runde , Tim A. Flanagan (2008), Building Conflict Competent Teams (J-B CCL (Center for Creative Leadership)), Wiley, NewDelhi.

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**23MBAP201 PRODUCTION AND OPERATIONS MANAGEMENT Semester – II**  
**4H –3C**


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**Instruction Hours/week L:4 T:0 P:0 Marks: Internal :40 External:60 Total:100**
**End Semester Exam: 3 Hours**
**COURSE OBJECTIVES:**

To make the students

1. To understand the Operations management and operation strategy concepts and its application in business.
2. To recognize the importance factory location, plant location, Plant layout and facility layout.
3. To formulate the production planning and control systems and ensure efficient scheduling for production.
4. To understand and apply the forecasting techniques in estimating the requirement of resources.
5. To understand the quality management practice and TQM tools and its application in improving the organizational performance.
6. To understand the concept of Materials Management – functions – material planning and budgeting and Material Requirement planning

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Relate the core features of the operations and production management function at the operational and strategic levels.	Apply
CO2	Illustrate and decide the best plant and factory location and layout.	Analyse
CO3	Discover the requirement and make accurate production planning , inventory planning and schedule the production	Apply
CO4	Summarize the knowledge of applying a quality management TQM tools to improve organizational effectiveness.	Apply
CO5	Effectively communicate ideas, explain procedures in oral and written forms to different audiences	Apply
CO6	Creating and delivering products & services to customers and improving process & supply chain performance	Create

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1		M								
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

#### **UNIT I Operations Management and Operations Strategy (8 hours)**

Nature, Importance, historical development, transformation processes, differences between services and goods, Operations Strategy, Competitive Capabilities and Core Competencies, Operations Strategy as a Competitive Weapon, Linkage Between Corporate, Business, and Operations Strategy, Developing Operations Strategy, Elements or Components of Operations Strategy, Competitive Priorities, Manufacturing Strategies, Service Strategies, Global Strategies and Role of Operations Strategy.

#### **UNIT II Location, Layout, material handling and Maintenance (8 hours)**

Location Strategies: Introduction, Location Planning Process-Facility or Layout Planning and Analysis: : Introduction, Objectives of Layout, Classification of Facilities, Basis for Types of Layouts, Layout decisions, Nature of layout problems, Redesigning of a layout, Manufacturing facility layouts, Types of Layouts, Layout Planning, Evaluating Plant Layouts, Assembly Line Balancing, Material handling - Overview of MRP, MRP II and ERP, Maintenance Management- Reliability and Maintenance – Replacement Techniques.

#### **UNIT III Production Planning and controlling, Scheduling (8 hours)**

Production planning and Control– Objectives, functions, PPC in different types of manufacturing systems -Capacity Planning – Long range, Types, Rough cut plan, Capacity Requirements Planning (CRP), Developing capacity alternatives. Aggregate Planning – Purpose of Operations Scheduling, Factors Considered while Scheduling, Scheduling Activity under PPC, Scheduling Strategies, Scheduling Guidelines, Approaches to Scheduling, Scheduling Methodology – Gantt Chart and sequencing (Problems), Scheduling in Services.

#### **UNIT IV Forecasting (8 hours)**

Forecasting: Introduction, The Strategic Importance of Forecasting, Benefits, Cost



implications and Decision making using forecasting, Classification of Forecasting Process, Methods of Forecasting, Forecasting and Product Life Cycle, Selection of the Forecasting Method, Qualitative Methods of Forecasting, Quantitative Methods, Associative Models of Forecasting, Accuracy of Forecasting. Work study methods.

#### **UNIT V TQM, JIT and Supply Chain**

**(8 hours)**

Total Quality Management: Introduction, Meaning and Dimensions of Quality, Quality Control Techniques, Quality Based Strategy, Total Quality Management (TQM), Towards TQM – ISO 9000 as a Platform, Total Productive Maintenance (TPM) - Statistical Process Control (SPC) (Problems) Just-In-Time: Introduction, Characteristics of JIT, Key Processes to Eliminate Waste, Implementation of JIT, Pre-requisites for implementation, JIT Inventory and Supply Chains –KANBAN system - Supply Chain Management, Managing supply chain, Supply chain integration. Six Sigma.

**Note:** Problems 20 Marks and Theory 80 Marks

#### **SUGGESTED READINGS:**

1. Jay Heizer, Barry Render, Chuck Munson, Amit Sachan (2017), Operations Management : Sustainability and Supply chain Management, 12th edition, Pearson Education, NewDelhi.
2. Krajewski, L.J et.al (2015), Operations Management, 11th edition, Pearson Education, NewDelhi.
3. Russel, Taylor (2015), Operations and Supply Chain Management, 8th edition, Wiley, NewDelhi.
4. B. Mahadevan (2015). Operations Management : Theory and Practice, 3rd edition, Pearson Education, NewDelhi.
5. Pannerselvam. (2012). Production and Operations Management, 3rd edition, PHI, New Delhi.

#### **E-Resources**

- <https://nptel.ac.in/courses/112107238/>
- <https://nptel.ac.in/courses/111/107/111107128/>
- <https://nptel.ac.in/courses/110/107/110107141/#>

**Instruction Hours/week L:4 T:0 P:0 Marks: Internal:40 External:60 Total:100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To understand the marketing concepts and conduct market analysis through environment scanning
2. To recognize and apply market segmentation branding and New Product development concepts in real situations.
3. To identify the importance of selecting the marketing channel and the pricing strategies and its applications.
4. To recognize the role of advertising, sales promotion, public relations, and market research in the success of marketing a product.
5. To understand the ethical issues related to marketing and the latest development in marketing.
6. To analysis Customer relationship marketing, Customer database, identifying and analyzing competitors

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Discover the core concepts of marketing and the role of marketing in business and society.	Apply
CO2	Correlate market analysis and identify the best marketing mix	Analyse
CO3	Sketch strategies for developing new products and services for the right target segment by Conducting marketing research.	Apply
CO4	Discover the latest trends in marketing and apply the ethical norms in marketing domain	Apply
CO5	Articulate communicate ideas, explain procedures and interpret results and solutions in written and oral forms to the teammembers.	Apply
CO6	Analyze the importance of consumer buying motives & consumer behavior, Designing competitive strategies for Leaders	Analyse

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

### **UNIT I Marketing, Marketing Process and Marketing Environment(8 hours)**

Introduction to Marketing Management: Introduction, Market and Marketing, the Exchange Process, Core Concepts of Marketing, Functions of Marketing, Importance of Marketing. The marketing process: Introduction, Marketing Mix-The Traditional 4Ps- The Additional 3Ps- Marketing Environment: Introduction, Environmental Scanning, Analyzing the Organization's Micro Environment, Company's Macro Environment.

### **UNIT IIMarket Segmentation, Branding and Product (8 hours)**

Marketing segmentation- Bases for segmenting consumer Markets and Business Markets -Steps in segmenting a Market-Strategies for selecting Target Markets, One to One Marketing- Positioning. Buyer Behaviour.Cross Cultural buying behavior.- Product Concepts-Product-Definition, Levels of product, Types-Product Items, Product Lines and Product Mix - New Product Development: Process-Product lifecycle.

### **UNIT III Pricing and Marketing Channels(8 hours)**

Pricing: Introduction, Factors Affecting Price Decisions, Cost Based Pricing, Value Based and Competition Based Pricing, Product Mix Pricing Strategies- Need for Marketing Channels, Decisions Involved in Setting up the Channel, Channel Management Strategies, Introduction to Logistics Management, Introduction to Retailing, Wholesaling,

### **UNIT IV Promotion and Personal Communication Channels(8 hours)**

Promotion Management-Managing Non-Personal Communication Channels: Introduction,Integrated Marketing Communications (IMC), Introduction to Advertising, Fundamentals of Sales Promotion, Basics of Public Relations and Publicity, Personal Selling, Direct Marketing,

### **UNIT V Contemporary Developments in marketing(8 hours)**

Marketing Strategies for Competitors - Definitions of Customer Relationship Management (CRM), Forms of Relationship Management, Managing Customer Loyalty and Development, Reasons Behind Losing Customers by Organizations, Services Marketing, Digital Marketing- Social Media Marketing, Social marketing,

Rural Marketing and Green Marketing. Ethics in Marketing – Legal aspects of Marketing.

**Suggested Readings:**

1. Philip T. Kotler, Gary Armstrong, Prafulla Agnihotri , (2018), *Principles of Marketing*, 17th edition, Pearson Education, NewDelhi
2. S. Ramaswamy , S. Namakumari (2018), *Marketing Management: Indian Context Global Perspective*, 6th edition, , Sage Publications India (P) Ltd., NewDelhi
3. Philip Kotler, Kevin Lane Keller, (2017), *Marketing Management*, 15th edition, Pearson Education, NewDelhi
4. Rajan Saxena (2017), *Marketing Management*, 5th edition, McGraw Hill Education, NewDelhi.
5. Philip Kotler (2017), *Marketing 4.0: Moving from Traditional to Digital*, Wiley, NewDelhi

**E-Resources**

- <https://nptel.ac.in/courses/110104068/>
- <https://nptel.ac.in/courses/110104070/>

**COURSE OBJECTIVES:**

To make the students

1. To acquire knowledge in human resource management, HR audit, and Analytics.
2. To gain knowledge of HR planning, Selection, Recruitment, job analysis and its interrelations.
3. To understand the concepts and practical implications of performance management, Training methods and career planning.
4. To know about compensation and reward management and its practice in industry.
5. To be familiar with Employee relations and its application for the development of Human resources.
6. To understand the methods to improve quality of work life

**Course Outcomes**

At the end of this course, students will be able to

<b>Cos</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Assess the job analysis for a profile and understand its linkage with HR planning	Apply
CO2	Evaluate the training needs and draft a training programme.	Evaluate
CO3	Sketch the compensation and reward system applicable to the industry based and understand its linkage with performance management	Apply
CO4	Discover and apply the appropriate employee relations measures.	Apply
CO5	Illustrate the HR functions and latest developments in the field of HR and effectively communicate ideas, explain procedures and interpret results and solutions in written and oral forms to different audiences.	Analyse
CO6	Make any manager to identify various activities related to Human Resources, Job involved in HR, Training, Compensation and Labour welfare practices	Analyse

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1				M						
CO2				M						
CO3				M						
CO4				M						
CO5				M						
CO6				M						

**S-Strong; M-Medium; L-Low**

#### **UNIT I HRM and Trends in HR**

**(8 hours)**

Human resource management - introduction to Human Resource Management – Functions and importance of HRM – Globalization and challenges to HR manager – Human Resource Development – Trends in HR.

#### **UNIT II Human Resource Planning**

**(8 hours)**

Human Resource Planning and Staffing - Human resource planning and forecasting Recruitment and selection: Sources of recruitment, Recruitment process – Process of selection -Interviewing for selection Induction and Placement – Employee Socialization – Employee termination and Exit interviews. Job analysis and Design – Process of Job Analysis - Job description, Job specification, Job rotation, Job enrichment- Job enlargement – Job enhancement.

#### **UNIT III Training andDevelopment**

**(8 hours)**

Training Need assessment - Designing Training Programs – Methods and Techniques of Training and Development – training evaluation – Management development programs - Talent Management – techniques of performance appraisal – Orientation – Socialization – Process of socialization – Strategies. Training – Training process - Performance appraisal- Process – Traditional and Modern Methods - 360<sup>0</sup> - 720<sup>0</sup> feedback – Ethics of performance appraisal - challenges to performance appraisal – career and development planning- mentoring – coaching – succession planning.

#### **UNIT IV Compensation and Reward**

**(8 hours)**

Compensation and Reward Management Factors influencing pay rates – Components of compensation – Types of incentives and rewards – Employee benefits and services-

Statutory benefits - Non-Statutory (voluntary) benefits - Executive compensation – Employee social security – Employee engagement.

## **UNIT V Employee Relations.**

**(8 hours)**

Employee Relations - Managing employee relations – Grievance Management - organizational discipline – dispute settlement – Collective bargaining – Employee Health and Safety - Social Security Measures – I-HRM trends – Complexities – challenges and choices in future - Managing Expatriates - Quality of Work life – Concepts – Methods to improve quality of work life. Diversity management – Strategic Human resource management – HR audit accounting - HR analytics. Comparative study of HRM practice in major Global economies. Ethical Practices in HR

### **SUGGESTED READINGS:**

1. Dessler, G. and BijjuVarkkey (2017). *Human Resource Management*, 15<sup>th</sup> edition, Pearson Education, NewDelhi.
2. Aswathappa, K. (2017). *Human Resource Management*, 6<sup>8h</sup> edition, McGraw Hill Education, NewDelhi.
3. David A. Decenzo , Stephen P. Robbins, Susan L. Verhulst (2015), *Human Resource Management*, 11th edition, Wiley, NewDelhi.
4. George W Bohlander and Scott., Snell., (2016). *Principles of Human Resource Management* , 16th edition, Cengage India, NewDelhi.
5. Scott Snell, George Bohlander ,Veena Vohra (2010), *Human Resources Management: A South Asian Perspective*, 1st edition, Cengage India, NewDelhi.

### **E-Resources**

- <https://nptel.ac.in/courses/110105069/>
- <https://nptel.ac.in/courses/122105020/>

**COURSE OBJECTIVES:**

To make the students

1. To understand the scientific approaches to decision-making through mathematical modeling and solving linear programming models.
2. To use variables for formulating complex mathematical models in management science, industrial engineering and transportation science.
3. To know the advanced methods for large-scale transportation, assignment problems and inventory models.
4. To formulate and solve problems as networks and graphs
5. To recognize the mathematical and computational modeling of real decision-making problems,
6. To analyse Competitive Decision Models

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the principles and techniques of Operations Research and their applications in decision-making	Apply
CO2	Reframe and apply mathematical techniques for shortest path, maximum flow, minimal spanning tree, critical path, minimum cost flow, and transshipment problems.	Evaluate
CO3	Solve linear programming (LP) models and understand the cost minimization and profit maximization concepts.	Apply
CO4	Sketch the best strategy on the basis of decision criteria under the uncertainty.	Apply
CO5	Correlate capabilities of problem-solving, critical thinking, and communication skills.	Analyse
CO6	Conclude the concept of Dynamic Programming	Analyse



### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

### UNIT I Operations Research and Linear Programming

**(10 hours)**

Introduction, Historical Background, Scope of Operations Research , Features of Operations Research, Phases of Operations Research, Types of Operations Research Models, Operations Research Methodology, Operations Research Techniques and Tools , Structure of the Mathematical Model, Limitations of Operations Research-Linear Programming: Introduction, Linear Programming Problem, Requirements of LPP, Mathematical Formulation of LPP, Case Studies of LPP, Graphical Methods to Solve Linear Programming Problems, Applications, Advantages, Limitations, Graphical Analysis, Some Basic Definitions, Graphical Methods to Solve LPP, Some Exceptional Cases, Important Geometric Properties of LPP, Standard Form of LPP, Fundamental theorem of LPP, Solution of LPP – Simplex MethodThe Simplex Algorithm, Penalty Cost Method or Big M-method, Two Phase Method, Solved Problems on Minimization, Importance of Duality Concepts, Formulation of Dual Problem, Economic Interpretation of Duality, Sensitivity Analysis.

### UNIT II Transportation and Assignment Models

**(10 hours)**

Transportation Problem: Introduction, Formulation of Transportation Problem (TP), Transportation Algorithm (MODI Method), the Initial Basic Feasible Solution, Moving Towards Optimality- Assignment Problem: Introduction, Mathematical Formulation of the Problem, Hungarian Method Algorithm, Routing Problem, Travelling Salesman Problem

### UNIT III Network Analysis

**(10 hours)**

Network Analysis – Construction of networks, Components and Precedence relationships – Event – activities – rules of network construction, errors and dummies in network. PERT/CPM networks –project scheduling with uncertain activity times – Critical Path

Analysis – Forward Pass method, Backward Pass method – Float (or slack) of an activity and event – Time – cost trade-offs – crashing activity times.

#### **UNIT IV Queuing Models**

**(10 hours)**

Queuing Theory, Operating Characteristics of a Queuing System, Constituents of a Queuing System, Service Facility, Queue Discipline, Introduction, Mathematical Analysis of Queuing Process, Properties of Queuing System, Notations, Service System, Single Channel Models, Multiple Service Channels, Erlang Family of Distribution of Service Times, Applications of Queuing Theory, Limitations of Queuing Theory, Finite Queuing Models

#### **UNIT V Simulation and Game Theory**

**(10 hours)**

Methodology of Simulation, Basic Concepts, Simulation Procedure, Application of Simulation - Simulation Monte-Carlo Method: Introduction, Monte-Carlo Simulation, Applications of Simulation, Advantages of Simulation, Limitations of Simulation- Game Theory: Introduction, Competitive Situations, Characteristics of Competitive Games, Maximin – Minimax Principle, Dominance

**Note:** Problems 60 Marks and Theory 40 Marks.

#### **SUGGESTED READINGS:**

1. Wayne L. Winston, S. Christian Albright (2018), Practical Management Science, 6th Edition, Cengage Learning, New Delhi.
2. Frederick S. Hillier, Gerald J. Lieberman, Bodhibrata Nag, Preetam Basu (2017),
3. Introduction to Operations Research, 10th edition, McGraw Hill Education, New Delhi.
4. J.K. Sharma (2017). Operations Research - Theory and Applications., 6th edition, Laxmi Publications, New Delhi.
5. G. Srinivasan (2017), Operations Research: Principles and Applications, PHI, New Delhi
6. Taha (2014), Operations Research: An Introduction, 9th edition, Pearson education, New Delhi.

**COURSE OBJECTIVES:**

To make the students

1. To understand the financial management concept and its importance and its applications in business, their relationship with the business environment and the role and functions of chief financial officer.
2. To know the concept of time value of money and the rationale for using the time value of money concept in capital budgeting techniques for evaluations of business proposals.
3. To recognize the availability of difference source of capital and computation of cost of capital.
4. To recognize the importance of financial leverage, dividend policies and capital structure theories and its application in business.
5. To comprehend on the importance working capital, its determination and application.
6. To understand the factors affecting working capital requirements

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Relate the role of a financial manager, and their role in taking decisions professionally.	Apply
CO2	Reframe the knowledge and compute value of money over time and apply the concept to Evaluate the business proposal applying capital budgeting techniques	Evaluate
CO3	Discover the cost of capital and financial leverage to estimate the optimal capital structure.	Apply
CO4	Use the knowledge of assessing the working of organization to assess the liquidity position of the firm.	Apply
CO5	Illustrate capabilities of teamwork, problem-solving, critical thinking and communication skills related to finance decisions.	Analyse
CO6	Correlate analytical skills which facilitate the financial decision making in business situations	Analyse

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

#### **UNIT I Financial Management and Sources of Finance (8 hours)**

Financial Management: Meaning, nature and scope of finance goal –profit vs. wealth maximization; Finance decisions – investment, financing and dividend decisions. Role of finance manager – Professional Ethics - Treasurer Vs. Controller.-Sources of Finance - Long Term Sources of Finance: Equity, Debentures, Preference Shares, Long term loan, Private equity, Venture capital and Angel investor, Asset Based Financing.Short term Sources of Finance : Short term loan, commercial paper, certificate of deposits, commercial paper, bill of exchange, factoring.

#### **UNIT II Time Value of Money and Capital Budgeting (8 hours)**

Time value of money: Present value, future value, Annuity, Annuity Due, Perpetuity, Amortization schedule, Capital Budgeting : Independent, Mutually exclusive and Contingent Projects,—Evaluation Technique - Non discounted Cash flow Methods-Payback, ARR - Discounted cash flow methods: NPV, IRR, profitability index - Capital Rationing – Capital budgeting decision under Risk and Uncertainty.

#### **UNIT III Capital Structure and Cost of Capital (8 hours)**

Capital Structure: forms – importance – optimal capital structure – Theories – Net Income Approach – Net Operating Income Approach - Factors determining capital structure – changes in capital structure – capital gearing. Cost of Capital: Cost of capital – meaning – significance – classification of cost – determination – problems – computation of cost of specific - sources of finance - cost of Debt, Equity& Preference shares , Retained earnings – Computation of weighted average cost of capital, Marginal cost of capital.

#### **UNIT IV Leverage and Dividend policy (8 hours)**

Leverages: Meaning – Types – Financial Leverage – Trading on Equity - Operating Leverage – Composite – Working Capital Leverage- EBIT – EPS Analysis- Indifference

point. Dividend: Approaches – determinants – types of dividend policy – forms of dividend. - effects and objects of bonus issue – Dividend theories and Models - Relevance and Irrelevance theories- Walter’s Model, Gordon’s Model and MM approach.

### **UNIT V Working Capital Management (8 hours)**

Working capital Management: Meaning - concept – Gross – Net - kinds – importance of adequate working capital - determinants of working capital - working capital policy- estimation of working capital– operating cycle/ cash conversion cycle- working capital finance - Commercial paper, Company deposit, Trade credit, Bank finance. Cash management: optimal cash, cash budget. Inventory management: EOQ, Reorder level Receivables Management: Credit policy, receivables matrix. Corporate restructuring and contemporary issues in Financial Management.

**Note:** Mark distribution - Problems 40 marks and Theory 60 marks.

### **SUGGESTED READINGS:**

1. Pandey. I.M. (2016). Financial Management, 11<sup>th</sup> edition, Vikas Publishing House, New Delhi.
2. Vanhorne, J. C and Wachowicz, J .M Jr. (2015). Fundamentals of Financial Management. 13<sup>th</sup> edition. Pearson Education, New Delhi.
3. Lawrence J. Gitman, Chad J. Zutter, (2017). Principles of Managerial Finance. (13<sup>th</sup> edition). Pearson Education, New Delhi.
4. Khan, M.K. and Jain, P.K. (2017). Financial Management, 7<sup>th</sup> edition, McGraw Hill, New Delhi
5. Chandra, P. (2017). Financial Management Theory and Practice, 9th edition, McGraw Hill, New Delhi:

### **E-Resource:**

- <https://nptel.ac.in/courses/110/107/110107144/>

**Semester – II**

**23MBAP206 RESEARCH METHODOLOGY FOR MANAGEMENT 4H – 4C**

**Instruction L:4 T:0 P:0 Marks: Internal:40 External:60 Total:100**  
**Hours/week**

**End Semester Exam: 3 Hours**

**COURSE OBJECTIVES:**

To make the students

1. To understand the basic framework of research and research process and its important in business decision.
2. To develop an understanding of various research designs and sampling techniques and its application.
3. To identify appropriate sources of information and methods of data collection for solving a business issue.
4. To understand the selection of appropriate tools to analyse the quantitative and qualitative data.
5. To understand the ethical norms for research and select the best type of research report and be familiar with the content to be included in the report.
6. To understand about Attitude Measurement and Scaling.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Articulate the best suitable research type and formulate the research objective for the business problem.	Apply
CO2	Reframe the suitable research designs and select appropriate sampling techniques for the research.	Evaluate
CO3	Sketch the appropriate data collection method for solving the business issue and decide the appropriate measurement scale for designing the instrument for data collection.	Apply
CO4	Apply appropriate analytical tools for the data collected and formulate a suitable suggestion for the business problem.	Apply
CO5	Illustrate capabilities of team work, problem-solving, critical thinking, and communication skills and design a suitable research report based on the ethical norms of research.	Analyse
CO6	Correlate NormsforUsing Tables,ChartsandDiagrams	Analyse

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1			M							
CO2			M							
CO3			M							
CO4			M							
CO5			M							
CO6			M							

**S-Strong; M-Medium; L-Low**

### UNIT I Research:

**(8 hours)**

Research - Meaning, types, criteria of good research, marketing research, scientific approach to research in physical and management science, limitations of applying scientific methods in business research problems, ethical issues in business research. Research process – Steps - problem formulation, management problem v/s. research problem, Review of Literature.

### UNIT II Research Design and Sampling Design

**(8 hours)**

Business Research Design: Exploratory, Descriptive, and Causal research - Meaning, suitability, collection, hypothesis formulation. Sampling Design - Meaning, Steps in Sampling process, Sample Size - Sampling Errors, Sampling Techniques- Probability and Non probability.

### UNIT III Sources of Data collection and Scaling Techniques

**(8 hours)**

Data collection: Primary and Secondary data – Sources – advantages/disadvantages, Data collection Methods – Observations, Survey, Interview and Questionnaire. Measurement & Scaling Techniques: Nominal Scale, Ordinal Scale, Interval Scale, Rating Scale, Criteria for good measurement, attitude measurement – Likert's Scale, Semantic Differential Scale, Thurstone-equal appearing interval scale, MDS – Multi Dimensional Scaling. Questionnaire Design: Questionnaire method; Types of Questionnaires; Process of Questionnaire Designing; Advantages and Disadvantages of Questionnaire Method. Data Processing: Data Editing; Coding; Classification and Tabulation of Data.

### UNIT IV Univariate and Bivariate Analysis of Data:

**(8 hours)**

Hypothesis - Meaning, Types, characteristics, sources, Formulation of Hypothesis, Errors in hypothesis testing, Parametric and Nonparametric test: T-test, Z-test, F-test, U-test, Rank-Sum test, K-W test. (Theory only). ANOVA – One-way & Two-way classification. Analysis of Business Research: Bivariate Analysis (Chi-square only) Multivariate Analysis - Factor Analysis, Discriminant Analysis, Cluster Analysis,

Conjoint Analysis, (Theory only). Structural Equation Model using AMOS.

## **UNIT V Research Report Writing and Ethics in research (8 hours)**

Types of research reports – Brief reports and Detailed reports; Report writing: Structure of the research report- Preliminary section, Main report, Interpretations of Results and Suggested Recommendations; Report writing: Formulation rules for writing the report: Guidelines for presenting tabular data, Guidelines for visual Representations, Ethics in Research: Meaning of Research Ethics; Clients Ethical code; Researchers Ethical code; Ethical Codes related to respondents; Responsibility of ethics in research, Plagiarism. Citations : Meaning and Purpose and Types of citations and its interpretations.

**Note:** Case study (20 Marks) and Theory 80 Marks

Chapter 4 – Theory will be covered here and practically applied using SPSS Practical

### **SUGGESTED READINGS:**

1. Uma Sekaran, Roger Bougie (2018), *Research Methods for Business: A Skill-Building Approach*, 7th edition, Wiley, New Delhi.
2. C.R. Kothari, Gaurav Garg (2018), *Research Methodology*, Fourth Edition, New Age International Publishers, New Delhi.
3. Donald Cooper and Pamela Schindler (2017), *Business Research Methods*, 11th edition, McGraw Hill education, New Delhi.
4. Zikmund William G. et.al (2016), *Business Research Methods*, Cengage India, New Delhi.
5. Mark N.K. Saunders, Philip Lewis, Adrian Thornhill (2015), *Research Methods for Business Students*, 7th edition, Pearson Education, New Delhi.

### **E-Resources**

- <https://nptel.ac.in/courses/121106007/>
- <https://nptel.ac.in/courses/110107080>



**COURSE OBJECTIVES:**

To make the students

1. Discuss the concept of information system
2. Understand the concept of digital convergence and changing business environment
3. Assess the Computer Hardware and its technologies
4. Recognize management challenges
5. Understand contemporary approach to IS
6. Discuss Information and knowledge economy

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Articulate the use of information systems in business.	Apply
CO2	Reframe the emerging trends in information technology for organizations.	Evaluate
CO3	Discover how information technology systems influence organizational strategies.	Apply
CO4	Sketch the prevailing ethical issues of information systems.	Apply
CO5	Relate core information systems applications from a business perspective.	Analyse
CO6	Contrast the procedures for securing information systems	Analyse

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1					M					
CO2					M					
CO3					M					
CO4					M					
CO5					M					
CO6					M					

**S-Strong; M-Medium; L-Low**

## **UNIT I Organisation and Information Systems (6 hours)**

Changing Environment and its impact on Business - The IT/IS and its influence - The Organisation: Structure, Managers and activities - Data, information and its attributes - The level of people and their information needs - Types of Decisions and information - Information System, categorization of information on the basis of nature and characteristics.

## **UNIT II Information System (6 hours)**

Nature of IT decision - Strategic decision - Configuration design and evaluation Information technology implementation plan. Transaction Processing System (TPS) - Office Automation System (OAS) -Management Information System (MIS) - Decision Support System (DSS) and Group Decision Support System(GDSS) - Expert System (ES) - Executive Support System (EIS or ESS).

## **UNIT III Computer fundamentals, Telecommunication and Networks(6 hours)**

Computer System – Introduction – Generation of Computers - Classification of Computers - Input and output devices - Software – System s/w and Applications/w - O/S – Functions and Features. Communication, Media, Modems & Channels - LAN, MAN & WAN - Network Topologies, Internet, Intranet and Extranet. Wireless technologies like Wi-Fi, Bluetooth and Wi-Max.

## **UNIT IV Enterprise System (6 hours)**

Information systems for Accounting, Finance, Production and Manufacturing, Marketing and HRM functions - IS in hospital, hotel, bank industry. Enterprise Resources Planning (ERP): Features, selection criteria, merits, issues and challenges in Implementation - Supply Chain Management (SCM): Features, Modules in SCM – Customer Relationship Management (CRM): Phases .Knowledge Management and e-governance.

## **UNIT V Security and Ethical Challenges (6 hours)**

Security and ethical challenges: Ethical responsibilities of Business Professionals – Business, technology. Computer crime – Hacking, cyber theft, unauthorized use at work. Piracy – software and intellectual property .Privacy – Issues and the Internet Privacy .Challenges – working condition, individuals. Health and Social Issues, Ergonomics and cyber terrorism.MIS reports

### **SUGGESTED READINGS:**

1. Laudon, K. C., & Laudon, J. P. (2020).Management information systems: Managing the digital firm, 16th ed. Pearson.
2. Kenneth Laudon & Jane Laudon,(2017). Management Information System,14<sup>th</sup> ed Pearson Edu. India.
3. Jaiswal and Mittal (2012), Management Information Systems, Oxford University Press

4. D.P Goyal (2014) Management Information Systems, 2nd Edition, Mcmillan India Ltd.
5. David & Olsen (2016) Management Information Systems, 2nd Edition, TMH

**23MBAP211 Decision Making Using Statistical Package 4H-2C  
(PRACTICAL)**

**Instruction Hours/week L:0T:0 P:4Marks: Internal:40External:60 Total:100**

**End Semester Exam: 3 Hours**

**COURSE OBJECTIVES:**

To make the students

1. To understand the importance of Statistical package and the features for entering the data according to the variable type.
2. To understand and apply the descriptive analytical tools.
3. To know the univariate tools and its application.
4. To comprehend the application of Bivariate analysis.
5. To understand and compute the multivariate analysis using the package.
6. To learn the data editing and derive required graphs.

**COURSE OUTCOMES**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Complete the datasheet and enter the data	Apply
CO2	Compute descriptive statistics using the package and graphically represent the data.	Evaluate
CO3	Use univariate and bivariate analysis in the software package.	Apply
CO4	Sketch multivariate analysis in the software package.	Apply
CO5	Relate multivariate analysis in the software package.	Analyse
CO6	Illustrate capabilities of problem-solving, critical thinking, and communication skills to infer the output.	Analyse

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2		M								
CO3		M								
CO4		M								
CO5		M								
CO6		M								

**S-Strong; M-Medium; L-Low**

## **EXPERIMENTS:**

### **PRACTICALS ON STATISTICAL PACKAGE FOR SOCIAL SCIENCE RESEARCH**

**Exercise 1:** Data entry in SPSS (Coding and Encoding), Data Editing.

**Data analysis tools in SPSS:**

**Exercise 2:** Compute frequencies distribution, skewness and kurtosis

**Exercise 3:** Compute Descriptive Statistics

**Computation of Bivariate, Univariate and Multivariate Analysis:**

**Exercise 4:** Compute INDEPENDENT SAMPLE 't' TEST to find whether mean differs between two groups

**Exercise 5:** Compute PAIRED SAMPLE 't' TEST

**Exercise 6:** Compute Chi-square test to find association between two variables

**Exercise 7:** Compute ANALYSIS OF VARIANCE (ANOVA) to find whether mean differs among more than two groups

**Exercise 8:** Compute Correlation to find nature of relation between dependent and independent variable

**Exercise 9:** Compute regression test to ascertain the combined influence of select independent variables over dependent variable

**Exercise 10:** Compute FACTOR ANALYSIS to find out the important factors (or) variables among the various set of variables

#### **Suggested Readings:**

1. Darren George, Paul Mallery (2016), *IBM SPSS Statistics 23 Step by Step*, Routledge, NewDelhi.
2. Asthana & Braj Bhushan (2017), *Statistics for Social Sciences (With SPSS Applications)*, PHI, New Delhi.
3. Keith McCormick, Jesus Salcedo, Aaron Poh, *SPSS Statistics for Dummies*, 3rd edition, Wiley, New Delhi.

**COURSE OBJECTIVES:****To make the students**

1. To comprehend on the requirement of the industry.
2. To develop basic skills required in corporate.
3. To exhibit corporate etiquettes.
4. To understand and display the professional competencies.
5. To Assess and manage the emotional intelligence of self and others.
6. To reveal the interpersonal skills expectations of a workplace.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Solve on the requirement of the industry.	Apply
CO2	Reframe basic skills required in corporate.	Evaluate
CO3	Teach the corporate etiquettes.	Apply
CO4	Discover and display the professional competencies.	Apply
CO5	Devise and manage the emotional intelligence of self and others.	Analyze
CO6	Devise the interpersonal skills expectations of a workplace	Analyze

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1				M						
CO2				M						
CO3				M						
CO4				M						
CO5				M						
CO6				M						

S-Strong; M-Medium; L-Low

**UNIT 1 Difference between campus and Corporate: (4 hours)**

Change management - Learn the Culture - Impact of your attitude and behavior - Consider the language – Establish and maintain relationship – Respect others - Be Confident - Keep on learning - Consider the body language.

**UNIT II Grooming for Corporate: (4 hours)**

**Corporate Etiquettes** - Dressing and grooming skills - Workplace etiquette - Business etiquette - E-Mail etiquette - Telephone etiquette - Meeting etiquette.

**UNIT III Professional Competencies: (4 hours)**

Analytical Thinking - Listening Skills - Time management - Team Skills – Assertiveness - Stress Management - Participating in Group Discussion - Interview facing – Ownership - Attention to Detail.

Building Positive Relationships – Giving Praise – Dealing with Criticism – Managing Conflict.

**UNIT IV Emotional Intelligence (EI) (4 hours)**

Perspectives on the Science and History of EI, How Emotions Work, Developing EI Abilities and Competencies, Workforce Diversity and EI in the Workplace, Workplace Leadership: Using and Understanding Emotions, Empathy, moods, Managing Other People's Emotions

**UNIT V Interpersonal Communication: (4 hours)**

Formal and informal talk – listen to follow and respond to explanations, directions and instructions in academic and business contexts – strategies for presentations and interactive communication – group/pair presentations – negotiate disagreement in group work. Lexical chunking for accuracy and fluency- factors influence fluency, deliver a five-minute informal talk – greet – respond to greetings – describe health and symptoms – invite and offer – accept – decline – take leave – listen for and follow the gist- listen for detail - Recitation of short stories - Social Conversation Skills – Presentation - One Act Plays- Situational Analysis – Thematic Appreciation Test

**SUGGESTED READINGS**

1. Ferguson Careers skills library (2015), COMMUNICATION SKILLS AND PERSONALITY DEVELOPMENT, 1st edition, Ferguson
2. Sanjay Kumar (Author), PushpLata (2015), Communication Skills, 2nd edition, Oxford University Press, New Delhi.
3. Sanjay Kumar (Author), PushpLata (2018), Communication Skills – A Workbook, 1st edition, Oxford University Press, New Delhi.
4. Cengage Learning India (2013), English Language Communication Skills: Lab Manual cum Workbook w/CD, 1st edition, Cengage, New Delhi.
5. BarunMitra (2016), Personality Development and Soft Skills, 2nd edition, Oxford University Press, New Delhi.
6. Gopalaswamy Ramesh (2013), The Ace of Soft Skills: Attitude, Communication

and Etiquette for Success, 1st edition, Pearson Education, New Delhi.

7. Keith McCormick, Jesus Salcedo, Jon Peck, Andrew Wheeler, Jason Verlen (2017), SPSS Statistics for Data Analysis and Visualization, Wiley, New Delhi.
8. Brian C. Cronk (2016), How to Use SPSS®: A Step-By-Step Guide to Analysis and Interpretation, 9th edition, Routledge, New Delhi.



Instruction Hours L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100  
/ week:

End Semester Exam: 3 Hours

### COURSE OBJECTIVES:

To make the students

1. To understand the Concept of entrepreneurship, types of entrepreneurs and skills required by an entrepreneur.
2. To generate creative business ideas and pitch the idea,
3. To formulate a business plan assessing marketing, technical and financial feasibility.
4. To understand the Functional plans of a new business.
5. To select the best source of financing the business ventures
6. To comprehend apply the recent changes and legal aspects to new business ventures.

### COURSE OUTCOMES:

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Concept of entrepreneurship, types of entrepreneurs and skills required by an entrepreneur.	Understand
CO2	Formulate creative business ideas and pitch the idea	Create
CO3	Formulate a business plan assessing marketing, technical and financial feasibility	Create
CO4	Understand the Functional plans of a new business.	Understand
CO5	Select the best source of financing the business ventures	Remember
CO6	Apply the recent changes and legal aspects to new business ventures	Apply

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1						M				
CO2						M				
CO3						M				
CO4						M			L	
CO5						M				
CO6						M				

S-Strong; M-Medium; L-Low

## **UNIT I Entrepreneurship**

**(9 hours)**

Entrepreneurship: Concept, knowledge and skills requirement; characteristic of successful entrepreneurs; role of entrepreneurship in economic development; entrepreneurship process; factors impacting emergence of entrepreneurship; managerial vs. entrepreneurial approach and emergence of entrepreneurship.

Types of Entrepreneurs (Clarence Danhoff's Classification) - Intrapreneurship – Concept and Types (Hans Schollhammer's Classification) - Entrepreneurship in different contexts:

## **UNIT II Business Idea Generation**

**(9 hours)**

Starting the venture: generating business idea – sources of new ideas, methods of generating ideas, creative problem solving, opportunity recognition; environmental scanning, competitor and industry analysis.

Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analyzing business models; Business model canvas, Introduction to startups – Meaning, Definition, Business Pitching.

## **UNIT III Marketing and Financial Plan**

**(10 hours)**

Feasibility study – market feasibility, technical/operational feasibility, financial feasibility; drawing business plan;

Functional plans: marketing plan – marketing research for the new venture, steps in preparing marketing plan, contingency planning; organizational plan – form of ownership, designing organization structure, job design, manpower planning; Financial plan – cash budget, working capital, Performa income statement Performa cash flow, perform balance sheet, break-even analysis. Preparing project report; presenting business plan to investors.

## **UNIT IV Sources of Finance for Entrepreneurs**

**(10 hours)**

Public and private system of stimulation, support and sustainability of entrepreneurship. Requirement, availability and access to finance, marketing assistance, technology, and industrial accommodation, Role of industries/entrepreneur's associations and self-help groups. The concept, role and functions of business incubators, debt or equity financing, commercial banks, angel investors, venture capital and private equity funds. Startups – Definition – Startup Ecosystem – mobilizing resources for startup – basic Startup problems – Funding opportunities for Startups. Mudra Scheme – Financing for Startups – Seed Capital, Private equity, Angel Investor, venture capital and crowd fund.

## **UNIT V Current Trends and Legal aspects of Entrepreneurship(10 hours)**

Women Entrepreneurship, Rural Entrepreneurship, technopreneurship, cultural entrepreneurship, international entrepreneurship, netpreneurship, ecopreneurship, and social entrepreneurship. Legal issues – intellectual property rights patents, trademarks, copyrights, trade secrets, licensing; franchising.

### **SUGGESTED READINGS:**

1. Robert Hisrich and Michael Peters and Dean Shepherd (2018), Entrepreneurship, 10<sup>th</sup> Edition, McGraw Hill, New Delhi.
2. David H. Holt (2016), Entrepreneurship, 1st Edition, Pearson Education, New Delhi.
3. Sangeetha Sharma (2017), Entrepreneurship Development, PHI Learning Pvt Ltd., New Delhi.
4. Poornima M., Charantimath (2018), Entrepreneurship Development and Small Business Enterprises, 3rd edition, Pearson Education, New Delhi
5. S.S.Khanka (2012), Entrepreneurial Development, S.Chand, New Delhi.

### **E-Resources**

- <https://www.youtube.com/watch?v=Ihs4VFZWwn4>
- <https://nptel.ac.in/courses/127105007/>
- <https://nptel.ac.in/courses/110106141/>
- <https://nptel.ac.in/courses/110/107/110107094/>

**Semester - III****23MBAP302****INTERNATIONAL BUSINESS****3H - 3C****Instruction Hours/week: L: 3 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To make the students to understand the concepts of International business
2. To know the export procedure for production and shipment
3. To enhance knowledge in EXIM policy
4. To understand the Logistics and International marketing channel decision.
5. To get an insight on the need for documentation, Process of obtaining Export and Import License
6. To Understand the Concept of Export, EXIM strategies, custom clearance and Export incentive schemes.

**COURSEOUT COMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Apply the concepts of International business, trade procedures and EXIM Policy apply lifelong	Apply
CO2	Understand the basics of shipment, foreign trade and international agencies and agreement.	Understand
CO3	Demonstrate capabilities of analysing problems, team work and communication skills	Apply
CO4	Develop knowledge on international financial institutions	Apply
CO5	Acquire knowledge on foreign trade.	Remember
CO6	Understand Financing of foreign trade and Documentation	Understand

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1							M			L
CO2							M			
CO3				L	L		M			
CO4							M			
CO5							M			
CO6							M			

**S-Strong; M-Medium; L-Low**

**UNIT I: International Business:****(7hours)**

International Business - Elements of International Business, Globalization. International Trade theories and their application - Mercantilism, Absolute advantage, Comparative advantage, Heckscher- Ohlin, Product life cycle theory and Porter's diamond model.

**UNIT II : International Business Environment and Culture****(7 hours)**

Environment - Economic Environment, Political Environment, Demographic environment, Legal Environment

Culture and International Business: Introduction, Meaning of Culture, Country Culture, and Culture in an International Business Organization -Balance of Trade – Balance of Payment – Current – Unilateral - Disequilibrium of BOP.

**UNIT III Foreign Investments, Regional Economic integration and Global trade institutions****(7 hours)**

Foreign Investments, Types and Motives: Foreign investments, types of foreign investments, motives.

Regional integration: Introduction, Overview of Regional Integration, Types of Integration, Regional Trading Arrangements, India and Trade Agreements- Global Trade Institutions: World Trade Organization (WTO), International Labour Organisation (ILO), International Monetary Fund (IMF). Structure and functions of Regional Economic arrangements like EU – NAFTA – SAARC – ASEAN.

**UNIT IV: Functional Knowledge in International perspective****(7 hours)**

International Financial Management: Introduction, Overview of International Financial Management, Components of International Financial Management, Scope of International Financial Management

International Accounting Practices: Introduction, International Accounting Standards, Accounting for International Business, International Regulatory Bodies, International Financial Reporting Standards

International Marketing: Introduction, scanning international markets, mode of entering into potential markets, Global Marketing Strategies, Branding for International Markets - International Human Resource Management: Introduction, International Organizational Structures, Introduction to International Human Resource Management, Scope of International Human Resource Management.

## **UNIT V Finance and International Trade:**

**(8hours)**

Finance and International Trade - Documentation in International Trade, Financing Techniques, Export Promotion Schemes, Export and Import Finance

Trade Barriers. Tariff – Classification – Impact – Nominal, effective, optimum tariff – Non tariff barriers

EXIM Policy - Export procedure – Offer and receipt of confirmed order – production, shipment and banking procedure – Negotiation – Documents for export trade – Export incentives to Indian exporters.

Export Finance- Payment terms, Pre and Post shipment credit, Institutional finance for exports, EXIM Bank, Letter of Credit and financing of foreign trade, ECGC, Importer–Exporter Code (IEC).FERA

### **SUGGESTED READINGS:**

1. K. Aswathappa (2017), International Business, 6th edition, McGraw Hill, New Delhi.
2. Francis Cherunilam, (2013), International Trade and Export Management. Himalaya Publications, Mumbai.
3. Charles W. L. Hill, G. Tomas M. Hult, Rohit Mehtani (2018), International Business: Competing in the Global Marketplace, McGraw Hill, New Delhi.
4. Gupta C.B.(2014), International Business, S.Chand, New Delhi.
5. Varma Sumati (2019), Fundamentals of International Business, 4th edition, Pearson Education, New Delhi.
6. Francis Cherunilam, (2013), International Trade and Export Management. Himalaya Publications, Mumbai.

### **E-Resources**

1. [https://www.youtube.com/watch?v=fU7xJ2AYM3w&list=PLesgViD0jhW\\_pW9WVtA4oe4w3TRVecbEQ](https://www.youtube.com/watch?v=fU7xJ2AYM3w&list=PLesgViD0jhW_pW9WVtA4oe4w3TRVecbEQ)

**COURSE OBJECTIVES:****To make the students**

1. To Understand the Concept of investing and mechanics for formulating investment decisions.
2. To communicate orally and in written form the concepts of Concept of investing and mechanics for formulating investment decisions.
3. To apply the investing concepts and skills lifelong.
4. To clarify the structure and functioning of capital market.
5. To expose the concepts of investment Risks and Securities.
6. To facilitate them to understand and exploit the tools available for analysis.

COs	Course Outcomes	Blooms Level
CO1	Understand the Concept of investing and mechanics for formulating investment decisions.	Understand
CO2	Apply the investing concepts and skills lifelong	Apply
CO3	Demonstrate capabilities of problem-solving, critical thinking, team work and communication skills	Apply
CO4	Demonstrate knowledge and compute value of security analysis & portfolio management and apply the concept to Evaluate the business proposal applying capital budgeting techniques	Apply
CO5	Understand about SAPM. Investments', its types, risk involved in investments', analysis pertaining to investments, Portfolio Theory and models on investment management.	Under stand
CO6	Comprehend the knowledge of assessing the working of organization to assess the liquidity position of the firm.	Understand

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M							
CO4		M								
CO5							M			
CO6							M			

**S-Strong; M-Medium; L-Low**

## **UNIT I : Investment and Investment Avenues (8 hours)**

Concepts of investment – Saving Vs. Investment, Investment Vs. Speculation Vs. Gambling, Sources of investment information- Investment Avenues :Non marketable Financial Assets – Money Market Instruments – Bond/Debentures – Equity Shares – Schemes of LIC – Mutual Funds– Real Assets – Real Estate – Art – antiques and others.

Hedging Instruments: Derivatives: Financial Derivatives –Futures and Options - Stock and Index futures and options - Commodity Derivatives – Structure of commodity exchanges – Commodity futures and options – Hedging using commodity futures. Stock Market – Stock Market Regulator and SEBI.

## **UNIT II: Risk and Return and Valuation of Securities(10 hours)**

Concept of total risk, factors contributing to total risk - systematic and unsystematic risk : default risk, interest rate risk, market risk, management risk, purchasing power risk. Risk & risk aversion. Meaning and Types of Returns- Holding Period return – Expected return – Annualized return – Measurement of Risk : Standard deviation and beta - Capital allocation between risky & risk free assets-Utility analysis.

Bond Valuation, Preference Share Valuation and Share Valuation: Dividend discount models- no growth, constant growth (Problems)

## **UNIT III Fundamental Analysis, Technical Analysis and Market Efficiency (10 hours)**

Fundamental Analysis- Economic analysis: Leading lagging and coincident macro-economic indicators, Expected direction of movement of stock prices with macroeconomic variables in the Indian context; Industry analysis: stages of life cycle, MichealE.Porter's five forces model, SWOT analysis, Company analysis: Financial Statement Analysis.

Technical Analysis: meaning, assumptions, difference between technical and fundamental analysis; - Technical Tools - Dow theory, Primary Trend – The secondary Trend – Minor Trends, Support and Resistance Level ,Indicators, Simple Moving averages, MACD, Charts: line chart, bar chart, candle chart, point & figure chart, Patterns: head & shoulders, triangle, rectangle, flag, cup and saucer.

Efficient Market Hypothesis; Concept of efficiency: Random walk, Three forms of EMH

## **UNIT IV :Portfolio Management(10hours)**

Portfolio Management – Portfolio creating process -Principles of Portfolio Construction -Portfolio Analysis: portfolio risk and return, Markowitz portfolio model: risk and return for 2 and 3 asset portfolios, concept of efficient frontier and optimum portfolio- Mean Variance Criterion – covariance – Beta (simple



problems) – Portfolio Theory : Capital asset pricing model – Arbitrage pricing theory. assumptions, significances and limitations of each theory

#### **UNIT V: Mutual Funds, Portfolio Evaluation and Portfolio Revision(10 hours)**

**Mutual Funds :** Introduction, Mutual Funds Products and Features- calculation of Net Asset Value(NAV) of a Fund, classification of mutual fund schemes by structure and objective, advantages and disadvantages of investing through mutual funds- open ended and close ended Funds- Historical Perspective of Mutual Funds, Mutual Fund Industry in India and Abroad. Performance Evaluation using Sharpe's Treynor's and Jensen's measures. Meaning – needs – Sharpe's performance measures – Treynor's Performance Index – Jensen's Performance Index – their significance and limitations – Portfolio revision (Problems).

**Note:** Distribution of marks - 80% theory and 20% problems

#### **SUGGESTED READINGS :**

1. Sasidharan, K. and Alex, K. Mathews. (2013). *Security Analysis and Portfolio Management*. New Delhi: Tata McGraw Hill Education Private Limited.
2. Punithavathy, Pandian. (2013). *Security Analysis and Portfolio Management*. New Delhi: Vikas Publishing House Pvt Ltd.
3. Donald, E. Fischer., and Ronald, J. Jordan. (2010). *Security Analysis & Portfolio Management*. New Delhi: Prentice Hall of India Private Ltd.
4. Prasanna Chandra. (2010). *Managing Investments*. New Delhi: Tata McGraw Hill.
5. Avadhani, V.A. (2008). *Securities Analysis and Portfolio Management*. New Delhi: Himalaya Publishing House,
6. Kevin. (2010). *Security Analysis and Portfolio Management*. New Delhi: Prentice Hall of India Private Ltd.

#### **E-Resources**

- <https://nptel.ac.in/courses/110105035/>

**COURSE OBJECTIVES:****To make the students**

1. To understand the features and functioning of the financial markets and financial services operations.
2. To communicate orally and in written form the concepts features and functioning of the financial markets and financial services operations.
3. To apply the knowledge of financial markets, financial services operations lifelong.
4. To understand competent in creating different types of charges and documentation in respect of different types of borrowers against various types of securities.
5. To apply the Concept of banking and insurance, its products in lifelong practice
6. To develop a perfect understanding of the procedure and precautions to be adopted by bankers in dealing with different types of securities.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the features and functioning of the financial markets and financial services operations and apply lifelong.	understand
CO2	Communicate orally and in written form the features and functioning of the financial markets and financial services operations.	understand
CO3	Demonstrate capabilities of analysing problems, team work and communication skills	Apply
CO4	To give them an overview about insurance market	understand
CO5	To gain a comprehensive knowledge on the procedural formalities in dealing with different types of customers.	Apply
CO6	To understand competent in creating different types of charges and documentation in respect of different types of borrowers against various types of securities	Evaluate

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2	M									
CO3		M								
CO4							M			
CO5					M					
CO6	M									

**S-Strong; M-Medium; L-Low**

#### **UNITI: Merchant Banking and Financial Services: (8 hours)**

Introduction, concept of merchant banking, financial system in India, development of merchant banks and regulations

Objectives of financial services – types of financial services (fund based and fees based) – capital market services and money market services – intermediaries: banking financial corporations, non banking financial corporations and insurance corporations- financial services sector problems and reforms, growth of financial services in India.

#### **UNIT II: Issue Management (10 hours)**

Pre-issue and post-issue management activities performed by merchant banks Different roles played by underwriters and brokers in issue management and their responsibilities- Needs of Indian companies for raising funds from foreign markets usage of euro issue, evaluation of various types of depository receipts -American Depository Receipts, Global Depository Receipts, FCCBs and FCEBs.

#### **UNIT III Depositories, Securitization and Venture capital (10 hours)**

Depositories: Online trading, dematerialization and re-materialization, Depository system, the Depository Act of 1996 and depository participants. NSDL, CDSL and benefits of a depository system

Credit Rating - Introduction of credit rating, processes, scope of credit rating agencies in India.

Securitization of Debts -Introduction of securitization, features, advantages and the steps involved in the securitization process, guidelines laid down by the Securitization Act, 2002,

Venture Capital Funds -Introduction of venture capital fund, features, emergence of venture capitalism in India.

#### **UNIT IV Leasing and Hire Purchase (10 hours)**

Leasing – History and Development – Concept and Classification – Types – Advantages – Disadvantages - Legislative Framework – Supplier, Lessor, Lessee

Relationship – Sub Lease – Default and Remedies – Lease Evaluation in Lessee's and Lessor's point of view.

Hire Purchase – Concept and Characteristics – Rate of Interest – Methods of reporting adopted for hire purchase transactions - Legal aspects – Tax implication frame work for Financial Evaluation –Concept of credit Rating. Types of credit Rating - Advantages and Disadvantages of credit Rating - credit Rating Agencies & their Methodology - Emerging avenues of Rating services – International credit Rating practices – Concept – Types – Advantages and Disadvantages – Process –Agencies- Consumer Finance.

## **UNIT V Factoring and Forfeiting**

**(10 hours)**

Process and features of factoring, types of factoring contracts, advantages and disadvantages of factoring, differences between factoring and bill discounting, process of factoring as it exists in India and Forfeiting, process of forfeiting..

### **Suggested Reading:**

1. Khan, M.Y. (2013). *Financial Services* (7<sup>th</sup> edition). New Delhi: Tata McGraw Hill.
2. Ramesh Babu, G. (2009). *Indian Financial System*. New Delhi: Himalaya Publishing House.
3. Shanmugam, R. (2010). *Financial Services*. New Delhi: Wiley India Pvt Ltd.
4. Gurusamy, S. (2009). *Merchant Banking and Financial Services* (3<sup>rd</sup> edition). New Delhi: Tata Mc Graw Hill Education Pvt Ltd.
5. Gordon, E. Natarajan. (2013). *Financial Markets & Services*. New Delhi: Himalaya Publications.

### **E-Resources**

- <https://nptel.ac.in/courses/110105121/>
- <https://www.youtube.com/watch?v=-JMLdhbUbzE>

**COURSE OBJECTIVES**

1. To build knowledge and understanding of various accounting standards and the conceptual framework (based on IFRS and Ind AS) that are applicable to corporate entities.
2. The Examine important role accounting plays in society.
3. To Classify the business transactions and create financial statements according to generally accepted accounting principles
4. To understand the important role accounting plays in allowing individuals to make informed decisions.
5. To construct financial statements for individual entities for the use of shareholders.
6. To construct financial statements such as balance sheets, income statements, and cash flow statements from the underlying transactions.

**COURSE OUTCOMES:**

At the end of this course, Students will be able to

Cos	Course Outcomes	Blooms Level
CO1	Understand the use and application of the IFRS	Remembering
CO2	Accounting for transactions using accounting standards	Apply
CO3	Construct the single entity financial statement	Evaluate
CO4	Examine and interpretation of accounting statements	Evaluate
CO5	Explain the main elements of financial accounting information – assets, liabilities, revenue and expenses	Understand

**Mapping with Programme Outcomes**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		S								
CO2			M							
CO3					M					
CO4				M						
CO5	M									

S-Strong; M-Medium; L-Low

**UNIT I: Use of IFRS and Ind AS (8 hours)**

Understand the application of IFRS in India through the use of Ind AS – the applicability of Ind AS – the mapping of Ind AS to IFRS – differences between IFRS & Ind AS – the list of IFRS (Ind AS) – Process of transition to IFRS for the first time -Overview of applicable U.S GAAP accounting guidance - Divergence between U.S GAAP and IFRS.

**UNIT II: Application of IFRS (Ind AS) for transactions (10 hours)**

Asset based standards such as PPE, Intangible assets, borrowing costs, impairment of assets, inventory & biological assets, provisions & contingencies, events after reporting period, accounting policies, estimates & errors

**UNIT III: Revenue recognition (10 hours)**

Understand the principles of recognising revenue of the business – revenue recognition for goods, services, interest and dividends – concept of deferred income and accounting thereof

**UNIT IV: Preparation & presentation of financial statements (10 hours)**

Thorough knowledge of preparation & presentation of financial statements by incorporating the effects of the accounting standards (covered in module 2& 3 only) - statement of profit or loss and other comprehensive income – statement of financial position (Balance sheet)

**UNIT V Analysis of financial statements (10 hours)**

Analyse the financial performance of an entity using the financial statements – use of ratios in performance evaluation – according to statement – according to function – according to purpose - trend analysis – comparison with competition or industry average

**SUGGESTED READINGS:**

1. Subramanyam, K. R. and John, J.W.(2014), “Financial Statement Analysis”, 10th Edition, Tata McGraw Hill, New Delhi.
2. Stephen H. Penman (2014) “Financial Statement Analysis and Security Valuation”, 4th Edition, Tata McGraw Hill, New Delhi.
3. M.S Narasimhan (2016), Financial Statement Analysis, 1st Edition, Cengage Learning India Private Limited, New Delhi.
4. Charles H. Gibson (2013), Financial Statement Analysis, 13th edition, Cengage Learning India Private Limited, New Delhi.
5. Lawrence Revsine , Daniel Collins , Bruce Johnson , Fred Mittelstaedt , Leonard Soffer (2015), Financial Reporting and Analysis, 6th Edition, McGraw-Hill Education, New Delhi.
6. Deepa Agarwal (2017), Financial Reporting and Auditors Responsibility, 2nd edition, Bloomsbury Professional India, New Delhi.

7. Deepa Agarwal (2018), The Law & Practice of Financial Reporting and Auditor's Responsibilities under Companies Act, 2013, 1<sup>st</sup> edition, Bloomsbury Professional India, New Delhi.

**23MBAPF303D CORPORATE RESTRUCTURING,  
MERGERS AND ACQUISITIONS****4H - 3C****Instruction Hours /week: L: 4T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To Understand the Concept mergers, Demergers, LBO, MBO, JV its valuation and accounting.
2. To compute, analyse and evaluate the corporate restructuring decisions and its impact on company.
3. To communicate orally and in written form the understanding of mergers, Demergers, LBO, MBO, JV its valuation and accounting.
4. To understand international mergers and acquisitions activity and role of mergers and acquisitions in international trade growth
5. To analyse the impact of government policies and political and economic stability on international mergers and acquisitions decisions
6. To understand cultural profiling and assessment of cultural compatibility

**COURSE OUTCOMES:****At the end of this course, Students will be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the Concept mergers, Demergers, LBO, MBO, JV its valuation and accounting.	Understand
CO2	Compute, analyse and evaluate the corporate restructuring decisions and its impact on company.	Apply
CO3	Communicate orally and in written form the understanding of mergers, Demergers, LBO, MBO, JV	Apply
CO4	Understand the concessions under Income Tax Act for mergers and unwillingness to pay and inability to pay	Under stand
CO5	Gain knowledge in Valuation and accounting	Under stand
CO6	Understand Legal and Regulatory Framework of mergers and acquisitions and Post Merger Integration	Understand



## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2			M							
CO3				M						
CO4	M									
CO5								M		
CO6								M		

**S-Strong; M-Medium; L-Low**

### **UNIT I Introduction to Corporate Restructuring (10 hours)**

Meaning of Corporate Restructuring, various forms of Corporate Restructuring, Objectives of mergers, types of mergers, Horizontal, Vertical, Conglomerate. The Merger and Acquisition Process, Theories of Merger, Success and failure of Merger & Acquisition. De-merger, spin offs, split ups, split offs, Reverse Merger. Difference between Demerger and Reverse Merger. Takeover Tactics and Takeover Defenses.

### **UNIT II Negotiation, Deal Structuring and Methods of Payment in Mergers and Acquisitions (10 hours)**

Introduction, structuring of transactions, regulatory approval, deal making in India, methods of payment in M&A, distinction between stock and cash transactions, types of exchange of shares.

### **UNIT III Legal Acts and policies (10 hours)**

Amalgamation as per AS-14 and IFRS. Merger Aspects under Competition Law, Competition Bill 2002. SEBI regulations on Takeovers in India (Takeover Code), Role of Merchant Bankers in Mergers & Acquisition

### **UNIT IV Valuation and accounting (10 hours)**

Concept of Value of a Company, Firm Valuation Models on Merger & Acquisition: (a) DCF Model, (b) Comparable Company, (c) Book Value, (d) Adjusted Book Value (e) Enterprise Value, (f) Three Stage growth model, Swap Ratio, Valuation Practices in India, LBO, MBO.

*Accounting for Amalgamation* –Meaning of amalgamation, types of amalgamation, methods of accounting for amalgamation, meaning of consideration, treatment of goodwill, reserves and other profits

### **UNIT V Taxation Aspects in M&A(8 hours)**

Tax Implications: Tax Concession to amalgamated company, tax concession to amalgamating company in case of Merger & Acquisition. Tax aspects related to demergers.

### **SUGGESTED READINGS:**

1. Rabi Narayan Kar/Minakshi (2017), Mergers Acquisitions & Corporate Restructuring - Strategies & Practices, 3rd edition, Taxmann, New Delhi.
2. Prasad G. Godbole(2013), Mergers Acquisitions and Corporate Restructuring, 2nd edition, Vikas Publishing House, New Delhi.
3. ChandrashekarKrishnamurti (Editor), Vishwanath S R(2018), Mergers Acquisitions and Corporate Restructuring – Texts and Cases, 2nd edition, SAGE Publications Pvt. Ltd, New Delhi.
4. Patrick A. Gaughan(2019), Mergers Acquisitions and Corporate Restructuring, 7th edition, Wiley New Delhi.
5. SheebaKapil, Kanwal N. Kapil (2018), Mergers and Acquisitions: Strategy, Valuation, Leveraged Buyouts and Financing, 2nd edition, Wiley, New Delhi.

### **E-Resources**

- <https://www.youtube.com/watch?v=NtXV3YGr988>
- <https://www.youtube.com/watch?v=J3VrV-UdVZw>
- <https://www.youtube.com/watch?v=JaIqStF8bTw>

**COURSE OBJECTIVES:****To make the students**

1. To introduce the new field of behavioural finance and underline its importance as a driving force in the global markets.
2. To provide the conceptual framework of behavioural finance based on traditional and modern theories.
3. To impart the psychological aspects and challenges underlying the issue of rational and irrational behavior.
4. To demonstrate the impact of news and timing from the corporate angle and highlight the ramifications of effective news communication.
5. To introduce students to an alternate framework for understanding price discovery in the markets.
6. To help students identify persistent or systematic behavioral factors that influence investment behavior

**COURSE OUTCOMES:****At the end of this course, Students will be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Enumerate the key terms associate with behaviour finance, investment in financial markets & corporate finance.	Understand
CO2	Illustrate the various theories associated with behaviour finance and parameters of investing in financial market.	Apply
CO3	Identify persistent or systematic behavioural factors that influence investors and investment decisions.	Knowledge
CO4	Analyse the various behavioural finance factors related to corporate & individual investors.	Apply
CO5	Evaluating Interpret various investment strategies of effective investment in the financial market on the basis of various theories and factors of behavioural finance.	evaluate
CO6	Understanding on the concept of mean reversion and investment style.	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3		M								
CO4		M								
CO5	M									
CO6							M			

**S-Strong; M-Medium; L-Low**

### UNIT I

**(8 hours)**

Basics of Behavioural Finance Behavioural Finance: Nature, Scope, Objectives, Significance and Application. The Psychology of Financial Markets and Investor Behaviour, Behavioural Finance Market Strategies, Prospect Theory and Mental Accounting - Investors Disposition Effect.

### UNIT II

**(10 hours)**

Building block of Behavioural Finance Cognitive Psychology and limits to arbitrage. Demand by arbitrageurs; Risk - Noise-trader risk; Professional arbitrage; Destabilizing informed trading - Expected Utility as a basis for decision-making – Theories.

### UNIT III

**(10 hours)**

Rationality Ellsberg's paradoxes, Rationality from an economics and evolutionary prospective. Different ways to define rationality: dependence on time horizon, individual or group rationality. Herbert Simon and bounded rationality. Demand by average investors; Belief biases; Limited attention and categorization; Non-traditional preferences; Bubbles and systematic investor sentiment.

### UNIT IV

**(10 hours)**

Investor Behaviour External factors and investor behaviour: Fear & Greed in Financial Market, Emotions and financial markets: geomagnetic storm, Statistical methodology for capturing the effects of external influence onto stock market returns.

## **UNIT V**

**(10 hours)**

Behavioural corporate finance Empirical data on dividend presence or absence, ex-dividend day behaviour. Timing of good and bad corporate news announcement. Systematic approach of using behavioural factors in corporate decision-making. Neurophysiology of risk-taking. Personality traits and risk attitudes in different domains.

### **SUGGESTED READINGS**

1. Chandra, Behavioral Finance Paperback – 1 Jul 2017, McGraw–Hill Education.
2. Sulphrey M.M., Behavioral Finance Paperback – 2014, PHI Learning Private Limited
3. Michael Mauboussin, More Than You Know–Finding Financial Wisdom in Unconventional Places, Columbia Business School Publishing, 2013
4. Williams Forbes, Behavioral finance, Wiley 2011
5. James Montier, The Little Book of Behavioural Investing: How not to be your own worst enemy, Little Books, Big Profits (UK), 2010.

### **E-Resources :**

- <https://nptel.ac.in/courses/110/105/110105143/>
- <https://nptel.ac.in/courses/110/107/110107128/>

**Instruction Hours/week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To understand the Services, marketing of services, marketing mix, pricing and segmentation for services marketing.
2. To comprehend on the consumer behaviour of services sector and emerging issues in services sector.
3. To evaluate the Gap in services sector using tools and techniques.
4. To understand the concept of marketing strategy for service products requires a different sort of approach, which is different from the traditional goods marketing.
5. To understand the uniqueness of the services characteristics and its marketing implications.
6. To provide an in-depth appreciation and understanding of the unique challenges inherent in managing and delivering quality services.

**COURSE OUTCOMES:**

Learners should be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the Services, marketing of services, marketing mix, pricing and segmentation for services marketing	Apply
CO2	Comprehend on the consumer behaviour of services sector and emerging issues in services sector.	Apply
CO3	Evaluate the Gap in services sector using tools and techniques	Understand
CO4	Demonstrate capabilities of analysing problems, team work and communication skills	Apply
CO5	Understand the role of marketing strategic business in service sector	Apply
CO6	Gain knowledge on operations and financial aspects in market and retail planning	knowledge

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1			M				S	
CO2		M						
CO3					S			S
CO4	M						S	
CO5			S					
CO6	M						S	

**S-Strong; M-Medium; L-Low**

### **UNIT I Nature, Scope of Services and Services Marketing (10 hours)**

Nature, Scope of Services :Introduction, meaning of services, unique characteristics, difference between services and tangible products, service sector, classification of services, Barriers and issues in Services Marketing in the Indian context, growth of service sectors and service industries.

Services Marketing: Introduction, concept and evolution of services marketing, meaning of service marketing, Categories of Service Providers, myths encountered in services, need for service marketing, and growth in Services Marketing.

### **UNIT IIServices Marketing Mix, Gaps Model, Service Design and Service Delivery (8 hours)**

Services Marketing Mix, Introduction, 7Ps of service marketing, service gaps framework, perceived service quality, models of service marketing, Gaps Model of service quality.

Service Design and Service Delivery: Introduction, Service delivery process, service encounters and Moments of Truth, employee role in service delivery, service employee- criteria, importance and emotional approach, role of service provider, intermediaries involved in Service Process and Service Delivery

### **Unit IIISTP Strategy for Services and Consumer Behavior in Services Marketing (10 hours)**

STP Strategy for Services :Introduction, Need for segmentation of services, bases of segmentation services, segmentation strategies in service marketing, need for targeting and positioning of services, positioning strategies for services, positioning Through Product/Service Delivery Strategies, Positioning Through Pricing Strategies, Positioning Through Distribution Strategies, positioning through Sales Promotion and Advertising, Service Differentiation Strategies.

Consumer Behavior in Services Marketing Introduction, Customer Expectations in Services, Service Costs Experienced by Consumer, the Role of customer in Service Delivery, Conflict Handling in Services, Customer Responses in Services, Concept of Customer Delight

#### **Unit IV Service Development and Quality Improvement and Customer Defined Service Standards (10 hours)**

Service Development and Quality Improvement: Introduction, Types of New Service Development and its Stages, Types of new services, Stages in new service development, Service Costs Incurred by the Service Provider, Service Blue Printing, Service Development – Need, Importance and as a Measure of Competitive Advantage, Service Quality Dimensions, Service Quality Measurement and Service Mapping, Improving Service Quality and Service Delivery, Service Failure and Recovery. Customer Defined Service Standards.

#### **UNIT V Integrated Services Marketing, Marketing of Services and Emerging Issues in Service Marketing (10 hours)**

Integrated Services Marketing: Introduction, meaning and Importance, Features of Integrated Service Marketing, Integrated Marketing Communication for Service, Reasons for growing importance of integrated marketing communication, Advantages of integrated marketing communication, Integrated Service Marketing Mix, Developing an effective and efficient service marketing system, Integration of service quality measures and managing quality

Marketing of Services: Introduction, Overview of Different Service Sectors, Marketing of Banking Services, Marketing in Insurance Sector, Marketing of Education Services, Marketing of Tourism and Airlines, Tourism marketing, Airlines marketing, marketing of Hospitality Services, Healthcare Marketing, Social Service by NGOs, Marketing of Online Services, Marketing of Professional Services. Emerging Issues in Service Marketing, Ethical Aspects in Service Marketing

#### **SUGGESTED READINGS:**

1. Christopher Lovelock et.al (2017) Services Marketing-People, Technology, Strategy, 8th edition. Pearson Education, New Delhi.
2. Zeithaml (2017), Services Marketing: Integrating Customer Focus across the Firm, 6th edition, MC Graw Hill, New Delhi.
3. Vinnie Jauhari & Kirti Dutta (2017), Services Marketing: Text and Cases, 2<sup>nd</sup> edition, Oxford University Press, New Delhi.
4. Srinivasan, R. (2012). Services Marketing – The Indian Context, Prentice Hall of India, New Delhi.
5. Rama Mohana Rao (2011), Services Marketing, 2nd edition, Pearson Education, New Delhi.
6. Rajendra Nargundkar (2010), Services Marketing, 3rd edition, McGraw Hill, New Delhi.
7. Steve Baron, (2010). Service Marketing, Sage Publications, New Delhi

#### **E-resources:**

- <https://nptel.ac.in/courses/110/105/110105038/>
- <https://nptel.ac.in/courses/110/105/110105078/>
- <https://nptel.ac.in/courses/110/107/110107142/>



**COURSE OBJECTIVES:**

To make the students

1. To understand the concept of integrated marketing communication, understanding communication process and digital marketing and apply lifelong.
2. To develop advertisement by selecting appropriate media.
3. To understand the ethical standards related to advertising.
4. To know the role of advertising agencies and other marketing organizations providing marketing services and perspective on consumer behaviour
5. To understand Theoretical approach to budgeting viz. Marginal analysis and Sales response curve
6. To measure the effectiveness of all Promotional tools and IMC

**COURSE OUTCOMES:**

Learners should be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the concept of integrated marketing communication, understanding communication process and digital marketing and apply lifelong.	Apply
CO2	Develop advertisement by selecting appropriate media.	Apply
CO3	Understand the ethical standards related to advertising.	Understand
CO4	Demonstrate capabilities of analysing problems, team work and communication skills	Apply
CO5	Gain knowledge in Planning and development of creative mar com	Apply
CO6	Understand strategies for Digital Media & Advertising.	understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	M						S	
CO2		M						S
CO3			M					S
CO4	M			M			S	
CO5					M			S
CO6		M					S	

**S-Strong; M-Medium; L-Low**

### **UNIT I Integrated Marketing Communication (IMC) (10 hours)**

Meaning and role of IMC in Marketing process, steps involved in developing IMC programme, Effectiveness of marketing communications - Purpose, Role, Functions and Types of marketing communication, one voice communication V/s IMC. Introduction to IMC tools – Advertising, sales promotion, publicity, public relations, and event sponsorship; The role of advertising agencies and other marketing organizations providing marketing services.

### **UNIT II Understanding Communication Process (10 hours)**

Communication: Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation adoption model, information processing model, The standard learning Hierarchy, Attribution Hierarchy, and low involvement hierarchy Consumer involvement- The Elaboration Likelihood (ELM) model, The Foote, Cone and Belding (FCB) Model.

### **UNIT III Planning for Marketing Communication (10 hours)**

Establishing marcom Objectives and Budgeting for Promotional Programmes-Setting communication objectives, Sales as marcom objective, DAGMAR approach for setting ad objectives. Budgeting for marcom-Factors influencing budget, Theoretical approach to budgeting viz. Marginal analysis and Sales response curve, Method to determine marcom budget.

### **UNIT IV Developing the Integrated Marketing Communication Programme (10 hours)**

Planning and development of creative marcom: Creative strategies in advertising, sales promotion, publicity, event sponsorships. Creative strategy in implementation and evaluation of marcom- Types of appeals and execution styles. Media planning and selection decisions- steps involved and information needed for media planning and formulation of Mediastrategy. Measuring the effectiveness of all Promotional tools and Integrated marketing communications.

## **UNIT V Digital Media and Advertising**

**(8 hours)**

Digital Media, Evolution of Technology, Convergence of Digital Media, E-Commerce and Digital Media, Advertising on Digital Media, Social Media, Mobile Advertising, E-PR. Advertising Laws and Ethics: Advertising & Law, Advertising & Ethics, Pester Power, Intellectual Property Rights, ASCI, International Advertising: Global environment in advertising, Decision areas in international advertising.

### **Suggested Readings:**

1. Jerome M. Juska (2017), Integrated Marketing Communication: Advertising and Promotion in a Digital World, 1st edition, Routledge
2. Belch (2017), Advertising and Promotion: An Integrated Marketing Communications Perspective, 9<sup>th</sup> edition, McGraw Hill, New Delhi
3. KrutiShah(2017), Advertising and Integrated Marketing Communications, 1st edition McGraw Hill Education, New Delhi.
4. Thomas O'Guinn , Chris Allen, Richard J. Semenik , Angeline Close Scheinbaum (2015), Advertising and Integrated Brand Promotion with CourseMate, 7<sup>th</sup> edition, Cengage Learning, New Delhi.
5. Lawrence Ang(2014), Principles of Integrated Marketing Communications, 1st edition, Cambridge University Press, New Delhi.
6. Rajeev Batra, John, G. Myers and David A. Aaker. (2013). Advertising Management. Prentice Hall India Publishers, New Delhi.

### **E-resources:**

- <https://nptel.ac.in/courses/110/108/110108141/>
- <https://www.youtube.com/watch?v=ZK3c9GCjSx8>

**Instruction Hours/week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To understand the Concept of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing.
2. To communicate orally and in written form the understanding of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing.
3. To apply the understanding of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing in lifelong practice.
4. To have knowledge on store layout plan and inventory management in retailing
5. To have an exposure in retailing concept and consumer behavior in retail.
6. To understand the retail Store Location - Choosing a Store Location

**COURSE OUTCOMES:**

Learners should be able to.

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the Concept of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing.	Apply
CO2	Communicate orally and in written form the understanding of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing.	Apply
CO3	Apply the understanding of Retailing, Retail market segmentation, Retail location, merchandising, Retail operations and Retail Pricing in lifelong practice	Understand
CO4	Demonstrate capabilities of analysing problems, team work and communication skills.	Apply
CO5	Explain the concept of strategic planning within the retail management decision process	Apply
CO6	To know the various Retail Inventory Planning , Return on Inventory Investments and Stock Turnover	knowledge

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	M							S
CO2		M					S	
CO3				S				S
CO4	M							S
CO5					S			
CO6	M		M				S	

**S-Strong; M-Medium; L-Low**

#### **UNIT I Retail Management**

**(10 hours)**

Introduction to Retailing: Concept of retailing, Functions of retailing, Terms and Definition, Retail formats- organized and unorganized formats – Emerging trends in retail formats – Role of MNCs in retail formats. Retailing Channels, Retail Industry in India: Growth, trends, challenges and opportunities. Importance of retailing, changing trends in retailing. Impact of Government policies on Retailing - Foreign Direct Investment in retailing

#### **UNIT II Retail Market Segmentation and Retail Consumer**

**(10 hours)**

Retail Market Segmentation and Strategies: Market Segmentation and its benefits, Kinds of markets, Definition of Retail strategy, Strategy for effective market segmentation, Strategies for penetration of new markets, Growth strategies, Retail value chain.

Understanding the Retail Consumer: Retail consumer behavior, Factors influencing the Retail consumer, Customer decision making process, Types of decision making, Market research for understanding retail consumer.

#### **UNIT III Retail Location and Retail Space management**

**(10 hours)**

Retail Location Selection: Importance of Retail locations, Types of retail locations, Factors determining the location decision, Steps involved in choosing a retail location, Measurement of success of location

Retail Space Management and Marketing: Definition of Space Management, Store layout and Design, Site analysis, Visual Merchandising, Promotions Strategy, Relationship Marketing Strategies, CRM, Retail Marketing Mix, Retail Communication Mix, Creative display, POP Displays.

#### **UNIT IV Merchandise Management:**

**(10 hours)**

Meaning of Merchandising, Factors influencing Merchandising, Functions of Merchandising Manager, Merchandise planning, Merchandise buying, Analysing Merchandise performance

## **UNIT V Retail Operations, Retail Pricing and Emerging trends in retailing (8 hours)**

Retail Operations and Retail Pricing: Store administration, Premises management, Inventory Management, Store Management, Receipt Management, Customer service, Retail Pricing, Factors influencing retail prices Pricing strategies, Controlling costs.

Retail Management Information systems: Retail technology and E-tailing, Emerging trends- Challenges faced in online retailing.

### **SUGGESTED READINGS:**

1. Gibson (2017), Retail Management, 5th edition, Pearson education, New Delhi.
2. Berman, B., and Evans, J.R. et.al (2017). Retail management: A Strategic Approach, 13th edition, Pearson education, New Delhi
3. Swapna Pradan, (2017), Retailing Management: Text and Cases, 5th edition, Mc Graw Hill, New Delhi
4. Michael Levy, Barton Weitz, Ajay Pandit (2017), Retailing Management, 8th edition, McGraw Hill, New Delhi
5. U. C. Mathur (2011), Retail Management: Text and Cases, I K International Publishing House Pvt. Ltd, New Delhi.
6. Bajaj Chetan, Rajnish Tuli and Nidhi Varma Srivastava, (2012). Retail Management, Oxford University Press, New Delhi.

### **E-resources:**

- <https://www.youtube.com/watch?v=5iRDd-f1nmg&list=PLWPirh4EWFpEv7x2CU-9jcXIIvBuSx7oF>

**Instruction Hours /week: L: 4 T: 0 P: 0 Marks:Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the consumer behavior concepts, dimensions used in consumer behavior research.
2. To recognize the Internal Influencing factors that affect the Consumer Behavior.
3. To identify the external Influencing factors that affect the Consumer Behavior.
4. To conceptualize on the consumer decision making process.
5. To know the application consumer behavior concepts to access the changing behavior of the customers.
6. To provide an insight into the marketing research area emphasizing the consumer's needs and solutions to it in a scientific approach.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the importance of Culture, Subculture, Social Class, Reference Groups and Family Influences in Consumer Behaviour.	Apply
CO2	Explore, analyse and compare the core theories of consumer behaviour and its application in both consumer and organizational markets	Apply
CO3	Appraise modelsof Consumer Behaviour and determine their relevance to particular marketing situations.	Understand
CO4	Critique the theoretical perspectives associated with consumer decision making, including recognizing cognitive biases and heuristics	Apply
CO5	Demonstrate capabilities of teamwork, critical thinking, and communication skills related to investment decisions	Apply
CO6	Gain knowledge in Problem Recognition and Information Search	knowledge

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	S						S	
CO2		M						M
CO3				M			S	
CO4	M				S			M
CO5				S			M	
CO6		M						S

**S-Strong; M-Medium; L-Low**

### **UNIT I Consumer Behaviour and Consumer Research**

**(8 hours)**

Introduction to Consumer Behaviour, Dimensions of Consumer Behaviour, Consumer Research, Consumer Behaviour and Marketing Strategy

### **UNIT II Motivation and Consumer Learning**

**(10 hours)**

Motivation and Involvement :Consumer Motivation: Introduction, Needs and Goals, motivational Conflict, Defense Mechanisms, Motive Arousal, Motivational Theories, Maslow's hierarchy of needs, Motivation Research. Consumer Perception : Introduction, Sensation (Exposure to Stimuli), Perceptual Selection, Perceptual Organisation, Factors that Distort Individual Perception, Price Perceptions, Perceived Product and Service Quality, Consumer Risk Perceptions

### **UNIT III Consumer Personality, Consumer Attitudes, Consumer Behaviour and Marketing Communications**

**(10 hours)**

Personality, Self-Image, and Life Style: Consumer Personality: Introduction, Self-concept, personality Theories, Brand Personality, emotions

Consumer Attitude Formation and Change : Introduction, Functions of Attitude, Attitude Models, Factors that Inhibit Relationship between Beliefs, Feelings and Behaviour, Learning Attitudes, Changing Attitudes, Attitude Change Strategies

Communication and Consumer Behaviour: Consumer Behaviour and Marketing Communications: Introduction, Marketing Communication Flow, Communications Process, Interpersonal Communication, Persuasive Communications, source, message, message appeals, communication feedback.

### **UNIT IV External Influences on Consumer Behaviour**

**(10 hours)**

Cultural Influences on Consumer Behaviour: Introduction, Characteristics of Culture, Values, Sub-cultures, Cross-cultural Influences, Cultural Differences in Non-verbal Communications



Subcultures and Consumer Behaviour : Social Class and Group Influences on Consumer Behaviour: Introduction, nature of Social Class, Social Class Categories, Money and Other Status Symbols, Source of Group Influences, Types of Reference Groups, Nature of Reference Groups, reference Group Influences, Applications of Reference Group Influences, Conformity to Group Norms and Behaviour, Family Life Cycle Stages, nature of Family Purchases and Decision- making, Husband-wife Influences, Parent-child Influences, Consumer Socialization of Children, word-of-Mouth Communications within Groups, opinion Leadership - Diffusion of Innovation

## **UNIT V Consumer Decision Making**

**(10 hours)**

Situational Influence on Consumer's Decision and the Decision Models: Introduction, Nature of Situational Influence, Situational Variables, Types of Consumer Decisions, Nicosia Model of Consumer Decision-making (Conflict Model), Howard-Sheth Model (also called Machine Model), Engel, Blackwell, Miniard Model (also called Open System)

Consumer Decision making Process– Problem Recognition, Information Search and Evaluation of Alternatives: Introduction, Problem Recognition, Information Search, Evaluation of Alternatives, Outlet Selection, Purchase and Post Purchase Behaviour, Introduction, Outlet Selection and Purchase, Post Purchase Behaviour - Organizational Buying Behaviour.

### **SUGGESTED READINGS:**

1. Schiffman L G, Kanuk LL, Ramesh Kumar S, (2015), Consumer Behaviour, 11<sup>th</sup> edition, Pearson Education, New Delhi.
2. Hawkins, Motherbaugh, Mookerjee (2017), Consumer Behaviour – Building Marketing Strategy, 12<sup>th</sup> edition, McGraw Hill education, New Delhi.
3. David Loudon, Albert Della Bitta (2017), Consumer Behavior: Concepts and Applications. 4<sup>th</sup> edition McGraw Hill Education, New Delhi.
4. Michael R. Solomon, (2015), Consumer Behaviour-Buying Having and Being, 11<sup>th</sup> edition, Pearson Education, New Delhi
5. Roger D. Blackwell, Paul W. Miniard, James F. Engel (2017), Consumer Behavior, 10<sup>th</sup> edition, Cengage India Private Limited; New Delhi

### **E-resources:**

- <https://nptel.ac.in/courses/110/105/110105074/>
- <https://nptel.ac.in/courses/110/105/110105054/>
- <https://nptel.ac.in/courses/110/105/110105029/>

**COURSE OBJECTIVES:****To make the students**

1. To provide basic knowledge on Marketing Research in strategic decision making.
2. To provide an exposure to the students pertaining to the marketing research process, which they are expected to possess when they enter the industry as practitioners.
3. To give them an understanding of the basic philosophies and tools of marketing research
4. To learn widely used data analysis in marketing research and its related concepts
5. To learn the various principles and practices of Report Writing in marketing research.
6. To learn the fundamentals of marketing research to applied in business decision making.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Get the knowledge of basic understanding in solving marketing related problems.	Apply
CO2	Get awareness of marketing research process, and the ethical issues in marketing research.	Apply
CO3	Understanding of quality philosophies and practices and how to apply them in an organization	Understand
CO4	Emphasizing the applications of marketing research methods in the business scenario	Apply
CO5	Comprehend the applicability of consumer, product, packaging and communication research in Business world.	Apply
CO6	Demonstrate capabilities of problem-solving, critical thinking, and communication skills to infer the output.	Analysis

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1			M				S	
CO2				M				S
CO3					M			
CO4	M					S		S
CO5								M
CO6		M					S	

**S-Strong; M-Medium; L-Low**

### Unit I

**(10 hours)**

Marketing Research – scope and importance; Marketing research management; Role of Marketing Research in strategic decision making; Marketing research and market research; Cost value analysis of marketing research; limitations of marketing research; Ethical issues in marketing research – issues connected with the client, researcher and the informants. Marketing information system- need, importance and functions; Components of Marketing Information systems; Marketing information systems Vs Marketing research.

### Unit II

**(10 hours)**

Marketing research process; major steps in marketing research process; Types of research exploratory research and conclusive research; Descriptive research vs experimental research; Qualitative research vs quantitative research; Data sources – internal and external sources; Methods of research – survey, observation, Focus Group Discussion; Depth Interviews; Content Analysis; Projective Techniques; Research design - meaning and importance of research design; types of research designs; Uses of research designs; Sampling technique; theories of sampling; types of sampling; sampling distribution; determination of sample size.

### Unit III

**(10 hours)**

Measurement and Scaling techniques – nominal scale; ordinal scale; interval scale and ratio scale; variables and attributes; Attitude scaling – Likert scale; Semantic-differential scale; Stapel scale; Questionnaire design – factors to be considered in questionnaire design;

### Unit IV

**(10 hours)**

Data analysis and interpretation – tools of data analysis; hypothesis setting and testing; parametric and non-parametric tests; Z test, t-test; Chi Square test; AVOVA- Univariate and multivariate; Analysis of experimental designs; Use of MS Excel and SPSS package for data analysis – Cluster analysis; Conjoint analysis, Factor analysis; Multi-dimensional analysis, Discriminant analysis. Report writing.

## **Unit V**

**(8 hours)**

Market research; product research; packaging research; consumer research; motivation research; Communication research; sales research; advertising research; testing of media effectiveness; pre-test and post test; copy research.

### **SUGGESTED READINGS**

1. Parasuraman A, Druv Grewal and R.Krishnan: Marketing Research, Biztandra, New Delhi 2004.
2. Nargundkar, Rajendra: Marketing Research- Text and Cases, Tata McGraw Hill, New Delhi 2004.
3. Green, Paul E. , Donald S.Tull and Gerald Albaum: Research for Marketing Decisions, Prentice Hall of India, New Delhi 1998.
4. Hair, Joseph: Marketing Research, Tata McGraw Hill, New Delhi 2005.
5. Malhotra, Naresh: Marketing Research, Prentice Hall of India, new Delhi 2002.
6. Luck, David and Donald Rubin: Marketing Research, Prentice Hall of India, New Delhi

**Instruction Hours/week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

1. To understand the HR Management and system at various levels in general and in certain specific industries or organizations.
2. To make aware of the concepts, techniques and practices of human resource development
3. To analyse the issues and strategies required to select and develop manpower resources
4. To develop relevant skills necessary for application in HR related issues
5. To integrate the understanding of various HR concepts along with the domain concept in order to take correct business decisions.
6. To make the students become aware of the recent trends in HR field.

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Explain the concept of human resource management and to understand its relevance in organizations.	Evaluate
CO2	Develop necessary skill set for application of various HR issues.	Create
CO3	Analyse the strategic issues and strategies required to select and develop manpower resources.	Analyse
CO4	Combine the knowledge of HR concepts to take correct business decisions.	Create
CO5	Relate the dynamic relationship between strategy, people, technology, and the processes that drive organizations.	Understand
CO6	Elaborate the knowledge in Emerging Trends and Perspectives in HRD Cross Cultural Dimensions	Create

**MAPPING WITH PROGRAMME OUTCOMES**

<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>POS1</b>	<b>POS2</b>
CO1	M									
CO2	M	M								

CO3		<b>M</b>				<b>M</b>				
CO4		<b>M</b>		<b>M</b>						
CO5							<b>M</b>			
CO6	<b>M</b>						<b>M</b>			

**S-Strong; M-Medium; L-Low**

### **Unit I (10 hours)**

Introduction to HRD – Meaning– Scope – Importance – Need for HRD –HRD and HRM – Role of HRD professionals – Key Performance Areas – HRD mechanism - Designing effective HRD programs - Framework of HRD process – HRD for service sector.

### **Unit II (10 hours)**

Individual Behavior: Personality– Perception – Role – Fatigue-Goal Conflict – Frustration–Interpersonal relationship – Group Behavior – Group Dynamics – Group Cohesiveness–Elements for understanding group behavior- Teams – Characteristics.

### **Unit III (10 hours)**

Potential Appraisal – Criteria – Career Planning-Career Development- Coaching, Mentoring and Successive planning - Altruism – Determinants - Organization Co-operation – factors – Competition – Benefits-Conflicts - Types/Levels– Consequences – Prevention - Management of conflict.

### **Unit IV (10 hours)**

Quality of work life (QWL) – Scope-Ways to increase QWL – Quality Circle– Process-Organization Effectiveness – Concept – Kaizen – Benchmarking-Just-in Time – Downsizing – Outsourcing- Organizational Change- Change Process- Resistance to Change- Requisites for Successful Change.

### **Unit V ( 8 hours)**

HRD Cross Cultural Dimensions- HRD Climate – HRD –OD Interface – HRD-OD Approach to Industrial Relations — HRD Experiences in India – Emerging-Trends and Perspectives – HRD Scenario in Indian Organization - Problems and prospects- Challenges and Issues in HRD.

### **Suggested Readings:**

1. Tripathi, P.C. (2014). *Human Resource Development*. (5<sup>th</sup> Edition).: Sultanand Sons. New Delhi
2. Krishnaveni, R. (2009). *Human Resource Development*. ExcelBooks.

3. Lalitha Balakrishna. (2010). *Human Resource Development*.: Himalaya Publishing House. New Delhi
4. Udai Pareek. (2007). *Human Resource Development*. (3<sup>rd</sup> Edition). Oxford and Indian Book House. London:
5. Kandula, S.R. (2008). *Strategic Human Resource Development*.: Prentice Hall of India., New Delhi
6. John, P. Wilson. (2005). *Human Resource Development*. (2<sup>nd</sup> Edition). Kogan Page Publishers.
7. Rao, V.S.P. *Human Resource Management*. Himalaya Publishing House

**Instruction Hours /week:L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To Understand the fundamentals of Wages, Salary, incentives, Compensation and pay scale systems and apply lifelong.
2. To comprehend on the ethical laws related to compensation management.
3. To critically evaluate, select the suitable methods and design the Pay structure.
4. To familiar with Wages, Salary, incentives, Compensation and pay scale systems
5. To understand the Concept of Equity and Compensation-Components of Compensation-
6. To understand the compensation designing ,incentives and retirement plans with wage concepts.

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>Cos</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the fundamentals of Wages, Salary, incentives, Compensation and pay scale systems and apply lifelong.	Understand
CO2	To comprehend on the ethical laws related to compensation management.	Create
CO3	Critically evaluate, select the suitable methods and design the Pay structure.	Evaluate
CO4	Demonstrate capabilities of problem-solving, critical thinking, team work and communication skills	Understand
CO5	Understand the Compensation plans provided by Public sectors & Private Sector.	Understand
CO6	Asses the Incentives and Retirement plans	Evaluate



## MAPPING WITH PROGRAMME OUTCOMES

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1	M									M
CO2								M		
CO3		M								
CO4				M						
CO5	M								M	
CO6	M									

**S-Strong; M-Medium; L-Low**

### **UNIT I Compensation**

**(10 hours)**

Overview of Compensation Management, Wage and Salary Administration – Nature, Importance, Philosophy, Objectives, Definition, Goals Role of various parties – Employees, Employers, Unions and Government and Legislations for compensation, Macroeconomics of Labor market, Wage Boards and Pay Commissions Economic theories of wages, Boothalingam and Sachar Committee–Managerial Remuneration in the Future.

### **UNIT II Compensation Designing**

**(10 hours)**

Job Evaluation, Basic systems Time wage, Piece wage, Wage payments and Total Salary Structure, Compensation Surveys, Hay Plan, Developing Competitive Compensation Programs, Developing Salary Structures, Planning a Job Analysis Program, Measuring Cost-to–Company (CTC).

### **UNIT III Performance Pay**

**(10 hours)**

Pay for Performance, Merit pay and Performance Appraisal, Performance based rewards, Performance Criteria Choices, Competency Mapping and Developing Performance Matrix, Performance Based Compensation Schemes. Converting Remuneration Survey results into a Salary Proposal. Fundamentals– Managerial Remuneration: Situation in India.

### **UNIT IV Incentive Plans**

**(8 hours)**

Incentive Plans: individual and group incentive plans, Productivity Gain sharing plans, Profit Sharing Plans, Non - Financial and Financial incentives, Introduction to ESOPs, Flexible benefits and Benefit Surveys

### **UNIT V Recent Trends**

**(10 hours)**

Taxation of Benefits, Current Trends in Compensation Management, Quantitative Tools and Innovation in Compensation Management. Equity Compensation Plans – objective of equity compensation, types of Stock Plans, valuing stock grants, SEBI Guidelines, taxability of stock options, Flexi Payment System- various types of Allowances

### **SUGGESTED READINGS:**

1. Dipak Kumar Bhattacharyya (2014), Compensation Management, 2nd edition, Oxford University Press, New Delhi.
2. George Milkovich, Jerry Newman, C S Venkataratnam (2017), Compensation, 9th edition, McGraw Hill Education, New Delhi.
3. J. Martocchio Joseph (2018), Strategic Compensation: A Human Resource Management Approach, 9th edition, Pearson Education, New Delhi.
4. B. D. Singh (2017), Compensation and Reward Management, 3rd edition, Excel Books, New Delhi.
5. Dr. Kanchan Bhatia (2015), Compensation Management;1<sup>st</sup> Edition, Himalaya Publishing House, New Delhi.
6. Dewakar Goel, Performance Appraisal and Compensation Management, *PHI Learning, New Delhi*.
7. Michael Armstrong & Helen Murlis, Hand Book of Reward Management, Crust Publishing House.

**Instruction Hours/week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand and critically examine the philosophies, values, assumptions associated with organizational paradigms from a change management perspective and to be able to apply organizational development as a meta theory
2. To explore the practice of change management and its limits with strategic management and to understand the management of change process and examine individual group and organizational reactions to change
3. To probe the development role of HR practitioner as facilitators and managers of change and to develop key competencies suitable for application in OD interventions.
4. To make the students be aware of the need and ways of changes in organization as a whole.
5. To create a critical appreciation and knowledge of understanding the determinants of organizational development.
6. To provide an in-depth understanding of the role of organizational interventions.

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Analyze the different approaches to managing organizational change and understand and utilize the competencies required for effective change management at organization, group and individual levels.	Analyze
CO2	Plan effective intervention strategies and function as an internal HR consultant to an organization in transition,	Create
CO3	Critically evaluate, in an organizational development framework, the theoretical and practical links between development models	Evaluate
CO4	Demonstrate capabilities of teamwork, critical thinking, and communication skills related to organization change and development concepts.	Understand
CO5	Understand creating support systems, managing transition and process oriented strategies	Understand
CO6	Design OD interventions	Create

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1		M								
CO2		M	M							
CO3		M								M
CO4	M									
CO5		M	L							

**S-Strong; M-Medium; L-Low**

### UNIT I Organisation Change

**(8 hours)**

Change Process and Models: Concept and Significance; Managing Change; Theories of Planned Change (Lewin's change model, Action research model, the positive model), Action Research as a Process, Resistance to Change

### UNIT II Organizational Development

**(10 hours)**

Introduction to Organizational Development, Process of Organizational Development, OD Change Agents.

Initiating OD relationship, contracting and diagnosing the problem, Diagnosing models, open systems, individual level group level and organizational level diagnosis; collection and analysis for diagnostic information, feeding back the diagnosed information

### UNIT III Designing OD interventions

**(10 hours)**

Human process interventions:- coaching, training and development, process consultation, third part intervention, and team building. Organization confrontation meeting, intergroup relations intervention, and large group intervention, Techno structural interventions:- Structural design, downsizing, reengineering, employee involvement, work design, socio technical systems approach

### UNIT IV Human Resources and Structural OD interventions

**(10 hours)**

Human Resource Interventions: HRM Interventions, Goal Setting, Performance Appraisal, Reward Systems, Career Planning and Development, Managing Workforce Diversity, Employee Wellness

Structural Interventions: Socio-Technical Systems, Techno-Structural Interventions, Physical Settings and OD, Types of Techno-Structural Interventions

### UNIT V Strategic and Technology OD interventions

**(10 hours)**

Strategic Interventions: Integrated Strategic Change, Trans-organisation Development, Merger and Acquisition Integration, Culture Change, Self-Designing Organisations, Organisation Learning and Knowledge Management, Confrontation Meetings, System Management, Learning Organisations

Technology and OD: Technology and OD: Basic Concept, Impact of Technology in Organisations, Benefits of Using Technology in OD, Guidelines for Integrating Technology in OD Interventions, Tools used in OD- Evaluating OD Interventions: Evaluation, Importance of Evaluating Interventions, Types of Evaluation, Methods of Evaluating Interventions

#### **SUGGESTED READINGS:**

- Thomas G. Cummings , Christopher G. Worley(2015), Organization Development and Change, 10<sup>th</sup>edition, Cengage Learning.
- R Jones Gareth, Matthew Mary(2017), Organizational Theory, Design and Change, 7<sup>th</sup>edition, Pearson Education.
- French Wendell L, Bell Jr Cecil H , Vohra Veena(2017), Organization Development:Behavioral Science Interventions for Organizational Improvement, 6<sup>th</sup>edition, Pearson Education.
- Gervase Bushe, Robert Marshak(2015), Dialogic Organization Development: The Theory and Practice of Transformational Change, 1<sup>st</sup> edition, Berrett-Koehler Publishers
- W. Warner Burke (2011), Organization Change: Theory and Practice, 3<sup>rd</sup>edition, SAGE Publications, New Delhi.

#### **E-Resources**

- <https://nptel.ac.in/courses/110/105/110105120/>
- <https://nptel.ac.in/courses/109/105/109105121/>

**Instruction Hours/week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concept of performance management and theoretical framework applied to evaluate the performance of individual or group.
2. To comprehend on the performance management process, documentation, types, and ethics pertaining to performance management.
3. To understand, critically evaluate, select and apply the best performance appraisal system based on the scenario.
4. To Demonstrate capabilities of teamwork, critical thinking, and communication skills related to Performance Management and Appraisal.
5. To analyse the Performance Appraisal of Bureaucrats
6. To understand the Concepts related to Performance and Reward

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the concept of performance management and theoretical framework applied to evaluate the performance of individual or group.	Understand
CO2	Comprehend on the performance management process, documentation, types, and ethics pertaining to performance management.	Understand
CO3	Select and apply the best performance appraisal system based on the scenario.	Evaluate
CO4	Demonstrate capabilities of teamwork, critical thinking, and communication skills related to Performance Management and Appraisal.	Understand
CO5	Adapt the knowledge of acquisition process and performance evaluation used	Create
CO6	Understand Manager's Responsibility in Performance Planning Mechanics and Documentation	Understand

## MAPPING WITH PROGRAMME OUTCOMES

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1	M									
CO2		M								
CO3		M								
CO4		M		M						
CO5		M								
CO6					M					

S-Strong; M-Medium; L-Low

### UNIT I Introduction to Performance Management and Theoretical Framework of Performance Management (10 hours)

Definition of Performance Evaluation, Evolution of Performance Management, Aims of Performance Management, Purpose of Performance Management, Employee Engagement and Performance Management, Principles of Performance Management, Overview of Performance Management as a System, Linkage of Performance Management to Other HR Dimensions of Performance Management

**Theoretical Framework of Performance Management:** Goal Theory and its Application in Performance Management, Control Theory and its Application in Performance Management, Social Cognitive Theory and its Application in Performance Management, Organisational Justice Theory and its Application in Performance Management

### UNIT II Process of Performance Management (10 hours)

Performance Management Process, Performance Management Planning Process, Mid-cycle Review Process, End-cycle Review Process, Performance Management Cycle at a Glance, Performance Management Planning and Development: Introduction, Performance Management. Planning, the Planning Process, Performance Agreement, Drawing up the Plan, Evaluating the Performance Planning Process - Mechanics of Performance Management Planning and Documentation: The Need for Structure and Documentation, Manager's Responsibility in Performance Planning Mechanics and Documentation, Employee's Responsibility in Performance Planning Mechanics and Documentation, Mechanics of Performance Management Planning and Creation of PM Document

### UNIT III Performance Appraisal (PA) (10 hours)

Definitions and Dimensions of PA, Purpose of PA and Arguments against PA, Necessity of Performance Appraisal and its Usage by Organisations, Characteristics of Performance Appraisal, Performance Appraisal Process, Performance Appraisal Methods: Performance Appraisal Methods, Traditional Methods, Modern Methods, and Performance Appraisal of Bureaucrats – A New Approach 360-Degree Appraisal: Introduction, the Impact of 360-Degree Feedback on Organisations, Concept of 360-

Degree Feedback System, Purpose, Methodology, Ratings, Advantages and Disadvantages of the Method, The Process of 360-Degree Feedback, Operating 360-Degree Appraisal, Performance Appraisal Feedback: Feedback – Role, Types and Principles, Situations Requiring Feedback and Pitfalls, Components of a Feedback and Steps in giving a Constructive Feedback, Levels of Performance Feedback

#### **UNIT IV Team performance**

**(10 hours)**

Team Performance, Performance of Learning Organisations and Virtual Teams: Team Performance Management, Performance Management and Learning Organisations, Performance Management and Virtual Teams- Role of Line Managers, Performance Management and Reward: Role of Line Managers in Performance Management, Performance Management and Reward, Concepts related to Performance and Reward, Linking Performance to Pay – A Simple System Using Pay Band, Linking Performance to Total Reward, Challenges of Linking Performance and Reward

#### **UNIT V Issues and Ethics in Performance Appraisal**

**(10 hours)**

Biases in Performance Appraisal: The Leniency error – The Halo and Horn Effect – The Recency effect- The Recency effect-The Error of Strictness- Reducing Performance errors

Ethical Issues and Dilemmas in Performance Management - Ethical Strategies in Performance Management - Developing Code of Ethics in Performance Management - Future Implications of Ethics in Performance Management.

#### **SUGGESTED READINGS**

1. Bhattacharyya(2011), Performance Management Systems and Strategies, 1st edition, Pearson Education.
2. T V Rao(2015), Performance Management: Toward Organizational Excellence, 2nd edition, Sage Publications.
3. B. D. Singh(2010), Performance Management System: A Holistic Approach, 1st edition, Excel Books.
4. Harvard Business Essentials (2010), Harvard Business Essentials: Performance Management - Measure and Improve the Effectiveness of Your Employees, Harvard Business Review Press.
5. Sharma D(2011), Performance Management and Appraisal System: Text and Cases, Kalpaz Publications
6. Deb Tapamoy(2008), Performance Appraisal and Management: Concepts, Antecedents and Implications, Excel Books.

#### **E-Resources:**

- <https://nptel.ac.in/courses/110/105/110105137/>



Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

### COURSE OBJECTIVES:

#### To make the students

1. To understand the process of competency mapping and profiling.
2. To comprehend the integration of competency profiling to other HR applications and apply the learning lifelong.
3. To differentiate the various types of competencies i.e. team competency, role competency.
4. To Design of competency and Competency Gap Analysis
5. To Identify the role competencies and elemental competencies
6. To know the importance of competency driven culture and Career Development Tools

### COURSE OUTCOMES

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the process of competency mapping and profiling.	Understand
CO2	Comprehend the integration of competency profiling to other HR applications and apply the learning lifelong.	Understand
CO3	Distinguish the various types of competencies i.e. team competency, role competency.	Analyze
CO4	Demonstrate capabilities of teamwork, critical thinking, and communication skills related to competency mapping.	Understand
CO5	To adapt knowledge in Integration of competency Based HR Systems	Create
CO6	Understand Ethics in Performance Appraisal	Understand

### MAPPING WITH PROGRAMME OUTCOMES

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1	M	M								
CO2		M								
CO3		M								
CO4				M						
CO5	M									
CO6								M		

S-Strong; M-Medium; L-Low

## **UNIT I Competency**

**(10 hours)**

Introduction: Concept and definition of Role and competency, Characteristics of competency, Core Competency, Competency versus competence, Performance versus competency; skills versus competency, behavior indicators, Types of competencies - generic/specific, threshold/performance, and differentiating and technical, managerial and human; Competency Method in Human Resource : Features of Competency Methods, Historical Development, Definitions,. Competencies Applications - Competency Frameworks (competency management framework or competency model), Competency Maps, and Competency Profiles.

## **UNIT II Using Competency Profiles in HR**

**(10 hours)**

Competency Frameworks - development of personal competency framework, Lancaster Model of managerial competencies, competency modeling framework developing a competency model Understanding job positions, Data collection instruments for job descriptions, Stages in design and implementation of competency model, Validation of the competency model after data gathering, Using competency maps for Competency profiling - Job competency profiling, Role competency, profiling Functional competency profiling, Core competency profiling Competency based selection, competency based interviews.

## **UNIT III Design of competency and Competency Gap Analysis**

**(10 hours)**

Team Competencies (project driven), Role competencies (Role wise); Competency identification Consolidation of checklist, Rank Order and finalization, Validation, and Benchmark; Competency assessment - 360 degrees , Competency Mapping - Strategy-Structure Congruence, Structure Role Congruence, Vertical and horizontal Role linkages, Positioning to bring in competitive advantage

## **UNIT IV Mapping Jobs via Model**

**(8 hours)**

Identification of Role competencies, elemental competencies, assessment center, Design of assessment center, Use of psychometric testing in assessment center, 360 degree feedback, potential appraisal through assessment center, Creating Competency Dictionary.

other methods of competency assessment - Role plays, Case study, Structured Experiences, Simulations, Business Games, Repertory grid, BEI, MBTI, FIRO-B; Difference between development center and assessment center.

## **UNIT V Competency mapping and Integration of competency Based HR System**

**(10 hours)**

Steps in development of competencies map: Studying job, processes, and environment, studying attributes of good performer; Strategy structure congruence,

Structure Role congruence - Each role to be unique, Non-Repetitive, and Value adding; Vertical and horizontal role congruence, Ensure non repetitive tasks in two different roles, Ensure core competencies for each task, Link all the above and position to bring in competitive advantage.

Integration of competency Based HR Systems: competency based performance management, competency driven careers, and competency linked remuneration, competency driven culture. Career Development Tools.

### **SUGGESTED READINGS**

1. SeemaSanghi(2016), The Handbook of Competency Mapping: Understanding, Designing and Implementing Competency Models in Organizations, 3rd edition, Sage Publications India Private Limited
2. Ganesh Shermon\_(2004), Competency based HRM: A strategic resource for competency mapping, assessment and development centres, 1st edition, McGraw Hill.
3. Srinivas R. Kandula(2013), Competency-based Human Resource Management, Prentice Hall India Pvt. Ltd.
4. Lyle M. Spencer, Signe M. Spencer(2008), Competence at Work: Models for Superior Performance, Wiley India Pvt Ltd
5. Sumati Ray AnindyaBasu Roy (2019), Competency Based Human Resource Management, 1st edition, SAGE Publications India Pvt Ltd

### **E-Resources**

- [https://nptel.ac.in/content/storage2/nptel\\_data3/html/mhrd/ict/text/109105121/lec38.pdf](https://nptel.ac.in/content/storage2/nptel_data3/html/mhrd/ict/text/109105121/lec38.pdf)
- <https://youtu.be/nqXUfrblLUM>
- <https://www.youtube.com/watch?v=wTWszuDVTQ>

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of Enterprise Resource Planning (ERP), ERP related technologies, its implementation, module structures of ERP, ERP vendors role, future trends in ERP and apply the learnings lifelong.
2. To evaluate the need of ERP for an organization, select the best vendor and implement the module that is appropriate for the organization need.
3. To enhance the understanding of the students with respect to the conceptual framework and the technological infrastructure of Enterprise Resource Planning.
4. To expose the students to the implementation issues and future trends associated with ERP.
5. To apprehend different Sales and Distribution tools used
6. To know the future trends in ERP systems to have good relation with customers.

**COURSE OUTCOMES**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Recognize the concept of Enterprise Resource Planning (ERP), ERP related technologies, its implementation, module structures of ERP, ERP vendors role, future trends in ERP and apply the learnings lifelong.	Knowledge
CO2	Estimate the need of ERP for an organization, select the best vendor and implement the module that is appropriate for the organization need.	Understand
CO3	Display the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO4	Explaining the application of different Sales and Distribution tools for business.	Analyze
CO5	Identify the Business benefits of ES	Remembering
CO6	Understand the concept of Data definition language	Understand

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M									
CO2				M						
CO3		M								
CO4					L					
CO5		M	L							
CO6	M									

**S-Strong; M-Medium; L-Low**

### UNIT I ERP

**(8 hours)**

Enterprise: An Overview: Business Functions and Business Processes, importance of Information: Characteristics of information; Types of information, Information System: Components of an information system; Different types of information systems; Management information system, Enterprise Resource Planning: Business modeling; Integrated data modelIntroduction to ERP: Defining ERP, Origin and Need for an ERP System, Benefits of an ERP System, Reasons for the Growth of ERP Market, Reasons for the Failure of ERP Implementation: Roadmap for successful ERP implementation

### UNIT II ERP and Related Technologies and ERP Implementation Life Cycle

**(10 hours)**

Business Process Re-engineering, Management Information systems, Decision Support Systems, Executive Information Systems- Advantages of EIS; Disadvantages of EIS, Data Warehousing, Data Mining, On-Line Analytical Processing, Product Life Cycle Management, Supply Chain Management, ERP Security. ERP Tools and Software, ERP Selection Methods and Criteria, ERP Selection Process, ERP Vendor Selection, ERP Implementation Lifecycle, Pros and cons of ERP implementation, Factors for the Success of an ERP Implementation

### UNIT III ERP Modules Structure

**(10 hours)**

Manufacturing Perspective: Role of Enterprise Resource Planning (ERP) in manufacturing, Computer Aided Design/Computer Aided Manufacturing (CAD/CAM), Materials Requirement Planning (MRP)-Master Production Schedule (MPS);Bill of Material (BOM);Inventory Records; Closed Loop MRP; Manufacturing Resource Planning (MRP-II), Distribution Requirements Planning (DRP), Just-in-Time(JIT) and KANBAN - Kanban; Product Data Management (PDM)- Data Management, Process Management; Manufacturing Operations- Make-to-Order (MTO) and Make-to-Stock (MTS); Assemble-to-Order (ATO); Engineer-to-Order (ETO); Configure-to-Order (CTO). ERP: An Inventory Management Perspective: Role of ERP in Inventory Management: ERP Inventory Management Module. ERP: A HR Perspective: Role of ERP in Human Resource Management.

ERP: An Finance Perspective: Role of ERP in Finance, Accounting and Finance Processes, age Accpac ERP – A Financial ERP Tool

**UNIT IV ERP: Purchase, Sales and Distribution Perspective (10 hours)**

ERP: A Purchasing Perspective: Role of ERP in Purchasing, Purchase Module: Features of purchase module; Benefits of purchase module, ERP Purchase System- ERP: Sales and Distribution Perspective: Role of ERP in Sales and Distribution, Sub-Modules of the Sales and Distribution Module: Master data management, Order management, Warehouse management, Shipping and transportation, Billing and sales support, Foreign trade, Integration of Sales and Distribution Module with Other Modules.

**UNIT V ERP Vendors, Consultants and Employees (10 hours)**

ERP Vendors - ERP Vendors, SAP-AG: Products and technology R/3 overview; SAP advantage, Baan Company, Oracle Corporation: Products and technology; Oracle Application; Vertical solutions, Microsoft Corporation, Ramco Systems, Systems Software Associates Inc. (SSA), QAD- Future Directions in ERP: New Trends in ERP, ERP to ERP II-Implementation of Organisation-Wide ERP, Development of New Markets and Channels, Latest ERP Implementation Methodologies, ERP and E-business, Market Snapshot, The SOA Factor.

**SUGGESTED READINGS**

1. Rajesh Ray (2017), Enterprise Resource Planning, 1st edition, McGraw hill, New Delhi.
2. Alexis Leon (2017), ERP, 3rd edition, McGraw hill, New Delhi.
3. Ashim Raj Singla(2016), Enterprise Resource Planning, 2nd edition, Cengage Learning India Private Limited, New Delhi.
4. Veena Bansal (2013, Enterprise Resource Planning, 1st edition, Pearson Education, New Delhi.
5. David Olson (2017), Managerial Issues Of Enterprise Resource Planning Systems, McGraw hill, New Delhi.

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of software development, software project planning, estimation, scheduling, monitoring, quality assurance and software reengineering and apply learning lifelong.
2. To apply appropriate tools and techniques to evaluate the project cost.
3. To use problem solving techniques to schedule the project.
4. To apply software testing methods and tools to ensure software quality.
5. To know about the software testing methods.
6. To know about the concept of quality in software development.

**COURSE OUTCOMES**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Summarizing the concept of software development, software project planning, estimation, scheduling, monitoring, quality assurance and software reengineering and apply learning lifelong.	Understand
CO2	Relating appropriate tools and techniques to evaluate the project cost.	Understand
CO3	Develop the problem solving techniques to schedule the project.	Create
CO4	Relating the software testing methods and tools to ensure software quality.	Understand
CO5	Display the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Describe the quantitative analysis using specialist software	Knowledge

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1			L							
CO2					M					
CO3	M									
CO4					L					
CO5		M								
CO6				M						

**S-Strong; M-Medium; L-Low**

### **UNIT I Software Development Organization, Roles and Overview of Project Management (10 hours)**

The Management Spectrum; Organizational Structure; Types of Organizational Structures – Hierarchical Organizational Structure, Flat Organizational Structure, Matrix Organizational Structure, Networked Organizational Structure, T-form Organization; Job Roles in Software Development. - Overview of Project Management: Project Management – Definitions; Factors Influencing Project Management – Project Manager, Project Management Activities, Stakeholders; Project Communication; Project Development Phases; Project Charter; Statement of Work (SoW); Project Management Associations.

### **UNIT II Project Planning and Estimation, Budgeting of Projects and Project Scheduling , Requirement Modeling (10 hours)**

Tasks in Project Planning; Work Breakdown Structures (WBS); Planning Methods; Development Life Cycle Models; A Generic Project Model.

Estimation and Budgeting of Projects: Software Cost Estimation; COCOMO Model; Budgeting.

**Project scheduling:** Basic Principles, Effort distribution, Refinement of Software Engineering Actions, Defining a Task Network, Time-Line Charts, Tracking the Schedule. Tracking Progress for an OO Project.

**Requirement Modeling:** Requirement analysis, Domain analysis, Requirements Modeling Approaches, Scenario-Based Modeling, Data Modeling Concepts, Class-Based Modeling

### **UNIT III Project Scheduling and Project Monitoring and Controlling (8 hours)**

Project Scheduling : Scheduling Techniques – Program Evaluation and Review Technique (PERT), Gantt Chart, Critical Path Method (CPM), Automated Tools.- Project Monitoring and Controlling: Project Status Reporting; Project Metrics; Earned Value Analysis (EVA); Project Communication Plan & Techniques; Steps for Process Improvement.



## **UNIT IV Managing software Project Risk**

**(10 hours)**

**Risk Management:** Concepts of Risks and Risk Management , Risk Management Activities; Effective Risk Management; Risk Categories; Aids for Risk Identification; Potential Risk Treatments; Risk Components and Drivers; Risk Prioritization.

**Configuration Management:** Software Configuration Management (SCM) – Baselines, Software Configuration Items (SCI); SCM Process; Identification of Objects in the Software Configuration; Version Control; Change Control; Configuration Audit; Status Reporting; Goals of SCM.

## **UNIT V Software Quality Assurance, Testing Techniques and Software Re-Engineering**

**(10 hours)**

Software Quality Assurance Activities; Software Qualities; Software Quality Standards – ISO Standards for Software Organization, Capability Maturity Model (CMM), Comparison between ISO 9001 & SEI CMM, Other Standards.-Testing Techniques : Software Testing Concepts; Types of Software Testing – Manual Testing, Automated Testing; Black Box Testing; White Box Testing Techniques.- Software Re-Engineering: Software Maintenance Problems; Redevelopment vs. Reengineering; Business Process Reengineering; Software Reengineering Process Model; Technical Problems of Reengineering.

### **SUGGESTED READINGS:**

1. Bruce R. Maxim Roger S. Pressman(2019), Software Engineering: A Practitioner's Approach, 8th Edition, McGraw Hill, New Delhi
2. Ian Sommerville (2017), Software Engineering, 10th edition, Pearson Education, New Delhi.
3. Bob Hughes, Mike Cotterell, Rajib Mall(2017), Software Project Management, 6th edition, McGraw Hill, New Delhi,
4. Rajib Mall(2018), Fundamentals of Software Engineering, 5th edition, PHI Learning, New Delhi.
5. Richard Fairley (2017), Software Engineering Concepts, 1st Edition, McGraw Hill Education, New Delhi.

### **E-Resources**

- <https://nptel.ac.in/courses/106105218/>

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of ecommerce, infrastructure, ecommerce models, risk, e-payment, and e marketing and apply learning lifelong.
2. To comprehend on the legal aspects related to e-commerce.
3. To analyse the technology requirements for Ecommerce
4. To know the different business models available for running a e-business
5. To consider the different ways of payment and payment services available
6. To understand the E-supply chain management relating to e- business.

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Recognize the concept of ecommerce, infrastructure, ecommerce models, risk, e-payment, and e marketing and apply learning lifelong.	Knowledge
CO2	Summarize on the legal aspects related to e-commerce.	Understand
CO3	Display the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO4	Preparing the wealth of online learning environment and adopt methods for system online implementation.	Apply
CO5	Estimating with the recent trends and developments in technology which covers e-Commerce and knowledge management aspects.	Analyze
CO6	Measuring E-Marketing, Customer orientation and Future of Ecommerce	Evaluate

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1			M							
CO2				S						
CO3					M					
CO4		L								
CO5	M									
CO6			L							

**S-Strong; M-Medium; L-Low**

### UNIT I E-Commerce and Evolution of E-commerce

**(10 hours)**

Introduction to E-commerce - Introduction, E-commerce or Electronic Commerce- An Overview, Electronic Commerce – Cutting edge, Electronic Commerce Framework Evolution of E-commerce: Introduction, History of Electronic Commerce, Advantages and Disadvantage of E-commerce, Roadmap of e-commerce in India, Ethics in ecommerce.

### UNIT II Network Infrastructure, E-commerce Infrastructure and Managing the E-Enterprise

**(10 hours)**

Network Infrastructure- An Overview, The Internet Hierarchy, Basic Blocks of e-commerce, Networks layers & TCP/IP protocols, The Advantages of Internet, World Wide Web E-commerce Infrastructure: Introduction, E-commerce Infrastructure-An Overview, Hardware, Server Operating System, Software, Network Website-Securing e commerce network-firewalls-demilitarized zone-personal firewalls-VPNs-Intrusion detection system-Honeynets-Honeypots- Managing the e-Enterprise: Introduction, e-Enterprise, Managing the e-Enterprise, E-business Enterprise, Comparison between Conventional Design and E-organisation, Organisation of Business in an e-Enterprise

### UNIT III E-Commerce Process Models, Risk and management challenges

**(10 hours)**

Introduction, Business Models, E-business Models Based on the Relationship of Transaction Parties, e-commerce Sales Life Cycle (ESLC) Model- Risks of Insecure Systems: Introduction, An Overview of Risks Associated with Internet Transactions, Internet Associated Risks, Intranet Associated Risks, risks associated with Business Transaction Data Transferred between Trading Partners- Management of Risk: Introduction, Introduction to Risk Management, Disaster Recovery Plans, Risk Management Paradigm- Management Challenges and Opportunities: New Business Model, Required Changes in Business Processes, Channel Conflicts, Legal and Regulatory Environment for e-commerce, Security and Privacy-types of threats and attacks-Securing e commerce communication Managerial Opportunities

### UNIT IV Electronic Payment Systems, EDI

**(8 hours)**

Electronic Payment Systems, Electronic Cash, Smart Cards and Electronic Payment Systems, Credit Card Based Electronic Payment Systems, Risks and Electronic Payment System- Electronic Data Interchange(EDI): The Meaning of EDI, History of EDI, EDI Working Concept, Implementation difficulties of EDI, Financial EDI, EDI and Internet

#### **UNIT V -Marketing, Customer orientation and Future of Ecommerce.**

**(10 hours)**

E-Marketing: The scope of E-Marketing, Internet Marketing Techniques Consumer Oriented Business: Consumer Market, One-to-One Marketing, Consumer Demographics, Maintaining Loyalty, Gaining Acceptance, Online Catalogue, the Pilot Catalogue, A Unique Search Engine Future Directions: Software Agents, Technology Behind Software Agents, Types of Software Agents, Characteristics and Properties of Software Agents, Frame-work for Software Agent-based e-commerce, m-commerce, m-commerce Architecture, Areas of Potential Growth and Future for m-commerce-E-Auctions. , Next generation of E-commerce - voice camera, digital shopping assistant, digital twins, social commerce.

#### **SUGGESTED READINGS:**

1. Chaffey (2013), E-Business and E-Commerce Management: Strategy, Implementation and Practice, 5th edition, Pearson education, New Delhi.
2. P.T. Joseph S.J. (2015), E-Commerce: An Indian Perspective, PHI Learning Pvt Ltd, New Delhi.
3. David Whiteley(2017), E - Commerce: Strategy, Technologies and Applications, McGraw Hill, New Delhi.
4. Kenneth C. Laudon and Traveer, (2016), E-Commerce 10th edition, Pearson education, New Delhi.
5. Bharat Bhasker, (2017), Electronic Commerce: Framework, Technologies and Applications, 4th edition, McGraw Hill, New Delhi.

#### **E-Resources**

- <https://www.youtube.com/watch?v=xKJjyn8DaAw>
- <https://nptel.ac.in/courses/110/105/110105083/>

Instruction Hours /week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

### COURSE OBJECTIVES:

To make the students

1. To impart the skills needed to provide security to the system.
2. To make students learn various types of threats, Risk analysis, Physical security of infrastructure, providing authorization using biometrics,
3. To understand concepts such as Network security and cryptography techniques, Database security and Web security issues.
4. To understand the key technical tools available for security/privacy protection
5. To understand the most important classes of information security/privacy risks in today's "Big Data" environment
6. To Exercise competent operational security practices

### COURSE OUTCOMES

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	To classify the vulnerabilities in any computing system and hence be able to design a security solution.	Understand
CO2	To recognize the security issues in the network and resolve it.	Knowledge
CO3	To appraise security mechanisms using rigorous approaches, including theoretical	Evaluate
CO4	To compare and Contrast different IEEE standards and electronic mail security	Understand
CO5	To identify and investigate cyber security events related to computer systems and	Knowledge
CO6	To recognize the need for digital evidence.	Knowledge

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1		L								
CO2	M									
CO3			M							
CO4				M						
CO5					L					
CO6			M							

**S-Strong; M-Medium; L-Low**

### **Unit I:** (10 hours)

Information Systems: Meaning, Importance. Global Information Systems: Role of Internet and Web Service. Information System Security & Threats. Threats - New Technologies Open Door Threats. Level of Threats: Information, Network Level. Threats and Attacks. Computer Viruses. Classifications of Threats and Assessing Damages. Cyber Security.

### **Unit II:** (10 hours)

Building Blocks of Information Security: Principles, Terms, Three Pillars of Information Security. Information Classification. Risk Analysis: Risk Management & Risk Analysis, Approaches and Considerations. Physical Security: Need, Meaning, Natural Disasters, Controlling Physical Access, Intrusion Detection System. Controlling Visitors. Fireproof Sales, Security through cables and locks.

### **Unit III:** (10 hours)

Biometrics Controls for Security: Access Control, User Identification & Authentication. Meaning, Biometric Techniques. Key Success factors. Network Security: Intro, Network Types, Basic Concepts: Computer Security, Network Security, Trusted and UnTrusted Networks. Unknown Attacks.

### **Unit IV:** (10 hours)

Cryptography & Encryption: Meaning, Applications of Cryptography, Digital Signature, Cryptographic Algorithms. Firewalls: Meaning, Demilitarized Zone. Proxy Servers. Packet Filtering, Screening Routers. Application Level Firewalls, Hardware Level Firewalls. Databases Security: Introduction, Need, Mobile Databases Security, Enterprise Database Security. Database Security Policy. Security Models & Frameworks: Intro, Terminology. Intro to ISO 27001. COBIT, SSE-CMM. Methodologies for Information System Security: IAM, IEM, SIPES.

### **Unit V:** (8 hours)

Security Metrics: Intro, Basic, Security Matrix, Classification. Privacy: Meaning, Business Issue, Privacy Vs. Security, Related Terms. Information Privacy Principles. Privacy Technological Impacts: Implications of RFID. Use with Bio-Metrics. Smart

Card Applications. Web Services and Privacy: Privacy on Internet, Web Services, Privacy Aspects of SOA.

**Suggested Readings:**

1. Principles of Information Security by Michael E. Whitman and Herbert Mattord
2. Managing Enterprise Information Integrity: Security, Control and Audit Issues, By IT Governance Institute
3. An Introduction to Computer Security: The NIST Handbook

**COURSE OBJECTIVES:****To make the students**

1. To Understand the Concept of Digital marketing using social media.
2. To learn tools and utilize the tools of digital marketing and social media.
3. To understand the linkage of digital marketing, social media and analytics
4. To know the Role of Digital Marketing in developing brands
5. To analyse ORM and the need ORM
6. To measuring the results of campaign and best practices of video ads

**COURSE OUTCOMES**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	To appraise the Concept of Digital marketing using social media.	Evaluate
CO2	To relate tools and utilize the tools of digital marketing and social media.	Analyze
CO3	To understand the linkage of digital marketing, social media and analytics	Understand
CO4	Display the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO5	Identify the knowledge in Website designing with WordPress	Knowledge
CO6	Understand Social media Marketing Tools	Understand

**MAPPING WITH PROGRAMME OUTCOMES**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1		L								
CO2	M									
CO3			M							
CO4				M						
CO5					L					
CO6			M							

**S-Strong; M-Medium; L-Low**



## **UNIT I Digital Marketing (10 hours)**

Digital Marketing - Digital vs. Real Marketing - Digital Marketing Channel, Creating initial digital marketing plan - Content management - SWOT analysis - Target group analysis-Benefits of Digital Marketing. Digital marketing platforms and strategies. Comparing digital with traditional marketing. Issues arise when Digital Marketing goes wrong. Role of Digital Marketing in developing brands, drive sales, encourage product and service development and innovation, aid recruitment and training. Professional Ethics in Digital Marketing.

## **UNIT II Website (10 hours)**

Website – Meaning, Domain Name - Types of domains. Register a domain name. Webhosting concepts. Types of websites – HTML, CSS and Java Script. Popular CMS.Website designing with Word Press: Benefits of using WP. Admin interface basics. Theme settings and customization. Content management in WP. Categories, tags and posts. Pages and subpages. Custom content types. Adding a menu to the website. Plugins and widgets. Using Plugins in site. Adding widgets to the website. Best plugins in WP.

## **UNIT III Social media Marketing Tools– Basic Tools (10 hours)**

Creating a Face book page - Visual identity of a Face book page - Types of publications - Face book Ads - Creating Face book Ads - Ads Visibility  
Business opportunities and Instagram options - Optimization of Instagram profiles - Integrating Instagram with a Web Site and other social networks - Keeping up with posts  
Business tools on LinkedIn - Creating campaigns on LinkedIn - Analyzing visitation on LinkedIn  
Creating business accounts on YouTube - YouTube Advertising - YouTube Analytics  
E-mail marketing - E-mail marketing plan - E-mail marketing campaign analysis - Keeping up with conversions  
Digital Marketing Budgeting - resource planning - cost estimating - cost budgeting - cost - App creation strategy. Video marketing: Importance of video marketing. Create a video campaign. Location targeting and bidding strategies. Measuring the results of campaign. Best practices of video ads.

## **UNIT IV Advanced Tools :SEO and SEM ( 8 hours)**

On-Site SEO: Optimize UX & Design, Off-Site SEO: Link-building, SEO Audit and Future of SEO  
Ad words and Keyword Selection, Create Text Ads, CPC Bidding, Navigate AdWords, SEM Metrics and Optimization

## **UNIT V Online Reputation Management, Merging digital and social marketing and data analytics. (10 hours)**

ORM -need for ORM, areas to analyze in ORM. Generate a ORM report. Things to do in ORM – Monitor search results, complaint sites, reviews, sites and blogs, and social media. Analytics and its importance for business. Key performance metrics in analytics. Audience reports. Traffic reports. Behavior reports. Conversion tracking.

### **SUGGESTED READINGS:**

1. Ryan, D.(2014). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation, Kogan Page Limited.
2. Puneet Singh Bhatia(2017), Fundamentals of Digital Marketing, Pearson Education, New Delhi.
3. Abhishek Das(2018), Applications of Digital Marketing for Success in Business, 1st edition, BPB Publications, New Delhi
4. Dishek J. J. Mankad(2018), Understanding digital marketing, BPB Publications
5. VandanaAhuja (2015), Digital Marketing, Oxford University Press, New Delhi.
6. Sarah McHarry(2013), Wordpress To Go, Create space Independent Pub
7. Karol Krol(2017),WordPress Complete - Sixth Edition, Packt Publishing Limited

### **E-Resources**

- <https://www.youtube.com/watch?v=wZZnxXyES80&vl=en>
- <https://nptel.ac.in/courses/106106169/>
- <https://www.youtube.com/watch?v=wfOp0lsCXAY&list=PLifnQOsGyOSRMYndHku6pNILYckbBuOGU>

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of supply chain, inventory management, supply contracts, supply chain integration and global logistics.
2. To apply the understanding of supply chain, inventory management, supply contracts, supply chain integration and global logistics lifelong.
3. To understand the concept of supply chain and logistics.
4. To familiarize the key drivers of supply chain performance.
5. To understand the analytical tools necessary to solve supply chain problems.
6. To get an in-depth knowledge in International supply chain

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept of supply chain, inventory management, supply contracts, supply chain integration and global logistics.	Understand
CO2	Teach the concept of supply chain, inventory management, supply contracts, supply chain integration and global logistics lifelong.	Apply
CO3	Illustrate behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Analyze
CO4	Summarize the importance of accurate planning and product data management as a part of Logistics Management.	Understand
CO5	Illustrate the key drivers of Logistics outsourcing	Analyze
CO	Develop in-depth knowledge in Transactional Logistics	Create

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	L									
CO2		M								
CO3			M							
CO4	L									
CO5			M							
CO6					S					

**S-Strong; M-Medium; L-Low**

#### UNIT I Supply Chain

**(8 hours)**

Supply chain - integrated supply chain - Growth of Supply chain - Strategic decision in supply chain - Value chain for Supply Chain Management. - Building Blocks of a Supply Chain Network - Performance Measures - Decisions in the Supply Chain World - Models for Supply Chain Decision-Making - Supply Chain Performance Metrics and Drivers.

#### UNIT II SCM Planning and Risk Pooling

**(10 hours)**

Supply Chain Planning - Supply Chain Facilities Layout - Capacity Planning, Inventory Optimization, Dynamic Routing and Scheduling-Distribution Network in a Supply Chain and Network Design Introduction and forms of inventory - Single stage inventory control - Economic lot size model - Effect of demand - uncertainty Single period models - Initial inventory - Multiple order opportunities - Periodic review policy - Continuous review policy, Risk pooling - Centralized versus decentralized systems -Managing inventory in the supply chain Practical issues - Practical issues, Approaches to forecast future demand. Network design Inventory positioning and logistics coordination - Resource allocation

#### UNIT III Supply Contracts

**(10 hours)**

Strategic components - Contracts for make-to-stock supply chain -Contracts with asymmetric information - Contracts for nonstrategic components. The Value of Information - The bullwhip effect- Supply chain coordination structures - Information sharing and incentives -Information and supply chain trade-offs - Centralized and decentralized decision-making and performance impacts - Learning organization principles. Performance Measurements and Metrics: An Analysis of Supplier Evaluation

#### **UNIT IV Supply Chain Integration**

**(10 hours)**

Functional Products, Innovative products - Efficient supply chains - Responsive supply chains - Agile supply chains - Supply Chain Integration Push, pull, and push-pull systems- Demand-driven strategies Impact of lead time -Impact of the Internet on supply chain strategies

Distribution Strategies- Direct shipment distribution -Intermediate inventory storage point strategies –Transshipment -Strategic Alliances - Framework for strategic alliances - Third-party logistics - Retailer-Supplier Partnerships, Distributor integration Procurement and Outsourcing Strategies - Outsourcing benefits and risks. A Framework for Buy/Make Decisions - Procurement strategies - E-Procurement

#### **UNIT V Global Logistics, Risk Management and IT for supply chain**

**(10 hours)**

Types of global forces - Risk management - Issues in international supply chains - Coordinated Product and Supply Chain Design - Design for logistics - Supplier integration into new product development - Mass customization - Information Technology - Business Processes Supply Chain - IT Innovations Technology standards – RFID, SOA - Relation to ERP - E-procurement, E-Logistics, Internet Auctions,E-markets, Electronic business process optimization, Business objects in SCM

#### **SUGGESTED READINGS:**

- Judy Dickens (2019), Principles and Practice of Supply Chain Management, Willford Press
- Russel, Taylor (2015), Operations and Supply Chain Management, 8th edition, Wiley India.
- Sunil Chopra, Peter Meindl, et al.(2018),Supply Chain Management, 7th edition, Pearson Education, New Delhi.
- F. Robert Jacobs, Richard Chase (2017), Operations and Supply Chain Management, 14th edition, McGraw Hill, New Delhi.
- Janat Shah, (2016), Supply Chain Management: Text and Cases, 2nd edition, Pearson Education, New Delhi.

#### **E-Resources:**

- <https://nptel.ac.in/courses/110/108/110108056/>
- <https://nptel.ac.in/courses/110/106/110106045/>
- <https://nptel.ac.in/courses/110107074/>

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of operations, capacity, purchase, inventory and linkages to strategic formulation, implementation, monitoring and control.
2. To apply the understanding of concept of operations, capacity, purchase, inventory and linkages to strategic formulation, implementation, monitoring and control lifelong.
3. To understand Process Technology strategy and Improvement strategy
4. To know the challenges to operations strategy formulation
5. To analyse the content of operations strategy and the relative importance of performance objectives changes over time.
6. To know the dynamics of monitoring and control and Implementation risk

**COURSE OUTCOMES:**

<b>CO s</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO 1	Summarize the concept of operations, capacity, purchase, inventory and linkages to strategic formulation, implementation, monitoring and control.	Understand
CO 2	Apply the understanding of concept of operations, capacity, purchase, inventory and linkages to strategic formulation, implementation, monitoring and control lifelong.	Apply
CO 3	Ascertain behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO 4	Summarize the principles and techniques of Operations Research and their applications.	Understand
CO 5	Summarize the importance of Formulation and implementation strategy	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	L									
CO2		M								
CO3				S						
CO4	L									
CO5			M							
CO6										

**S-Strong; M-Medium; L-Low**

### UNIT I Operation strategy

**(10 hours)**

Operations excellence fundamental to strategic success -Operations strategy - Content of operations strategy - The operations strategy matrix- The process of operations strategy- The five generic performance objectives - The relative importance of performance objectives changes over time - Trade-offs - Targeting and operations focus Substitutes for strategy: 'New' approaches to operations- Total quality management - Lean operations - Business process reengineering - Six sigma

### UNIT II Capacity strategy and Purchasing and supply strategy

**(8 hours)**

Capacity strategy - The overall level of operations strategy - The number and size of sites - Capacity change - Location of capacity Purchasing and supply strategy- Do or buy? The vertical integration decision - Contracting and relationships - type of arrangement - Supply network dynamics - Managing suppliers over time - Purchasing and supply chain risk

### UNIT III Process Technology strategy and Improvement strategy

**(10 hours)**

Process technology strategy - Scale/scalability – the capacity of each unit of technology - Degree of automation/'analytical content' - Degree of coupling/connectivity - The product–process matrix - The challenges of information technology - Evaluating process technology. Improvement strategy: Introduction - Development and improvement -Setting the direction -Importance - performance mapping - Developing operations capabilities -Deploying capabilities in the market

### UNIT IV Product and Service Development and Organization

**(10 hours)**

The strategic importance of product and service development - Product and service development as a process - A market requirements perspective on product and service development - An operations resources perspective on product and service development - The process of operations strategy

#### **UNIT V Formulation and implementation, Monitoring and Control (10 hours)**

Formulation and implementation : Formulating operations strategy - role of alignment? - Analysis for formulation - The challenges to operations strategy formulation - Implementing operations strategy

The process of operations strategy Monitoring and control - Introduction - Strategic monitoring and control - x Contents Monitoring implementation – tracking performance - The dynamics of monitoring and control - Implementation risk - Learning, appropriation and path dependency

#### **SUGGESTED READINGS:**

1. Nigel Slack, Michael Lewis, MohitaGangwar Sharma (2018), Operations Strategy, 5th edition, Pearson Education, New Delhi.
2. Gary Pisano, David Upton, Steven Wheelwright Robert Hayes(2011), Operations, Strategy and Technology: Pursuing the Competitive Edge, Wiley India, New Delhi.
3. Jay Heizer, Barry Render, Chuck Munson , Amit Sachan (2017), Operations Management , 12th edition, Pearson Education, New Delhi.
4. Richard B. Chase, Ravi Shankar, F. Robert Jacobs (2018), Operations and Supply Chain Management, 15th edition, Mc Graw Hill, New Delhi.
5. B. Mahadevan (2015), Operations Management : Theory and Practice, 3rd edition, Pearson Education, New Delhi.

#### **E-Resources**

- <https://nptel.ac.in/courses/112/107/112107238/>
- <https://www.youtube.com/watch?v=qpqQtJ7GW8k>
- <https://www.youtube.com/watch?v=VozCAXEAdoo>



**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of quality management(QM), QM Principles, tools and techniques and quality systems.
2. To apply the Quality tools and techniques in improving the performance.
3. To apply the understanding of quality management(QM), QM Principles, tools and techniques and quality systems lifelong.
4. To acquire required diagnostic skills and use various quality tools.
5. To get exposure on tools and techniques like six sigma, 7 old quality control
6. To familiarize the students about the Quality Management System.
7. To identify the key competencies needed to be an effective manager.

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept of quality management (QM), QM Principles, tools and techniques and quality systems.	Understand
CO2	Ascertain the Quality tools and techniques in improving the performance.	Apply
CO3	Acquire knowledge of quality management (QM), QM Principles, tools and techniques and quality systems lifelong.	Apply
CO4	Assess the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, problem solving, planning and team work.	Evaluate
CO5	Apply the Quality tools and techniques in improving the performance.	Apply
CO6	Summarize the concept of quality management (QM), QM Principles, tools and techniques and quality systems.	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	L									
CO2		M								
CO3				S						
CO4										
CO5			M							
CO6										

**S-Strong; M-Medium; L-Low**

### UNIT I TOTALQUALITYMANAGEMENT

**(8 hours)**

Definitions – TQM framework, benefits, awareness and obstacles. Quality – vision, mission and policy statements. Customer Focus – customer perception of quality, Translating needs into requirements, customer retention. Dimensions of product and service quality. Cost of quality.

### UNIT II PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT

**(10 hours)**

Overview of the contributions of Deming, Juran Crosby, Masaaki Imai, Feigenbaum, Ishikawa, Taguchi techniques – introduction, loss function, parameter and tolerance design, signal to noise ratio. Concepts of Quality circle, Japanese 5S principles and 8D methodology.

### UNIT III STATISTICAL PROCESS CONTROL AND PROCESS CAPABILITY

**(10 hours)**

Meaning and significance of statistical process control (SPC) – construction of control charts for variables and attributed.

Process capability – meaning, significance and measurement – Six sigma concepts of process capability.

Reliability concepts – definitions, reliability in series and parallel, product life characteristics curve.Total productive maintenance (TMP) – relevance to TQM, Terotechnology. Business process re-engineering (BPR) – principles,applications, reengineering process, benefits and limitations.

## **UNIT IV TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT**

**(10 hours)**

Quality functions development (QFD) – Benefits, Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) – requirements of reliability, failure rate, FMEA stages, design, process and documentation. Seven old (statistical) tools. Seven new management tools. Bench marking and POKA YOKE.

## **UNIT V QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION**

**(10 hours)**

Introduction to IS/ISO 9004:2000 – quality management systems – guidelines for performance improvements. Quality Audits. TQM culture, Leadership – quality council, employee involvement, motivation, empowerment, recognition and reward- Introduction to software quality.

### **SUGGESTED READINGS :**

1. Dale H. Besterfield, etal, (2018). Total Quality Management, 5th edition, Pearson Education, New Delhi.
2. Sunil Sharma (2018), Total Quality Management: Concepts, Strategy and Implementation for Operational Excellence, 1st edition, Sage Publications
3. Panneerselvam(2014), Quality Management, Prentice Hall India Learning Private Limited, New delhi
4. Charantimath(2011), Total Quality Management, Pearson Education, New Delhi
5. AmitavaMitra (2013), Fundamentals of Quality Control and Improvement, 3 rd edition, New Delhi.

### **E-Resources:**

- <https://nptel.ac.in/courses/110/104/110104085/>
- <https://nptel.ac.in/courses/110/104/110104080/>

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concept of sourcing and its importance as strategic organizational function.
2. To apply the tools and techniques to select the best vendor to deliver quality goods on time and apply the learning lifelong.
3. To understand the sourcing in the global perspective.
4. To evaluate of existing vendors and develop vendor performance measures
5. To understand the managing price fluctuation and volatility in international finance
6. To know the Global Trade Barriers and Dealing with international suppliers

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept of sourcing and its importance as strategic organizational function.	Understand
CO2	Apply the tools and techniques to select the best vendor to deliver quality goods on time and apply the learning lifelong.	Apply
CO3	Summarize the sourcing in the global perspective.	Understand
CO4	Analyze the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Analyze
CO5	Summarize the importance of Managing price fluctuation and volatility in international finance	Understand
CO6	Assess the Industry Best Practices, Measurement of sourcing performance and Benchmarking in Retail Purchasing	Evaluate

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PS01</b>	<b>PS02</b>
CO1	<b>L</b>									
CO2		<b>M</b>								
CO3			<b>M</b>							

CO4				<b>M</b>						
CO5			<b>M</b>							
CO6										

**S-Strong; M-Medium; L-Low**

**UNIT I Procurement as a Strategic Organizational Function (10 hours)**

Evolution of purchasing, Purchasing, sourcing and vendor management as a key organizational function, Purchasing objectives, Impact of strategic purchasing on profitability, Make or Buy Decisions, Types and methods of sourcing in retail; centralized vs decentralized, single sourcing vs multiple sourcing, day-to-day vs long range sourcing.

**UNIT II The Sourcing Process (8 hours)**

Market analysis and supplier research, Prime sources of supplier information, Request for Proposal, Fundamental steps of the buying process, terms and condition of purchase, Buying Documentation, Negotiation, Use of IT in sourcing, Global Tenders and E-Procurement, Reverse Auctions, Expanded role of global purchasing.

**UNIT III Vendor Selection and Management (10 hours)**

Vendor selection process, Evaluation of existing vendors, Developing vendor performance measures, new vendor development process, working with suppliers to manage quality, JIT and TQM in sourcing, Key supplier account management, Vendor relationship development, Negotiation skills, Vendor monitoring, Promoting SME suppliers.

**UNIT IV Cross functional Approach to Sourcing (10 hours)**

Overview of material management function and supply chain alignment, Role of purchasing in supporting inventory objectives, Goals of Inventory Control, Hedging vs. Forward Buying, Risk management, Managing price fluctuation and volatility in international finance, matching supply with customer demand, managing inward logistics, Transportation modes and warehousing.

**UNIT V Global Trends and Issues in Sourcing (10 hours)**

Global Trade Barriers, Dealing with international suppliers, UNO and GATT conventions, Legal, socio-cultural issues in international buying, Environmental issues-Green Purchasing- Industry Best Practices, Measurement of sourcing performance, Benchmarking in Retail Purchasing.

## **SUGGESTED READINGS:**

1. Fred Sollish, John Semanik(2018), Strategic Global Sourcing Best Practices, Wiley India.
2. Robert B. Handfield et.al (2012), Sourcing and Supply Chain Management. 5th edition, Cengage Learning.
3. Wilhelm Kohler, ErdalYalcin (2018), Developments in Global Sourcing, MIT Press
4. SudhiSeshadri (2014), Sourcing Strategy: Principles, Policy and Designs, Springer.
5. Dr Kenneth Lyons, Dr Brian Farrington (2016), Procurement and Supply Chain Management, 9th edition, Pearson Education.

### **E-Resources**

- <https://nptel.ac.in/courses/110105095/>
- <https://nptel.ac.in/courses/110106045/>

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of operations management in services sector.
2. To comprehend on understanding of services design, service quality, service facility.
3. To apply capacity and demand assessment tools in service operations.
4. To understand Front-office Back-office Interface and service decoupling.
5. To know Managing Service Experience, experience economy and Measuring Service Quality
6. To understand Inventory Management in Services sector

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept of operations management in services sector.	Understand
CO2	Characterize the services design, service quality, service facility.	Understand
CO3	Apply capacity and demand assessment tools in service operations.	Apply
CO4	Analyze behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Analyze
CO5	Summarize process flow diagram, process steps and simulation	Understand
CO6	Assess supply management tactics, operations planning and control	Evaluate

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PS01</b>	<b>PS02</b>
CO1	<b>L</b>									
CO2		<b>M</b>								

CO3			<b>M</b>							
CO4										
CO5			<b>M</b>							
CO6					<b>M</b>					

**S-Strong; M-Medium; L-Low**

### **UNIT I Services**

**(10 hours)**

Services – Importance, role in economy, service sector – growth; Nature of services - Service classification, Service Package, distinctive characteristics, open-systems view; Service Strategy – Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness; Internet strategies - Environmental strategies.

### **UNIT II Service Design**

**(10 hours)**

New Service Development – Design elements – Service Blue-printing - process structure – generic approaches –Value to customer; Retail design strategies – store size – Network configuration ; Managing Service Experience –experience economy, key dimensions ; Vehicle Routing and Scheduling

### **UNIT III Service Quality**

**(8 hours)**

Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality –SERVQUAL - Walk-through Audit; Quality service by design - Service Recovery - Service Guarantees; Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface – service decoupling.

### **UNIT IV Service Facility**

**(10 hours)**

Servicescapes – behaviour - environmental dimensions – framework; Facility design – nature, objectives, process analysis – process flow diagram, process steps, simulation; Service facility layout; Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location , location set covering problem

### **UNIT V Managing Capacity and Demand**

**(10 hours)**

Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines –Queuing systems, psychology of waiting; Managing for growth-expansion strategies, franchising , globalization.



## **SUGGESTED READING**

1. Johnston Robert, Clark Graham, Shulver Michael (2017), Service Operations Management: Improving Service Delivery, 4th edition, Pearson Education.
2. James A. Fitzsimmons , Mona J. Fitzsimmons , Sanjeev Bordoloi (2018), Service Management, 8th edition, McGraw Hill.
3. Richard D. Metters (2012), Successful Service Operations Management, Cengage Learning.
4. Robert Johnston, Graham Clark,(2007) Service Operations Management, 2nd edition, Pearson Education
5. Bill Hollins and Sadie Shinkins, (2006), Managing Service Operations, Sage Texts.

## **E-Resources**

- [https://www.youtube.com/watch?v=\\_9697WzjwRA](https://www.youtube.com/watch?v=_9697WzjwRA)
- <https://nptel.ac.in/courses/110/106/110106046/>

**COURSE OBJECTIVES:****To make the students**

1. To have the conceptual understanding of the HR metrics and analytics
2. To understand the importance of HR metrics and analytics in measuring HR's impact and drive business results.
3. To Identify the right HR metrics (what to measure, types of measurements etc,) – aligning HR and business goals.
4. To utilize metrics into analytics for effective management decisions and align to Strategic decision making.
5. To describe the key elements of the HR scoreboard
6. To Translate HR metrics results into actionable business decisions for upper management

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Relate the conceptual understanding of the HR metrics and analytics	Analyze
CO2	Understand the importance of HR metrics and analytics in measuring HR's impact and drive business results.	Understand
CO3	Identify the right HR metrics and aligning HR and business goals.	Knowledge
CO4	Develop metrics into analytics for effective management decisions and align to Strategic decision making.	Create
CO5	Displaying behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO6	Understand which metrics you will need and Implement	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO 4	PO 5	PO6	PO 7	PO 8	PSO 1	PS O2
CO1			M							
CO2	S									
CO3		M								
CO4				M						
CO5			M							
CO6	S									

**S-Strong; M-Medium; L-Low**

### UNIT I HR Analytics

**(8 hours)**

HR Measurements -Meaning for measurements - Strategy-focused organization- HR Analytics Overview - HR Analytics - Importance of HR Analytics. -The Business Balanced Scorecard & KPIs - Understand the HR Value Chain –Types of scorecards - Business balanced scorecard

### UNIT II HR Metrics

**(10 hours)**

HR Metrics - Concepts, Objectives - Historical evolution of HR metrics.- Defining Metrics - Components of metrics - Understand the different measures in metrics - How and why metrics are used in an organization - HR measurement model- HCM:21 (human capital management for the twenty-first century)- HR efficiency measures, HR Effectiveness measures, HR value / impact measures

### UNIT III HR Metrics and KPIs

**(10 hours)**

The HR Scorecard and Related Metrics - HR Scoreboard - Understand the HR value chain measurements - Key elements of the HR scoreboard

Define metrics from strategy to KPI - Performance matrix in HR - Understand several key metrics for your business- Designing effective Metrics that matters - Deciding what metrics are important to your business. - HR metrics design principles. - Approaches for designing HR metrics: The Inside-Out Approach,The Outside-In Approach

Align HR metrics with business strategy, goals and objectives - Link HR to the strategy map -Creating levels of metrics measures.

### UNIT IV Building HR functions metrics

**(10 hours)**

Building HR functions metrics - Workforce Planning Metrics - Recruitment Metrics - Training and Development Metrics - Compensation and Benefits Metrics - Employee relations & Retention Metrics

Aligning Metrics to Support Organizational Decision Making - To become a trusted business partner - Selecting the right methodology -Root cause analysis

## **UNIT V Implementation**

**(10 hours)**

Implementation: Building Support - Rules of building support - Building support for metrics - Involvement and commitment. Implementing HR Metrics. Translating HR metrics results into actionable business decisions for upper management (Using Excel Application exercises, HR dashboards).

### **SUGGESTED READINGS:**

1. C. Sesil James (2017), Applying Advanced Analytics to HR Management Decisions: Methods for Selection, Developing Incentives and Improving Collaboration, Pearson Education.
2. Jatin Pandey, Manish Gupta Pratyush Banerjee(2019), Practical Applications of HR Analytics, Sage Texts.
3. Dipak Kumar Bhattacharyya(2017), HR Analytics: Understanding Theories and Applications, Sage Texts.
4. Ramesh Soundararajan, Kuldeep Singh (2016), Winning on HR Analytics: Leveraging Data for Competitive Advantage, Sage Texts.
5. Jac Fitz-Enz and John R. Mattox II (2014), Predictive Analytics for Human Resources, Wiley India.

**COURSE OBJECTIVES:****To make the students**

1. To have the conceptual understanding of the marketing metrics and analytics
2. To understand the importance of marketing metrics and analytics in measuring marketing's impact and drive business results.
3. To Identify the right marketing metrics (what to measure, types of measurements etc.,) – aligning HR and business goals.
4. To utilize metrics into analytics for effective management decisions and align to Strategic decision making.
5. To Identify the size of the opportunity for growth and begin to identify the methods to achieve it the value of the different shopper groups
6. To derive the market share in terms of Units, Revenue, concentration ratio and Herfindahl.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarizing the conceptual understanding of the marketing metrics and analytics	Understand
CO2	Understand the importance of marketing metrics and analytics in measuring marketing's impact and drive business results.	Understand
CO3	Identify the right marketing metrics and aligning HR and business goals.	Remember
CO4	Examining metrics into analytics for effective management decisions And align to Strategic decision making.	Apply
CO5	Experimenting behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Evaluate
CO6	Understand Non financial measures, Brand Awareness, Test-drive, Churn, CSAT and Customer Satisfaction	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO 4	PO 5	PO6	PO 7	PO 8	PS O1	PS O2
CO1		M								
CO2	S		M							
CO3										
CO4				M						
CO5	S									
CO6			M							

**S-Strong; M-Medium; L-Low**

### UNIT I Marketing Analytics and Marketing Metrics

**(10 hours)**

Marketing Analytics - Introduction - Analytics v/s Analysis – Business Analytics, Business domains within Analytics, Introduction to Marketing Analytics, Introduction to Models, Decision Models – Descriptive, Predictive and Prescriptive Models. Introduction to Metrics: Marketing Metrics – Opportunities, performance and accountability. Data availability, mastering metrics, marketing Metrics survey. Market Insight - Market Data Source – treatment of outliers, Market sizing, PESTLE Market analysis, Porter Five Force Analysis.

### UNIT II Multichannel Segmentation and positioning

**(10 hours)**

Identify differences in behavior of online, in-store & multi-channel shoppers, Identify the size of the opportunity for growth and begin, to identify the methods to achieve it. The value of the different shopper groups- Key measures - Spend per visit, Spend per shopper, Units per visit, Units per shopper, Frequency of Purchase (Visits per shopper), Estimate the profitability of each segment in terms of Cost of Acquiring, Cost of Retention, Profitability and Lifetime value analysis.

### UNIT III Business strategy and Marketing Operations

**(10 hours)**

Business Strategy - Strategic Scenarios, Strategic Decision Models, Strategic Metrics Business Operations – Forecasting, Predictive Analytics, data Mining, Balanced Scorecard, Critical Success Factors, Market share Analysis - Derive the market share in terms of Units, Revenue, concentration ratio, Herfindahl-Hirschman Index – HHI- Competitive Analysis - Competitive Information, Competitive Analysis, Competitive Actions, Difference between leaders and laggards.

### UNIT IV Marketing Mix Analytics

**(10 hours)**

Product and Service Analytics - Conjoint Analysis, Decision Tree Model, Portfolio Resource Allocation, Product/ service Metrics, Attribute Preference testing Price Analytics - Pricing Techniques, Pricing Assessment, Profitable pricing, Pricing for Business Markets, Price Discrimination- Distribution analytics - Distribution Channel Characteristics, Retail Location selection, Channel Evaluation and Selection, Multi-channel Distribution, Distribution Channel Metrics

Promotion Analytics - Promotion Budget estimation, Promotion Budget Allocation – Ad value equivalence model, Promotion Metrics for traditional Media, Promotion Metrics for social media,

#### **UNIT V Financial and Non - Financial Measures**

**(8 hours)**

Non-Financial Measures - Brand Awareness, Test-drive, Churn, CSAT- Customer Satisfaction, Acceptance Rate / take-off, Customer Life time value estimation  
Financial measures – ROMI, Web Analytics - Search Engine Optimization- Tracking the success of SEO. Cost per click, Transaction Conversion Ratio, Return on Dollar spend(ROA), Bounce rate , Word of Mouth (WOM).

#### **SUGGESTED READINGS:**

1. Stephen Sorger (2013), Marketing Analytics: Strategic Models and Metrics, First Edition, Admiral Press.
2. Paul W. Farris , Neil T. Bendle, Phillip E. Pfeifer (2016), Marketing Metrics: The Definitive Guide to Measuring Marketing Performance, 3rd Edition, Pearson Education. (FT Press)
3. Wayne L. Winston (2014), Marketing Analytics: Data-Driven Techniques with Microsoft Excel, 1st edition, Wiley India.
4. Brea Cesar (2018), Marketing and Sales Analytics: Proven Techniques and Powerful Applications from Industry Leaders, 1st edition, Pearson Education.
5. Rajkumar Venkatesan, Paul Farris, Ronald T. Wilcox(2014), Cutting Edge Marketing Analytics: Real World Cases and Data Sets for Hands On Learning, 1st edition, Pearson (FT Press Analytics)

#### **E-resources:**

- <https://nptel.ac.in/courses/110/105/110105142/>

**COURSE OBJECTIVES:****To make the students**

1. To have the conceptual understanding of big volume of data and its utilization in decision making.
2. To comprehend on the industry usage of big data in different functions across sectors.
3. To Understand and apply the appropriate tools and techniques for analyzing the big data.
4. To understand Big Data and the New School of Marketing, Digital Marketing and Web Analytics
5. To know Discrete Probability distribution, Continuous Probability distribution and Random sampling from Probability Distribution
6. To evaluate an ARIMA Model and Reasons to Choose and Cautions

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understanding the conceptual understanding of big volume of data and its utilization in decision making.	Understand
CO2	Summarizing on the industry usage of big data in different functions across sectors.	Understand
CO3	Understand and apply the appropriate tools and techniques for analyzing the big data.	Understand
CO4	Examining the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO5	Understand Big Data and the New School of Marketing	Understand
CO6	Gain knowledge in Probability distribution and Data Modeling	Apply



## Mapping with Programme Outcomes

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PS O1	PS O2
CO1	M									
CO2	S									
CO3		M								
CO4	S									
CO5			M							
CO6	M									

**S-Strong; M-Medium; L-Low**

### **UNIT I Big Data Analytics and Big Data Technology (10 hours)**

Big data, users of big data, big data and strategy : A Linkage, The Expanding Universe of Unstructured Data,

Big Data Technology: Big Data Computation, Big data Storage. Open-Source Technology for Big Data Analytics, The Cloud and Big Data, Crowd sourcing Analytics, Inter- and Trans-Firewall Analytics, Mobile Business Intelligence

### **UNIT II Big Data – Industry users (10 hours)**

People : Rise of the Data Scientist, Learning over Knowing, Agility, Scale and Convergence, Multidisciplinary Talent, Innovation, Cost Effectiveness, The 90/10 Rule and Critical Thinking, Analytic Talent and Executive Buy-in, Developing Decision Sciences Talent, Holistic View of Analytics

Big data in Business: Big Data and the New School of Marketing, Digital Marketing , Web Analytics, Social and Affiliate Marketing.

Fraud and Big Data Risk and Big Data - Credit Risk Management, Big Data and Algorithmic Trading - Crunching Through Complex Interrelated Data - Intraday Risk Analytics, a Constant Flow of Big Data

Geospatial Intelligence, Health care - “Disruptive Analytics”.

### **UNIT III Descriptive Statistical Measures (10 hours)**

Population and samples, Measures of location, Measures of Dispersion, Measures of variability, measures of Association. Probability distribution and Data Modeling – Discrete Probability distribution, Continuous Probability distribution, Random sampling from Probability Distribution, Data Modeling and Distribution fitting. Hypothesis Testing, Difference of Means, Wilcoxon Rank-Sum Test, Type I and Type II Errors, Power and Sample Size, ANOVA

### **UNIT IV Clustering, Association And Classification (8 hours)**

Data Mining : Scope of Data Mining, Data Exploration and Reduction, Unsupervised learning – cluster analysis, Association rules, Supervised learning- Partition Data, Classification Accuracy, prediction Accuracy, k-nearest neighbors, Classification and regression trees, Logistics Regression.

**UNIT V Time series analysis****(10 hours)**

Overview of Time Series Analysis, Box-Jenkins Methodology, ARIMA Model. Autocorrelation Function (ACF), Autoregressive Models, Moving Average Models, ARMA and ARIMA Models, Building and Evaluating an ARIMA Model, Reasons to Choose and Cautions

**SUGGESTED READINGS:**

1. EMC Education Services(2015), Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data
2. Seema Acharya, Subhashini Chellappan (2015), Big Data and Analytics (WIND) , Wiley India.
3. Bart Baesens(2014), Analytics in a Big Data World: The Essential Guide to Data Science and its Applications, Wiley India.
4. Bernard Marr (2016), Big Data in Practice : How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results, Wiley India,
5. Mayank Bhushan (2018), Big Data and Hadoop- Learn by Example, BPB Publications.

**COURSE OBJECTIVES:****To make the students**

1. To have the conceptual understanding of the financial metrics and analytics
2. To select appropriate tools and techniques for analyzing the finance data and apply the same.
3. To analyze financial data and make decisions to maximize return and minimize risk.
4. To understand the overview of Time Series Analysis and Box-Jenkins Methodology
5. To know the Association rules and Supervised learning
6. To apply Principle component analysis

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the conceptual understanding of the financial metrics and analytics	Understand
CO2	Choose appropriate tools and techniques for analyzing the finance data and apply the same.	Apply
CO3	Analyze financial data and make decisions to maximize return and minimize risk.	Analyze
CO4	Examining behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Create
CO5	Understand Association and Classification for finance data	Understand
CO6	Identify knowledge in CAPM model and Beta calculation	Knowledge

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO2
CO1			M							
CO2	S									
CO3		M								

CO4				<b>M</b>						
CO5			<b>M</b>							
CO6	<b>S</b>									

**S-Strong; M-Medium; L-Low**

#### **UNIT I Data science – Finance**

**(8 hours)**

Understanding data in finance, sources of data, cleaning and pre-processing data- Corporate finance data, stock price data, derivative data, credit card fraud data.

#### **UNIT II Descriptive statistics for finance data**

**(10 hours)**

Mean, median, variance, Standard deviation, coefficient of variation, skewness, kurtosis, normality test, correlation and Regression, Hypothesis Testing- parametric and non parametric test

Difference of Means, Wilcoxon Rank-Sum Test, Type I and Type II Errors, Power and Sample Size, ANOVA

#### **UNIT III Time series analysis for finance data**

**(10 hours)**

Overview of Time Series Analysis, Box-Jenkins Methodology, ARIMA Model, Autocorrelation Function (ACF), Autoregressive Models, Moving Average Models, ARMA and ARIMA Models,

Building and Evaluating an ARIMA Model, Reasons to Choose and Cautions,

#### **UNIT IV Association and Classification for finance data**

**10 hours)**

Association rules, Supervised learning- Partition Data, Classification Accuracy, prediction Accuracy, k-nearest neighbors, Classification and regression trees, Logistics Regression. Factor analysis - Principle component analysis.

#### **UNIT V Financial models**

**(10 hours)**

CAPM model, Beta calculation, VAR, Mean variance analysis, Markowitz model, EVA, Black Scholes Model.

#### **SUGGESTED READINGS:**

1. EMC Education Services(2015), Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data
2. Walter Enders(2018), Applied Econometric Time Series, Wiley India.
3. Ruey S. Tsay(2014), Analysis of Financial Time Series, 3rd edition, Wiley India
4. John C. Hull and SankarshanBasu(2018), Options, Future & Other Derivatives, Pearson Education.
5. Sheldon Natenberg(2014), Option Volatility and Pricing: Advanced Trading Strategies and Techniques, 2nd Edition, McGraw Hill.

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of Data Warehouse and its significance.
2. To gain the knowledge of hardware and operational design of data warehouses
3. To obtain the knowledge of planning the requirements for data warehousing.
4. To understand the types of the data mining techniques and its application
5. To comprehend on the concept of knowledge discovery process and its application
6. To know about Visualization techniques and Knowledge discovery process.

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the basic principles, concepts and applications of data warehousing and data mining,	Understand
CO2	Comprehend the importance of Processing raw data to make it suitable for various data mining algorithms.	Understand
CO3	Visualize the techniques of clustering, classification, association finding, feature selection and its importance in analysing the real-world data.	Knowledge
CO4	Understand the Conceptual, Logical, and Physical design of Data Warehouses OLAP applications and OLAP deployment	Understand
CO5	Examining behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Understand Preliminary analysis of the data set using traditional query tools	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO 4	PO 5	PO6	PO 7	PO 8	PSO 1	PSO 2
CO1			M							
CO2	S									
CO3		M								
CO4				M						
CO5			M							
CO6	S									

**S-Strong; M-Medium; L-Low**

### UNIT I Data warehousing

**(10 hours)**

Meaning and Significance – Differences between operational database systems and data Ware House Data Warehouse Architecture: System Process – Process architecture– Design – Database scheme – Partitioning strategy – Aggregations – Data mart – Meta data – Systems and data Warehouse process managers

Data Modeling- Dimension Table characteristics; Fact-Less-Facts, Dimension Table characteristics; OLAP cube, OLAP Operations, OLAP Server Architecture-ROLAP, MOLAP and HOLAP.

### UNIT II Hardware and Operational design of data warehouses and Classification

**(10 hours)**

Hardware and Operational design of data warehouses – Hardware architecture – Physical layout – Security – Backup and Recovery – Service level agreement – Operating the data warehouse.

Classification: Problem definition, General Approaches to solving a classification problem, Evaluation of Classifiers, Classification techniques

### UNIT III Data warehouse Planning and Association Rules

**( 8 hours)**

Tuning and Testing – Capacity planning – Testing the data warehouses – Data warehouse features. Association Rules: Problem Definition, Frequent Item Set Generation, The APRIORI Principle, Support and Confidence Measures, Association Rule Generation, APRIORI Algorithm.

### UNIT IV Data Mining

**(10 hours)**

Introduction – Information and production factor – Data mining Vs Query tools – Data mining in marketing – Self learning computer systems – concept learning- Data Mining Tasks, Data Preprocessing- Data Cleaning, Missing Data, Dimensionality Reduction, Feature Subset Selection, Discretization and Binaryzation , Data Transformation; Measures of similarity and dissimilarity-Basics.

## **UNIT V Knowledge Discovery Process and Clustering (10 hours)**

Data selection – Cleaning – Enrichment – Coding – Preliminary analysis of the data set using traditional query tools – Visualization techniques – OLAP tools – Decision trees – Association rules – Neural networks –Genetic Algorithms KDD (Knowledge discover in Database) environment.

Clustering: Problem Definition, Clustering overview, Evaluation of clustering algorithms, Partitioning clustering K-Means Algorithm, K-Means Additional Issues, PAM Algorithm, Hierarchical Clustering.

### **SUGGESTED READINGS :**

1. Alex Berson, Stephen Smith (2017), Data Warehousing, Data Mining, & OLAP, McGraw Hill Education, New Delhi
2. Daniel T. Larose, Chantal D. Larose (2016), Data Mining and Predictive Analytics, 2nd edition, Wiley, New Delhi.
3. Daniel T. Larose, Chantal D. Larose (2015), Discovering Knowledge in Data: An Introduction to Data Mining, 2nd edition, Wiley, New Delhi.
4. Mehmed Kantardzic (2017), Data Mining: Concepts, Models, Methods and Algorithms, 2nd edition, Wiley, New Delhi.
5. Gordon S. Linoff , Michael J.A. Berry (2012), Data Mining Techniques: For Marketing, Sales and Customer Relationship Management, 3rd edition, Wiley, New Delhi.

**COURSE OBJECTIVES:****To make the students**

1. To inculcate among students, entrepreneurial competencies including self-confidence, goal setting, planning, resource mobilization, and planned risk-taking.
2. To provide intensive personal counseling to develop a competent entrepreneur and a successful family business leader of tomorrow.
3. To increase the problem-solving, conceptual, and decision-making skills of practicing managers.
4. To provide a learning environment for men and women to pursue careers in different fields of management or become academicians and researchers.
5. To promote the development of leadership skills among students by stimulating them to organize and manage various programs such as inter-institute competitions and seminars.
6. To provide exposure to real-life work experiences and hands-on practice in collaboration with the industry.

**COURSE OUTCOMES:****Learners should be able to**

<b>COS</b>	<b>COURSE OUTCOME</b>	<b>BLOOM'S LEVEL</b>
CO1	Become successful entrepreneurs and those with existing family businesses will be able to adopt better family business practices.	Apply
CO2	Cite and relate to current conceptual and theoretical models, issues, and concerns in business management	Remember
CO3	Classify organizational and business situations with an open mind and formulate innovative solutions to problems.	Understand
CO4	Examine business practices across the globe to determine the best practices for application to their businesses.	Evaluate
CO5	Summarize the importance of ethical values and work as team players	Evaluate
CO6	Acquire leadership skills and become productive managerial leaders	Apply



**Mapping with Program outcome:**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1			M							
CO2	M									
CO3	M									
CO4						M				
CO5						M				
CO6			M							

**S-Strong; M-Medium; L-Low****Unit I: (10 hours)**

The evolution of the concept of entrepreneurship and Start Ups. Recent Trends in Entrepreneurship, Factors affecting Entrepreneurial Growth. Opportunity Recognition, Types of startups, New and Emerging Startup areas, Startups in Indian Scenario. Green Startups.

**Unit II: (10 hours)**

Ideation, Stimulating Creativity; Organizational actions that enhance/hinder creativity, Managerial responsibilities; Sources of Innovation in Business; Managing Organizations for Innovation and Positive Creativity, Team Formation.

**Unit III: (10 hours)**

Venture Introduction, Venture Capital Financing Concept and Features, Need–Relevance and Development of Venture Capital Funds. Digital Marketing; Research for Marketing Decisions; Brand Management; Entrepreneurship in Action; Personal Values, Goals and Career Options; Strategic Thinking and Decision Making.

**Unit IV: (10 hours)**

The Venture Capital pitch - Strategies, delivery, How to Pitch your ideas, Pitching Platforms, Linguistic skills, Minimum Viable Plan: Concept and design. MVP Planning, Financial & Human Resources, The Business Model and Business Model Innovation, design techniques, Uses and advantages, Business Plan Preparations: Feasibility study and writing a business plan. Contents of a business plan.

**Unit V: (8 hours)**

Intellectual Property Protection- Patents, Trademarks and Copyrights – Importance for startups, Legal acts governing business in India; International entrepreneurship-opportunities and challenges. Role of Accelerators and Incubators in nurturing and guiding Startups.

**SUGGESTED READINGS:**

1. Introduction to Project Finance-Machiraju, H.R., Vikas Publishing House
2. Project Preparation Appraisal Budgeting and Implementation, Prasanna Chandra, Tata McGraw.
3. Entrepreneurship: Successfully Launching New Ventures- Barringer, B. R., and Ireland, R. D., Pearson Education, India
4. Innovation and entrepreneurship: Practice and principles- Drucker, P. F., Elsevier
5. Corporate creativity- Khandwalla, Tata Mc. Graw Hill.

**COURSE OBJECTIVES:****To make the students**

1. To understand the social entrepreneurship, scanning opportunity for social entrepreneurship, business models, social innovation and apply learning lifelong.
2. To analyse the real cases of social entrepreneurship and understand the dynamics of social entrepreneurship.
3. To design strategies for successful implementation of ideas
4. To Understand the systematic process to select and screen a business idea
5. To Assessing and prioritizing opportunities for Social Entrepreneurs and Social Innovation
6. To understand the value of Government initiative to support social entrepreneurship

**COURSE OUTCOMES:****Learners should be able to**

COs	COURSE OUTCOME	BLOOM'S LEVEL
CO1	Articulate the social entrepreneurship, scanning opportunity for social entrepreneurship, business models, social innovation and apply learning lifelong	Understand
CO2	Correlate the real cases of social entrepreneurship and understand the dynamics of social entrepreneurship	Analyze
CO3	Interpret behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Evaluate
CO4	Enumerate innovative ideas and find ways to apply these ideas to solve issues and problems in different industries and settings.	Remember
CO5	Correlate the role of government in business	Analyze
CO6	Meet ethical standards in individual and business life	Remember

**Mapping with Program outcome:**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1			M							
CO2	M									
CO3	M									
CO4						M				
CO5						M				
CO6			M							

**UNIT I Social Entrepreneurship****(10 hours)**

Social entrepreneur – factors impacting transformation into social entrepreneur - traits/characteristics of social entrepreneurship-- The four distinctions of social entrepreneurship, roles and responsibilities of social entrepreneurs towards society, challenges faced by social entrepreneurship Social entrepreneurship in India, Government initiative to support social entrepreneurship.

**UNIT II Opportunities For Social Entrepreneurs and Social Innovation****(10 hours)**

Methods of sensing opportunities and fields of opportunities - Assessing and prioritizing opportunities - Enterprise launching and its procedures – start-ups – incubation Social Innovation, Design Thinking and system thinking for social innovation. Social Entrepreneurship and the challenges of scale : What does ‘going to scale’ mean? How is it done? How much ‘scale’ is enough? How do you know? What are some key challenges for businesses trying to go to scale? For social enterprises? What are some methods for taking a social enterprise to scale? What role can major corporations, like multinationals, play in taking social enterprises to scale?

**UNIT III: Form of organization, newer business models - Social Entrepreneurs****(10 hours)**

Profit and non-profit Proprietorships – partnership - company -Non-Governmental organisation - Society – Trust and Company (sec. 25) registration - Factors determining selection of forms of registration . Business model : Types - The market intermediary model, The employment model, The fee-for-service -model, The low-income client model, The cooperative model, The market linkage model, The service subsidization model, The organization support model

**UNIT IV: Funding Social Entrepreneurship - Capital/Funding/Financing****(10 hours)**

What is a social impact investor? How do they differ from venture philanthropists and how are both different from traditional venture capital and market investors? What kinds of investments do social impact investors make? Approximately how much money is available to invest though social impact investment pooled funds

worldwide? Where do most social enterprises get financing for start-up, establishment, growth and expansion? How do they measure ROI? Do they provide an exit strategy for investors? What pressures are/may be impacting the investment market that may make getting funding for a socially responsible company easier than for one that is not?

**UNIT V: Successful Social Entrepreneurship Initiatives (8 hours)**

Study of successful models like Grameen Bank – Aravind Eye Care System’s – LEDeG – TERI – PasumaiPayanam, Siruthuli – SEWA – Amul – Evidence from OASiS, Case Study on SELCO, case study on Annapurna – Goonj

**SUGGESTED READINGS:**

1. Bornstein, Davis (2016), Social Entrepreneurship (What Everyone Needs To Know®), Oxford University Press, New Delhi.
2. Rama Krishna Reddy Kummitha(2016), Social Entrepreneurship: Working towards Greater Inclusiveness, 1st edition, SAGE Publications India Private Limited, New Delhi.
3. David Bornstein (2007),How to Change the World: Social Entrepreneurs and the Power of New Ideas, 2nd edition, OUP, USA.
4. Peter C. Brinckerhoff (2000), Social Entrepreneurship: The Art of Mission-Based Venture Development (Wiley Nonprofit Law, Finance and Management Series), 1st edition, John Wiley & Sons Sally Osberg, Arianna Huffington Roger L. Martin (2015), Getting Beyond Better: How Social Entrepreneurship Works, Harvard Business School Publishing
5. Dr Christine A. Hemingway (2014), Corporate Social Entrepreneurship: Integrity Within (Business, Value Creation, and Society), Cambridge University Press.
6. Jason Haber(2016), The Business of Good: Social Entrepreneurship and the New Bottom Line, Entrepreneur Press
7. Muhammad Yunus (2011),Building Social Business, Perseus Books Group
8. Takashi Iba, Eri Shimomukai, Sumire Nakamura (2015), Change Making Patterns: A Pattern Language for Fostering Social Entrepreneurship, Lulu.com

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100**

**End Semester Exam: 3 Hours**

### **COURSE OBJECTIVE**

1. To explain how financing for entrepreneurship is done.
2. To guide students in project planning and appraisal
3. To explain the various sources of finance
4. To analyse the concepts of Venture Capital
5. To understand the evaluation of leasing proposal
6. To guide students in preparing financial plan

### **COURSE OUTCOMES:**

**At the end of this course, Students will be able to**

<b>Cos</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Assess the role and the purpose of business finance and the influences of the economic environment on entrepreneurship.	Analyse
CO2	Apply finance theories, financial management tools and techniques available to entrepreneurs to forecast revenues and costs and integrate financial statements to create a new venture business plan.	Apply
CO3	Analyse and evaluate the different sources of finance available to new ventures, estimate the market value of the new venture using cash flows and other valuation methods and assess exit strategies available to entrepreneurs.	Evaluate
CO4	Analyse the concepts of Venture Capital	Analyse
CO5	Evaluate an entrepreneurial perspective on management	Analyse
CO6	Identify the sources of finance for new ventures	Apply

### **Mapping with Program outcome:**

<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1	S									
CO2	M									
CO3							M			
CO4					M					
CO5					M					
CO6				M						

**S-Strong; M-Medium; L-Low**

## **UNIT I** **(10 hours)**

Project planning and Project Appraisal: Concepts Capital Expenditures - Importance and difficulties - Phases of Capital budgeting Levels of Capital budgeting - Estimation of Project Cash flows -Expenditures - Time value of money. Payback period - NPV of inflows - IRR concepts -Cost of acquiring capital - Planning of portfolio. Risk Analysis - Economic Risk -Industry Risk - Company Risk - Financial Risk.

## **UNIT II** **(10 hours)**

Sources of Finance: Various sources of Finance available: Long term sources -Equity Shares, Preference Shares and debentures- Kinds Private Placements- IPO-SEBI-FDI- Institutional Finance - Banks - IDBI, IFCI, IIBI, ICICI, SIDBI, SFC's in India - Merchant Banks in India - NBFC's in India - their way of financing in India for small and medium business.

## **UNIT III** **(8 hours)**

Short Term Sources: Short term sources: Short term sources - banks and financial Institutions that give short term finance - Bills Discounting - Factoring - Working Capital - Concepts - Importance -Cash Management - Inventory Management - Receivables Management - Sources of Working Capital.

## **UNIT IV** **(10 hours)**

Venture Capital, Hire Purchase And Leasing: Venture capital - Meaning - origin - Importance - Venture capital in India - Benefits. Hire Purchase - Concept - Evaluation of Hire Purchase Proposals - Leasing - Overview -Tax aspects - Lease Accounting - Evaluation of Leasing Proposals.

## **UNIT V** **(10 hours)**

Preparing the Financing Plan General considerations-Construction Financing- Long term financing- Withholding Tax Considerations- Estimating the Borrowing capacity of a project- Loan repayment Parameters- Borrowing Capacity-, Assuming full Draw down Immediately prior to project Completion & Periodic Loan Draw downs-applications to Hypothetical High Speed rail Project.

### **SUGGESTED READINGS:**

1. Projects - Planning, Analysis, Selection, Implementation and Review - Prasanna Chandra. (Tata McGraw - Hill Publishing Corporation Limited, New Delhi).
2. Indian Financial Systems - M. Y. Khan. (Tata McGraw - Hill Publishing Corporation Limited, New Delhi).
3. Financial Institution & Markets - L. M. Bhole. (Tata McGraw - Hill Publishing Corporation Limited, New Delhi).
4. Financial Markets - Gordon & Natarajan. (BPB Publications).
5. Investment Management - V. K. Blialla. (S. Chand & Company Publishers Ltd.,)
6. Project Financing- Asset based Financial Engineering- John D Finnerty-John Wiley & Sons Inc, New York

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100**

**End Semester Exam: 3 Hours**

### **COURSE OBJECTIVE**

1. Understand innovation and creativity management from the perspective of obtaining a sustainable competitive advantage and integrating innovation into the business strategy
2. Acquire skills in idea generation, target markets and the “value proposition”
3. Gain confidence in problem solving with innovation and creativity at the core
4. Guide students in career exploration and self-discovery, while developing a personal brand
5. Increase confidence as an entrepreneurial leader
6. Gain an understanding of tools and methods to stimulate creativity

### **COURSE OUTCOMES:**

**At the end of this course, Students will be able to**

<b>COS</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand building blocks of innovation	Apply
CO2	Be familiar with processes and methods of creative problem solving: observation, definition, representation, ideation, evaluation and decision making	Apply
CO3	Enhance their creative and innovative thinking skills	Create
CO4	Construct the techniques for generating ideas creatively and applying the same	Apply
CO5	Practice and value teaming, communication, and diversity	Understand
CO6	Understand risk taking, paradigm shift, and paradigm paralysis	Analyse

### **Mapping with Program outcome:**

<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1	S									
CO2	M									
CO3							M			
CO4					M					
CO5					M					
CO					M					

**S-Strong; M-Medium; L-Low**



**UNIT I****(8 hours)**

Dynamics of Business Environment: India and Global - Industry 4.0 - Growth of Knowledge Economy - Ecological changes influencing business - Potential at the Bottom of the Pyramid

**UNIT II****(10 hours)**

Innovation and creativity- meaning, Types of innovations, features, and need. Creativity: need and significance Latest innovations in manufacturing and service sectors. Creativity in Innovation - Creativity - meaning, Creativity Process - Components of creative performance - Types of creativity and Techniques of creative problem solving - Design Thinking: Solution based approach to problem solving

**UNIT III****(10 hours)**

Innovation in Entrepreneurship: Innovation: Meaning and significance of innovation - Types of innovation - Innovation Diffusion theory - Innovation in Organizations - Drivers of Innovation - Bottom up and Top down Innovation - Horizontal versus vertical innovation

**UNIT IV****(10 hours)**

Dimension of Innovations: Innovation Eco-system in India and in select few countries - Social Innovation - Grassroots Innovation - Frugal Innovation- Case studies in India and abroad - Global Innovation: Global Innovation Index framework, GII (Case studies of Indian and global organizations)

**UNIT V****(10 hours)**

Innovation and Knowledge Tacit and explicit knowledge - Knowledge as a public good National Innovation System. Regional Innovation System. Centre of Innovation, Incubation and Entrepreneurship- An expert Interview, Entrepreneurship: Role of stimulating creativity, Creative teams and managerial responsibilities, Innovation and entrepreneurship: Creativity and Innovations in Start Ups.

**SUGGESTED READINGS:**

1. Making Breakthrough Innovations Happen, PorusMunshi, Marico Innovation Foundation
2. Frugal Innovation, Navi Radjou and JaideepPrabhu, Hachette India
3. Jugaad Innovation, Navi Radjou and JaideepPrabhu, Random House India
4. Design thinking : new product development essentials from the PDMA by Luchs Michael G.
5. Managing Creativity & Innovation By: Harvard Business School Press.
6. Fortune at the bottom of the pyramid,2005 By: Prahalad C K.

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept family business, managing family business and formulation of succession planning.
2. To comprehend on the importance of family culture and its uniqueness in fostering generation entrepreneurship.
3. To understand effective governance of the shareholder and firm relationship
4. To understand the pitfalls to avoid in estate and ownership transfer planning
5. To know the lifecycle stages influencing family business strategy
6. To Measure the performance of family firms

**COURSE OUTCOMES:****Learners should be able to**

CO's	COURSE OUTCOME	BLOOM'S LEVEL
CO1	Articulate the concept family business, managing family business and formulation of succession planning.	Understand
CO2	Acquire the importance of family culture and its uniqueness in fostering generation entrepreneurship.	Apply
CO3	Construct behavior and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analyzing, planning and team work	Create
CO4	Describe the measuring performance of family firms	Understand
CO5	Characterize Strategic Planning and the family business	Understand
CO6	Identify the intergenerational growth in entrepreneurial families	Remember

**Mapping with Program outcome:**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2			M							
CO3	M									
CO4				M						
CO5	M									
CO6			M							

**UNIT I Theories on Family Business****(8 hours)**

Nature, Importance and Uniqueness of Family Business – Systems Theory Perspective – Agency Theory Perspective – Strategic Perspective: Competitive Advantage (Resource Based View) – The Stewardship Perspective.

**UNIT II Family Culture****(10 hours)**

Family Culture – Zero sum dynamics and family culture – Family systems perspective – role Family Genograms – Family Emotional Intelligence – ECI-U Model – Family Business interaction factor – benefits of family meetings – unity and continuity – family employment policy – Conflict management.

**UNIT III Ownership in Family Business****(10 hours)**

Enterprise ownership – shareholder priorities - effective governance of the shareholder– firm relationship – Role of Board - role of shareholder meetings, family meetings, and meetings of the family council – Ownership structure – Family business consultants and non-family managers – Board’s role in adaptation over the generations.

**UNIT IV Succession Planning****(10 hours)**

Succession planning – profile of successful successors - rewards and challenges for latter-generation family members – desirable next-generation attributes – crafting the next generation career plan – Vision plan – sibling and cousin teams – Handling disagreements – CEO exit styles and transfer of power – role types of the CEO spouse and the transfer of power - Estate Planning – Trust – pitfalls to avoid in estate and ownership transfer planning - Measuring performance of family firms

**UNIT V Strategic Planning and The Family Business****(10 hours)**

Strategic Planning and the family business – Zero-sum family dynamic – Sources of Value creation - the lifecycle stages influencing family business strategy - Culture – Changing the culture – Three states of evolution – OD approach to change – Business

Rejuvenation matrix – Intrapreneurship: intergenerational growth in entrepreneurial families – continuing the spirit of enterprise: lessons from successful family businesses

**SUGGESTED READINGS:**

1. Poza. Ernesto J (2015), Family Business, 4th edition, Cengage Learning.
2. Peter Leach(2007), Family Businesses: The Essentials, Profile Books
3. Girish Kuber, Vikrant Pande(2019), The Tatas: How a Family Built a Business and a Nation, 1st edition, HarperBusiness
4. Craig E. Aronoff PhD, John L. Ward PhD(2011), Family Business Governance: Maximizing Family and Business Potential, Palgrave Macmillan
5. Craig E. Aronoff PhD , Joseph H. Astrachan PhD, John L. Ward PhD(2010), Developing Family Business Policies: Your Guide to the Future, Palgrave Macmillan

**23MBAPL303A PRINCIPLES OF LOGISTICS AND SUPPLY CHAIN  
MANAGEMENT**

4H - 3C

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100**

**End Semester Exam: 3 Hours**

**COURSE OBJECTIVES:**

**To make the students**

1. To understand the performances of each individual driver are monitored.
2. An understanding of the primary differences between logistics and supply chain management
3. An understanding of the individual processes of supply chain management and their interrelationships within individual companies and across the supply chain
4. An understanding of the management components of supply chain management
5. An understanding of the tools and techniques useful in implementing supply chain management
6. Knowledge about the professional opportunities in supply chain management.

**COURSE OUTCOMES:**

**Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Learn about the planning of logistics and supply chain management.	Apply
CO2	Evaluate performance of logistics	Evaluating
CO3	Organize the implementation of lean logistics	Apply
CO4	Design the mapping for supply chain management	Creating
CO5	Evaluate the performance of supply chain management	Evaluating
CO6	Measure performance of supply chain management	Evaluating

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	S									
CO2	S									
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

**UNIT I****(8 hours)**

Principles and strategies of Logistics and supply chain management, Logistics and supply chain operations planning, Approaches to develop metrics-Logistics management and Supply Chain management - Definition, Evolution, Importance. The concepts of logistics and Supply Chain Management.

**UNIT II****(10 hours)**

Basics of Transportation, Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport-Types of Ships. Logistical and supply chain measurement, Measurements in integration context

**UNIT III****(10 hours)**

Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage- Overseas Shipment- Inland-Transportation- Product content Protection, Packaging

Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging - Shrink packaging – Identification codes, bar codes, and electronic data interchange (EDI)- Universal Product Code- GS1 Standards-package labels-Symbols used on packages and labels.

**UNIT IV****(10 hours)**

Logistics / supply chain control, Characteristics of an ideal measurement system Mapping for supply chain management, Lean thinking and supply chain management

**UNIT V****(10 hours)**

Special Aspects of Export logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets - Import Logistics: Documents Collection – Valuing - Bonded Warehousing - Customs Formalities - Clearing, Distribution to Units - Measurement of supply chain performance.

**SUGGESTED READINGS:**

1. Bowersox & Closs, Logistical Management, McGraw-Hill Companies, 2017.
2. Martin Christopher, Logistics & Supply chain management, 2016.
3. Burt, Dobbler, Starling, World Class Supply Management, TMH.
4. Donald J Bowersox, David J Closs, Logistical Management, TMH
5. Pierre David, "International Logistics", Biztantra.
6. Sunil Chopra, Peter Meindl, Supply Chain Management ,Pearson Education, India.
7. Mohanty, Essentials of Supply Chain Management, Jaico 2018. Publishing House, 2018

**COURSE OBJECTIVES:****To make the students**

1. The program gives a foundation to participants who seek a career in International markets.
2. To focus on International trade barriers and risk management.
3. Understand the Export & import Management.
4. Understand the documentation involved in export and import management.
5. To familiarize students with the process of international customs clearance operations.
6. To form a base of policy framework in International Business with special emphasis on Indian Customs.

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Programs will help to understand concept of foreign exchange.	Understanding
CO2	Students would be aware of the documentation procedures for Export Import.	Remembering
CO3	Students would have appreciation of the role of export/import process in the globalised world market.	Understanding
CO4	Students would have a broad overview of the export-import process and its related literature and research streams.	Understanding
CO5	Student shall also develop network thinking in regards to export.	Applying
CO6	To understand the effective and efficient management of exports/imports.	Understanding

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	S									
CO2	S									
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

**Unit-I (10 hours)**

Export & Import – Introduction, Definitions - Evolution of Export & Import. Foreign Trade—Institutional Framework and Basics. Multinational Organizations & Structure, International Business Scenario.

**Unit-II (8 hours)**

Export-Import—Documentation and Steps, Export-Import Strategies and Practice, Export Marketing, Business Risk Management and Coverage, Export Incentive Schemes.

**Unit – III (10 hours)**

Logistics and Characteristics of Modes of Transportation, Characteristics of Shipping Industry, World Shipping, Containerization and Leasing Practices.

**Unit-IV (10 hours)**

Export Procedures and Documents, Customs Clearance of Import and Export Cargo, Methods and Instruments of Payment and Pricing Inco terms, Methods of Financing Exporters.

**Unit-V (10 hours)**

Information Technology and International Business, Export & Import with European continent, Africa, Middle East Countries, Asean Countries, Australia and New Zealand, China and Japan.

**SUGGESTED BOOKS**

1. Justin Paul & Rajiv Aserkar(2010). Export Import Management : Oxford University Press
2. Rama Gopal C.(2007). Export Import Procedures - Documentation And Logistics :New Age International
3. Usha Kiran Rai.(2007) Export-Import and Logistics Management : PHI Learning Pvt. Ltd.



Instruction Hours / week: L: 4 T:0 P:0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

### COURSE OBJECTIVES:

To make the students

1. The program gives a foundation to participants who seek a career in International markets.
2. To focus on International trade barriers and risk management.
3. Understand the Export & import Management.
4. Understand the documentation involved in export and import management.
5. To familiarize students with the process of international customs clearance operations.
6. To form a base of policy framework in International Business with special emphasis on Indian Customs.

### COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Analytical Understanding of Various Modes of Transportations	Understanding
CO2	Knowledge of Air Cargo Management	Remembering
CO3	Analytical Understanding of Processes at Air Cargo operations	Understanding
CO4	Competency for Shipment Planning	Understanding
CO5	Knowledge of Air Freight and Shipments	Remembering
CO6	Gain an overview about the aspects of air cargo operations	Remembering

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M	S								
CO2	S									
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

S-Strong; M-Medium; L-Low

**UNIT 1****(8 hours)**

Transportation and logic: significance of transportation logistics: utility created by transportation in logistics transportation as a means of conquering time and space features of inbound, outbound, local and medium, long and continental transportation features of logistics Transportation.

**UNIT 2****(10 hours)**

Railway and Logistics Contours: Features and facilities offered by Railways Factors influencing growth in Rail Logistics- Suitability for different Cargo and distance Ranges segments – Innovative.

**UNIT 3****(10 hours)**

Roadways and Logistics Contours: Roadways as a primary mode and complementary mode of transportation in Logistics – Features, Facilities and suitability- Innovations in road ways to make it Logistics-friendly- Factors influencing choice- Factors influencing growth in Road Logistics- Suitability for different Cargo and distance Ranges segments –Innovative schemes/facilities to popularize rail logistics in India- Share of Railways in Cargo movement in India and world-wide. Role of National Highways and the Toll highways- Outsourcing Fleets from others-Technology, Cost, Speed, Security and Dynamics- Competition with other Modes.

**UNIT 4****(10 hours)**

Air Transportation in logistics : Significance of air transportation in logistics: utility created by air transportation in logistics-Air transportation as a means of conquering time and space features and facilities offered by air cargo ways factors influencing growth in air logistics air suitability for different cargo- Innovative schemes facilities to popularize air cargo logistics in India –share cargo movement in India and worldwide Conventions covering the movement of dangerous goods by air.

**UNIT 5****(10 hours)**

Coordination among different segments: Concept, needs and areas of coordination among different modes coordination among supply chain Partners- energy product prices and logistics environments and logistics problem and prospects in interstate logistics by road -role of Trucker's bodies in road rail air cargo movement. Unit 6 Dynamic Component for Continuous Internal Assessment only: Contemporary Developments to the course during the semester concerned.

## **SUGGESTED BOOKS**

1. Chi Chu, C. Leung, Van Hui & Cheung. (2004). 4th Party Cyber Logistics for Air Cargo: Springer US.
2. Coyle, Bardi & Novack Transportation. (2010). A Supply Chain Perspective: South-Western College.
3. MB. Stroh. (2006). A Practical Guide to Transportation and Logistics: Logistics Network Inc.
4. MOSWest. (2005). Transportation and Cargo Security: Prentice Hall.
5. Ritter, Barrett and Wilson, (2006). Securing Global Transportation Networks: McGraw Hill.

**COURSE OBJECTIVES:****To make the students**

1. To provide advance understanding about the Procurement Management and Sourcing
2. To help the students understand the processes in Effective Procurements & Sourcing.
3. It provides guidance on using the latest technology, reducing inventory, people Management, location and design and manage uncertainty risks of customer markets
4. To define the right structure of the supply network and inventory control and warehouse Management system
5. To understand the basic concepts and various functions of Warehouse.
6. To impart knowledge on various types of warehouses and their advantages.

**COURSE OUTCOMES:****Learners should be able to**

Cos	Course Outcomes	Blooms Level
CO1	Understanding the importance and components of Procurements for SCM.	Understanding
CO2	Application of Processes of Procurements for Effective SCM and Logistics	Creating
CO3	Recognize the principles of warehouse or stores location and layout whilst applying proper stock flow, rotation and recording.	Remembering
CO4	Appreciate the role of procurement plays in an organization	Understanding
CO5	The student would be able to understand the various functions of Warehouse and also about its various types and their advantages.	Understanding
CO6	The student would be able to measure the metrics of warehouse operations.	Evaluating

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M	S								
CO2	M	S								
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

**UNIT-1****(8 hours)**

Procurement- Definition-Types of Procurement-Benefits and Risk of Outsourcing, E-Procurement, Framework of E-Procurement. Objectives of Procurement System, Principles of Procurement, History of procurement function: from administrative to strategic, value added role, Procurement Cycle, Procurement Planning

**UNIT- II****(10 hours)**

Framework of Procurement Management (8 Hours) Introduction to Sourcing, Sourcing v/s Procurement, Purchasing: Purchasing Cycle, 8 R's of Purchasing, Role of a Purchasing Manager, Risks associated with purchasing process and its mitigation, Placing Orders, Budgets and Expense Allocation, Establishing Concept and applications of Make or Buy Decision, Types and Methods of Sourcing in Retail, Centralized vs Decentralized Approaches, Single Sourcing vs Multiple Sourcing, Day-to-Day vs Long Term Sourcing.

**UNIT-III****(10 hours)**

Storage Management system – Storage Inventory Management –Functions of storage & Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system- Warehouse Management Systems (WMS) - choosing a WMS-the process implementation-cloud computing- Warehouse layout-Data collection-space calculation-aisle width- finding additional space.

**UNIT-IV****(10 hours)**

Storage and Warehousing Information system -Storage Equipment: storage option - shuttle technology - very high bay warehouse -warehouse handling equipment - vertical and horizontal movement -Automated Storage/ Retrieval System (AS/RS)-specialized equipment-Technical advancements- Resourcing a warehouse- warehouse costs-Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing

## **UNIT – V**

**(10 hours)**

Warehouse Types: Own Warehouses- Hired Warehouses- Private Warehouses- Public Warehouses- Government Warehouses- Bonded Warehouses- Co-operative Warehouses- Distribution Warehouses- Fulfillment/ Consolidation Warehouses Providing Value Added Services- Cross Docking and Trans-loading Warehouses- Break Bulk Warehouses- Storage Warehouses- Refrigerated Warehouses Characteristics of ideal warehouses- Warehouse Layout- Principles and Facilities Types.

### **SUGGESTED BOOKS**

1. Parasram.(2010). In Coterms Exports Coartind and Pricing with Practical Guide to in Co-Terms, (1st ed.): Jain Book, (6th ed.)
2. Gwynne Richards (2014) Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill.
3. Muller, M. (2011). Essentials of Inventory Management. (2<sup>nd</sup> ed.), American Management Association.

**COURSE OBJECTIVES:****To make the students**

1. To learn Port structure, functions and operations.
2. To understand the Airport management for logistics.
3. The course analyses how ports are organized, managed and planned, and how ports interface with the logistics chain.
4. The course provides knowledge and analysis of the principles and evolution of container terminal management, port indicators and supply chain management
5. To ensure a thorough knowledge and understanding of port and terminal management.
6. To develop relevant communication skills.

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Students gain the knowledge of Port and Airport Management for Logistics.	Remembering
CO2	Identify the interface of ports with logistics and the position of ports in the supply chain.	Applying
CO3	Analyze port performance and relevant quality management systems.	Analyzing
CO4	Analyze port charges and port competition related issues.	Analyzing
CO5	Integrate port planning and development policies.	Evaluating
CO6	Measuring and evaluating performance of cargo safety and logistics operations	Evaluating

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M	S								
CO2	M	S								
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

### UNIT I

**(10 hours)**

Port Structure and Functions: Definition - Types and Layout of the Ports – Organizational structure-Fundamental observations. Main functions and features of ports: Infrastructure and connectivity Administrative functions- Operational functions. Main services: Services and facilities for ships -Administrative formalities - Cargo transfer - Services and facilities for cargo - Additional “added value” service- Ports and their stakeholders like PHO, Immigration, Ship agents, Stevedores, CHA.

### UNIT II

**(10 hours)**

Port Operations: Berths and Terminals - Berth Facilities and Equipment-ship Operation – Pre shipment planning, the stowage plan and on-board stowage - cargo positioning and stowage on the terminal – Developments in cargo/container handling and terminal operation - Safety of cargo operations - Cargo security: Measuring and evaluating performance and productivity.

### UNIT III

**(8 hours)**

Port Development: Phases of port development - Growth in world trade - Changes in growth Development in terminal operation. Shipping technology and port: Ship knowledge Ship development and port development - Port time and ship speed - Other technical development Affecting port.

### UNIT IV

**(10 hours)**

Port Administration Ownership and Management Port ownership structure- Types of port ownership and administration – Organizations concerning ports - Boards governing the ports - Port management development Rise and fall of Ports - information technology in ports. Port ownership in Indian context: Acts governing the Ports in India – Port ownership structure in India. Port reform: Framework for port reform - Evolution of ports in a competitive world Alternative Port Management Structure and Ownership Models.



## **UNIT V**

**(10 hours)**

Air Transport: Introduction to Air Transport – Air Freight – IATA – Cargo Handling at Goods at Air Port – Information Management of Air Cargo – System and Modules – Distribution of Goods.

### **SUGGESTED BOOKS**

1. Patrick M.Alderton. 2008, Port Management and Operations. Information Law Category, U.K.
2. World Bank. 2007, Port Reform Tool Kit. World Bank, Washington.
1. Maria G.Burns. 2014., Port Management and Operations. CRS Press, U.K.
2. Alan E.Branch. 2008, Elements of Shipping. Chapman and Hall, Fairplay Publications, U.K.
3. De Monie. 1989., Measuring and Evaluating Port Performance and Productivity, Unctad, New York.

**COURSE OBJECTIVES:****To make the students**

1. To realize the potential of tourism industry in India;
2. To understand the various elements of Tourism Management;
3. To familiarize with the Tourism policies in the national and international context.
4. To apply the knowledge of tourism principles, policies and practices lifelong.
5. To analyse the present trends in Domestic and Global tourism
6. To understand the Code of conduct for safe and Sustainable Tourism for India.

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Comprehend on the potential of tourism industry in India	Apply
CO2	Understand the various elements of Tourism Management	Apply
CO3	Familiarize with the Tourism policies in the national and international context	Understand
CO4	Executing the knowledge of tourism principles, policies and practices lifelong	Apply
CO5	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Understand Overview of Five Year Plans	Apply

**Mapping with Programme Outcomes**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3							M			
CO4									L	M
CO5				M	M					
CO6	M									

**S-Strong; M-Medium; L-Low**

**UNIT- I Tourism; an overview: (10 hours)**

Elements, Nature and Characteristics - Typology of Tourism – Classification of Tourists - Tourism network - Interdisciplinary approaches to tourism - Historical Development of Tourism - Major motivations and deterrents to travel.

**UNIT-II Tourism Industry; (10 hours)**

Structure and Components: Attractions – Accommodation – Activities – Transportation - F&B – Shopping - Entertainment - Infrastructure and Hospitality – Emerging areas of tourism - Rural, Eco, Medical, MICE, Literary, Indigenous, Wellness, Film, Golf, etc., – Ideals of Responsible Tourism - Alternate Tourism - Case Studies on International Tourism.

**UNIT-III Tourism Impacts (10 hours)**

Tourism Area Life Cycle (TALC) - Doxey's Index - Demonstration Effect – Push and Pull Theory - Tourism System - Mathieson and Wall Model & Leiper's Model - Stanley Plog's Model of Destination Preferences - Demand and Supply in tourism - Tourism regulations - Present trends in Domestic and Global tourism – MNC's in Tourism Industry.

**UNIT-IV Tourism Organizations: (8 hours)**

Role and Functions of World Tourism Organization (WTO), Pacific Asia Travel Association(PATA) , World Tourism &Travel Council (WTTC) - Ministry of Tourism, Govt. of India, ITDC, Department of Tourism, FHRAI, IHA, IATA, TAAI, IATO.

**UNIT-V Overview of Five Year Plans (10 hours)**

Overview of Five Year Plans with special reference to Eleventh Five Year Plan for Tourism Development and Promotion, National Action Plan, National Tourism Policy - Code of conduct for safe and Sustainable Tourism for India.

**SUGGESTED READINGS:**

1. Charles R. Goeldner& Brent Ritchie, J.R. (2016), Tourism, Principles, Practices, Philosophies, 12<sup>th</sup> edition, John Wiley and Sons.
2. SunetraRoday, Archana Biwal, Vandana Joshi(2009), Tourism: Operations and Management, Oxford University Press
3. Sampad Kumar Swain, Jitendra Mohan Mishra (2011), Tourism: Principles and Practices, Oxford University Press
4. Pran Nath Seth & Sushma Seth Bhat (2012), An Introduction to Travel and Tourism, Sterling Publishers, New Delhi.
5. Venu Vasudevan, Vijayakumar B., Saroop Roy B.R.(2017), An Introduction to the Business of Tourism, 1st edition, Sage Publications India Private Limited

**COURSE OBJECTIVES:****To make the students**

1. To understand the vast Tourist resources of India;
2. To conceptualize a tour itinerary based on variety of themes
3. To identify and understand the features of emerging tourist destinations all over the world
4. To apply the knowledge of tourism resources, importance of tourist destination lifelong.
5. To understand the Emerging Manmade resources in tourism
6. To know the Major tourism circuits of India

**COURSE OUTCOMES:**

Cos	Course Outcomes	Blooms Level
CO1	Understand the vast Tourist resources of India	Apply
CO2	Implementing a tour itinerary based on variety of themes	Apply
CO3	Identify and understand the features of emerging tourist destinations all over the world	Understand
CO4	Apply the knowledge of tourism resources, importance of tourist destination lifelong	Apply
CO5	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Understand Emerging Tourism Destinations of India	Apply

**UNIT - I Tourism products:****(10 hours)**

Definition, Types and unique features - Tourism resources of India - Natural, Socio cultural, Diversities in Landform & Landscape - Outstanding Geographical features - Climate, Flora & Fauna.

**UNIT – II Natural resources:****(10 hours)**

Wildlife sanctuaries - National parks - Biosphere reserves - Mountain Tourist Resources and Hill stations – Islands – Beaches - Caves & Deserts of India.

**UNIT – III Major tourism circuits of India:****(8 hours)**

Inter State and Intra-State Circuits - Religious Circuits - Heritage Circuits - Wildlife Circuits. Cases of select destinations - Kerala, Rajasthan & Goa.

**UNIT – IV Manmade resources:****(10 hours)**

Adventure sports - Commercial attractions - Amusement Parks – Gaming - Shopping - Live Entertainments - Supplementary accommodation - House boats - Tree houses - Home stays - Tourism by rail - Palace on wheels - Deccan Odyssey & Golden chariot.

**UNIT - V Emerging Tourism Destinations of India:****(10 hours)**

Ecotourism - Rural Tourism - Golf Tourism - Wine Tourism - Camping Tourism - Medical Tourism - MICE Tourism - Pilgrimage Tourism.

**SUGGESTED READINGS:**

1. Robinet Jacob and Sindu Joseph (2008), Indian Tourism Products, 1st edition, Abhijeet Publications, Delhi.
2. S.P. Gupta and Lal Krishna (2002), Cultural Tourism in India : Museum of Monuments and Arts, 1st edition, D.K. Print World Ltd, New Delhi.
3. Cheryl M. Hargrove(2017), Cultural Heritage Tourism: Five Steps for Success and Sustainability (American Association for State & Local History), Rowman & Littlefield Publishers
4. Manhas P.S (2012), Sustainable and Responsible Tourism: Trends, Practices and Cases, Prentice Hall India Learning Private Limited, New Delhi
5. P. C. Sinha (2002), Tourism Transport And Travel Management, Anmol Publisher

**COURSE OBJECTIVES:****To make the students**

1. To understand the dynamics of recreation products and their significance for tourism industry;
2. To familiarize with the theoretical and practical issues of recreation management;
3. To comprehend on the marketing trends in recreation.
4. To apply the understanding of recreation products, recreation management and marketing recreation lifelong
5. To understand the Demand and Supply for Recreation and Tourism
6. To know Tourism and recreation planning and policy

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Understand the dynamics of recreation products and their significance for tourism industry	Apply
CO2	Comprehend with the theoretical and practical issues of recreation management	Apply
CO3	Understand the marketing trends in recreation	Understand
CO4	Apply the understanding of recreation products, recreation management and marketing recreation lifelong	Apply
CO5	<i>Display</i> behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Acquire knowledge in Environmental perspectives on coastal recreation and tourism	Apply

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3				M			M			
CO4								M	L	M
CO5				M	M					
CO6							M			

**S-Strong; M-Medium; L-Low**

### **UNIT-I Recreation: (10 hours)**

An overview - Range of Recreation Businesses: Recreation Vehicles, parks, adventure travel, winter sports, historic sites, camping, resorts, motor coach operators, enthusiast groups, recreation product manufacturers - Development of the geography of tourism and recreation - Recreation Theories - Recreation and leisure services.

### **UNIT-II Recreational Resources (10 hours)**

The Demand and Supply for Recreation and Tourism - Recreational demand - Recreational and Tourist Motivation - Barriers to Recreation - Gender and Social Constraints.

### **UNIT-III Recreation Management: (10 hours)**

Impact of recreation on tourism - Recreation Resource Management - Tourism and recreation planning and policy - Urban and rural recreation - Relationships between leisure, recreation and tourism.

### **UNIT-IV Marketing of Recreation: (8 hours)**

Marketing Recreation services and facilities- Customers of recreational products - Marketing plan- Marketing Mix for recreation- Case studies.

### **UNIT- V Trends in the recreation industry (10 hours)**

Tourism recreation and climate change - Tourists and recreational demand for wilderness, National Parks and natural areas - Supply of the wilderness and outdoor recreation experience - Environmental perspectives on coastal recreation and tourism.

### **SUGGESTED READINGS:**

1. George Torkildsen and Peter Taylor (2010), Torkildsen's Sport and Leisure Management, 6th edition, Routledge
2. Jay Shivers, Joseph W. Halper(2011), Strategic Recreation Management, 1st

edition, Routledge

3. George Torkildsen (2012), Leisure and Recreation Management, 4th Edition, Routledge
4. C. Michael Hall & Stephen J. Page (2014), The Geography of Tourism and Recreation Environment, Place and Space, 4th Edition, Routledge.
5. William C. Gartner & David W. Lime (2000), Trends in Outdoor, Recreation, Leisure and Tourism, 1st edition, CABI.



**COURSE OBJECTIVES:****To make the students**

1. To know the current trends and practices in the tourism and travel trade sector
2. To understand travel agency, tour operation business and functions of travel agency
3. To know the tour packaging & pricing
4. To assess the role and responsibility of travel trade associations
5. To understand the Wholesale and Retail Travel Agency business
6. To analyse the Changing Scenario of Travel Trade

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Understand the current trends and practices in the tourism and travel trade sector	Apply
CO2	Examining travel agency, tour operation business and functions of travel agency	Apply
CO3	Categorizing the tour packaging & pricing	Understand
CO4	Judging the role and responsibility of travel trade associations	Apply
CO5	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Procure knowledge in Environmental perspectives on coastal recreation and tourism	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3				M			M			
CO4								M	L	M

CO5				M	M					
CO6							M			

### **UNIT-I Travel Trade**

**(10 hours)**

Historical Perspectives - Emergence of Thomas Cook and American Express Company - Types of Tour Operators - Wholesale and Retail Travel Agency business - Linkages and Integration with the Principal Service Providers - the Changing Scenario of Travel Trade.

### **UNIT-II Travel Agency and Tour Operation Business**

**(8 hours)**

Functions of Travel Agency - Setting up a full-fledged Travel Agency - Sources of Income of a travel agency - Diversification of Business - Travel Insurance, Forex, Cargo & MICE – Documentation - IATA Accreditation - Recognition from Government.

### **UNIT-III Itinerary Planning & Development**

**(10 hours)**

Meaning, Importance and Types of Itinerary - Resources and Steps for Itinerary Planning - Do's and Dont's of Itinerary Preparation - Tour Formulation and Designing Process - FITs & Group Tour Planning and Components - Special Interest Tours (SITs).

### **UNIT-IV Tour Packaging & Pricing**

**(10 hours)**

Importance of Tour Packaging – Classifications of Tour Packages - Components of Package Tours - Concept of costing - Types of costs - Components of tour cost - Preparation of cost sheet - Tour pricing - Calculation of tour price - Pricing strategies - Tour packages of Thomas Cook, SOTC, Cox & Kings and TCI.

### **UNIT-V Role and Responsibility of Travel Trade Associations:**

**(10 hours)**

Objectives - Roles and functions of UFTAA, PATA, ASTA, TAAI, IATO, ATAOL, ADTOI, IAAI, FIYTO, TAFI.

### **SUGGESTED READINGS:**

1. J. Christopher Holloway and Ms Claire Humphreys (2016), The Business of Tourism, 10th edition, Pearson Education.
2. Goeldner, R & Ritchie. B (2016), Tourism, Principles, Practices and Philosophies, 12th edition, John Wiley & Sons.
3. Chand, M. (2007), Travel Agency Management: An Introductory Text, Anmol Publications Pvt. Ltd.
4. Negi. J (2008), Travel Agency Operations: Concepts and Principles, Kanishka Publishers.
5. Sunetra Roday, Archana Biwal, Vandana Joshi . (2009), Tourism Operations and Management, Oxford University Press.

**COURSE OBJECTIVES:****To make the students**

1. To comprehend the theories and practices of ecotourism;
2. To be familiar with the model of ecotourism projects; and significance of ecotourism;
3. To identify issues and challenges of conservation of ecotourism
4. To understand the role of the regulatory bodies and society to preserve ecotourism
5. To gain knowledge in Sustainable Ecotourism and Resource Management
6. To understand the Role of International Ecotourism Society

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Comprehend the theories and practices of ecotourism	Apply
CO2	Familiar with the model of ecotourism projects; and significance of ecotourism	Apply
CO3	Identify issues and challenges of conservation of ecotourism	Understand
CO4	Understand the role of the regulatory bodies and society to preserve ecotourism	Apply
CO5	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO6	Acquire knowledge in Ecotourism Development Agencies	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3				M			M			
CO4								M	L	M
CO5				M	M					
CO6							M			

**UNITI Fundamentals of Ecology****(8 hours)**

Basic Laws & ideas in Ecology- Function and Management of Ecosystem- Biodiversity and its Conservation-Pollution-Ecological Foot Prints - Relationship between Tourism & Ecology.

**UNITII Ecotourism****(10 hours)**

Evolution, Principles, Trends and Functions of Ecotourism - Mass Tourism Vs Ecotourism -Typology of Eco-tourists - Ecotourism Activities & Impacts -Western Views of Ecotourism - Qubec Declaration 2002 - Kyoto Protocol 1997 - Oslo Declaration 2007.

**UNITIII Ecotourism Development****(10 hours)**

Sustainable Ecotourism - Resource Management - Socioeconomic Development - Ecotourism Policies, Planning and Implementation - Eco-friendly Facilities and Amenities - Carrying Capacity - Alternative Tourism -Responsible ecotourism Ecotourism Programming.

**UNITIV Conservation of Ecotourism****(10 hours)**

Protected Area Management through Ecotourism - Stakeholder Engagement - Community Participation - Types of Participation, Issues and Challenges - Ecotourism Projects - Case Studies on Periyar National Park, Thenmala Eco Project, Similipal Ecotourism Project, Sunderban Ecotourism Project, Kaziranga National Park, Run of Kutch, Nandadevi Biosphere Reserve, Corbett National Park, Gulf of Mannar, Kruger National Park, South Africa.

**UNITV Ecotourism Development Agencies****(10 hours)**

Role of the International Ecotourism Society - the UNWTO, UNDP, WWF - Department of Forest and Environment - Government of India, ATREE, equations.

**SUGGESTED READINGS:**

1. Fennel, D. A. (2014), Ecotourism –An Introduction, 3rd edition, Routledge Publication.
2. Ralf Buckley (2008), Environment Impacts of Ecotourism, CABI.
3. Weaver, D. (2001), the Encyclopedia of Ecotourism, CABI Publication.
4. Aluri Jacob Solomon Raju (2007), A Textbook of Ecotourism Ecorestoration and Sustainable Development, 1st edition, New Central Book Agency
5. B. S. Badan H. Bhatt(2006), Ecotourism Commonwealth Publishers
6. Ramesh Chawla (2006), Ecotourism and Development, Sumit Enterprises.

**23MBAPI303A INFRASTRUCTURE PLANNING SCHEDULING AND CONTROL 4H - 3C**

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100**

**End Semester Exam: 3 Hours**

**COURSE OBJECTIVES:**

**Course Objectives**

1. To impart the basic knowledge about the Introduction to infrastructure.
2. To understand the concept of Privatization of infrastructure.
3. To understand the Valuation of Economic and demand risks.
4. To impart the basic knowledge of Risk Management Framework.
5. Know the Sectoral Design & Maintenance of Infrastructure.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the concept of Infrastructure Planning.	Apply
CO2	Identify the Privatization of infrastructure.	Apply
CO3	Assess the Valuation of Economic and demand risks.	Analyse
CO4	Summarize the basic knowledge of Risk Management Framework.	Apply
CO5	Describe the Sectoral Design & Maintenance of Infrastructure.	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	-	-	-	1	-	-	-	3
CO2	3	3	3	-	-	-	-	1	-	-	-	3
CO3	3	3	3	-	-	-	-	1	-	-	-	2
CO4	3	3	3	-	-	-	-	1	-	-	-	2
CO5	3	3	3	-	-	-	-	1	-	-	-	1
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

**UNIT I - INTRODUCTION**

**(10 hours)**

Introduction to infrastructure - Need and importance of infrastructure in India - Overview of power sector - Overview of water supply and sanitation sector-Overview of road, rail, air and port transportation sectors-Overview of telecommunication sector-Overview of rural and urban infrastructure-Introduction to special economic zones-Organizations and players in infrastructure field -Overview of infrastructure project finance.

## **UNIT II - INFRASTRUCTURE PRIVATIZATION (8 hours)**

Privatization of infrastructure in India - Benefits of privatization-Problems with privatizationChallenges in privatization of water supply projects- Challenges in privatization of power sector projects – Challenges in privatization of road transportation projects.

## **UNIT III - RISKS IN INFRASTRUCTURE PROJECTS (10 hours)**

Economic and demand risks, political risks, socio-economic risks and cultural risks in infrastructure projects -Legal and contractual issues in infrastructure projects-Challenges in construction of infrastructure projects.

## **UNIT IV - RISK MANAGEMENT FRAMEWORK (10 hours)**

Planning to mitigate risk-Designing sustainable contracts-Introduction to fair process and negotiation-Negotiation with multiple stakeholders - Sustainable development-Information technology and systems for successful management.

## **UNIT V - DESIGN & MAINTENANCE OF INFRASTRUCTURE (10 hours)**

Innovative design and maintenance of infrastructure facilities- Modeling and life cycle analysis techniques-Capacity building and improving Government's role in implementationIntegrated framework for successful planning and management.

### **SUGGESTED READINGS:**

1. Raina V.K, “Construction Management Practice – The inside Story”, Tata McGraw Hill Publishing Limited, 2005
2. Leslie Feigenbaum, “Construction Scheduling With Primavera Project Planner”, Prentice Hall, 2002
3. W.Ronald Hudson, Ralph Haas, Waheed Uddin, “Infrastructure Management: Integrating, Design, Construction, Maintenance, Rehabilitation and renovation”, McGraw Hill Publisher, 2013
4. Prasanna Chandra, “Projects – Planning, Analysis, Selection, Implementation Review”, Tata McGraw Hill Publishing Company Ltd., New Delhi. 2006. 75
5. Joy P.K., “Total Project Management - The Indian Context”, Macmillan India Ltd., 1992
6. Report on Indian Urban Infrastructure and Services – The High Powered Expert Committee for estimating the Investment Requirements for Urban Infrastructure Services, March 2011
7. Urban Water Development in India 2011 – Published and Distributed by India Infrastructure Research
8. Manual on sewerage and sewage treatment, CPHEEO, Ministry of urban affairs and employment, Govt.of India, New Delhi, 2012
9. Manual of National Highway Authority of India, 1988.

Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

### COURSE OBJECTIVES:

1. To impart the basic knowledge about the Contracts in Construction Industry.
2. To understand the concept of Laws Related to Construction Industry.
3. To understand the Arbitration of Engineering Contracts.
4. To impart the basic knowledge of Negotiation, Mediation and Conciliation.
5. Know the Alternate Dispute Resolution.

### Course Outcomes

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Contracts in Construction Industry.	Understand
CO2	Identify the concept of Laws Related to Construction Industry.	Identify
CO3	Assess the Arbitration of Engineering Contracts.	Assess
CO4	Summarize the basic knowledge of Negotiation, Mediation and Conciliation.	Summarize
CO5	Describe the Alternate Dispute Resolution.	Describe

### Mapping with Programme Outcomes

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
CO1	S	S	S	-	-	-	-	L	-	-	-	S
CO2	S	S	S	-	-	-	-	L	-	-	-	S
CO3	S	S	S	-	-	-	-	L	-	-	-	M
CO4	S	S	S	-	-	-	-	L	-	-	-	M
CO5	S	S	S	-	-	-	-	L	-	-	-	L
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

## UNIT I INTRODUCTION TO CONTRACTS IN CONSTRUCTION INDUSTRY (10 hours)

Brief details of engineering contracts -Definition, types and essentials of contracts and clauses for contracts - Preparation of tender documents and contract documents – Issues related to tendering process- Awarding contract, e-tendering process - Time of performance-Provisions of contract law - Breach of contract - Performance of contracts - Discharge of contract- Indian contract Act 1872 - Extracts and variations in engineering contracts – Risk management in contracts.

**UNIT II LAWS RELATED TO CONSTRUCTION INDUSTRY (8 hours)**

Labor and industrial laws - Payment of wages act, contract labor - Workmen's compensation act - Insurance, industrial dispute act- Role of RERA

**UNIT III ARBITRATION OF ENGINEERING CONTRACTS (10 hours)**

Background of Arbitration in India - Indian Arbitration Act 1937 - UNCITRAL model law. Forms of arbitration - Arbitration agreement - Commencement of arbitral proceedings-Constitution of arbitral tribunal - Institutional procedure of arbitration - Impartiality and independence of arbitrators jurisdiction of arbitral tribunal - Interim measures – Enforcement of awards.

**UNIT IV NEGOTIATION, MEDIATION AND CONCILIATION (10 hours)**

Concepts and purpose - Statutory back ground ADR and mediation rules - Duty of mediator and disclose facts - Power of court in mediation.

**UNIT V ALTERNATE DISPUTE RESOLUTION (10 hours)**

Structure of Indian Judicial - The arbitration and reconciliation ordinance 1996 – Dispute resolution mechanism under the Indian judicial system - Litigation in Indian courts – Case studies.

**SUGGESTED READINGS:**

1. American Arbitration Association, "Construction industry arbitration rules and mediation procedures", 2007
2. Case study of Southern Railway Arbitration Cases [wiki.ircen.gov.in/doku/lib/exe/fetch.php](http://wiki.ircen.gov.in/doku/lib/exe/fetch.php)
3. Collex.K, "Managing Construction Contracts", Reston publishing company, Virginia, 1982
4. Eastern Book Company "Arbitration and Conciliation Act 1996", June 2008
5. International Federation of Consulting Engineers (FIDIC) documents Geneva, 2009 (<http://www.fidic.org>)
6. Gajaria.G.T., "Laws relating to building and Engineer's Contracts", M.M.Tripathi Pvt Ltd., Mumbai, 1985
7. Horgon.M.O and Roulston F.R., "Project Control of Engineering Contracts" E and FN, SPON, Norway, 1988
8. Krishna Sharma, Momota Oinam and Angshuman Kaushik, "Development and Practice of Arbitration in India-Has it evolved as an effective legal Institution", CDDRL, Stanford, 103, Oct 2009
9. Park.W.B., "Construction Bidding for Projects", John Wiley, Norway, 1978
10. Roshan Namavati, "Professional Practice", Anuphai Publications, Lakhani Book Depot, 2013
11. Vasavada.B.J. "Engineering Contracts and Arbitration", March 1996.



Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

1. To impart the basic knowledge about the Project and process.
2. To understand the concept of Project Time Management.
3. To understand the Valuation of Various Categories of Resource Management
4. To impart the basic knowledge of Resource Optimization.
5. Know the Sectoral Emerging Trends in Project Management.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Project and process.	Understand
CO2	Identify the concept of Project Time Management.	Identify
CO3	Identify the Valuation of Various Categories Of Resource Management.	Identify
CO4	Summarize the basic knowledge of Resource Optimization.	Summarize
CO5	Analyse the Sectoral Emerging Trends in Project Management.	Analyse

**Mapping with Programme Outcomes**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
CO1	3	3	3	-	-	-	-	1	-	-	-	3
CO2	3	3	3	-	-	-	-	1	-	-	-	3
CO3	3	3	3	-	-	-	-	1	-	-	-	2
CO4	3	3	3	-	-	-	-	1	-	-	-	2
CO5	3	3	3	-	-	-	-	1	-	-	-	1
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

## **UNIT I PROJECT AND IT'S PROCESS**

**(10 hours)**

Define project and process -Boundaries of project - Objectives and functions of project management -Characteristics and types of projects -Organization structure / styles -Roles of project management group - Project management office and its role - Project knowledge area - Project integration- Process group interaction -project flow - Project life cycle Influencing factors. - Case study.

## **UNIT II PROJECT TIME MANAGEMENT**

**(10 hours)**

Project scope management - Work break down structure - Activity/Task – Events - Case study - Project planning tools - Rolling wave planning - Gantt charts, Milestone chart, Program progress chart- Creating milestone plan - Project network- Fulkerson's rules - A-OA and A-O-N networks - Analyze project time- Critical path method (deterministic approach) - Activity oriented network analysis- 80-20 rule- Case study - Type of time estimates & square network diagram - Project updating and monitoring- Case study - Estimate time- Program Evaluation & Review Technique (Probabilistic approach)- Event oriented network analysis Optimistic, pessimistic and most likely time - Degree of variability in average time - Probabilistic estimate - % utilization of resources.

## **UNIT III - RESOURCE MANAGEMENT**

**(8 hours)**

Types of Resource- Time, Men, Material, Machinery, Money, Space - Balancing of resource - Resource smoothing technique- Time constraint - Resource leveling technique- Resource constraint- Case study.

## **UNIT IV - RESOURCE OPTIMIZATION**

**(10 hours)**

Types of cost – Direct, indirect and total cost - Variation of cost with time - Schedule compression techniques- Crashing, fast tracking & Re-estimation- Crash time and crash cost - Optimize project cost for time and resource - CPM cost model - Life cycle assessment - Impacts and economical assessment - Life cycle cost- Maintenance and operation -Life cycle forecasting – Concept and applications.

## **UNIT V - EMERGING TRENDS IN PROJECT MANAGEMENT (10 hours)**

AGILE Project management and Project Management using latest tools- Case study.

### **SUGGESTED READINGS:**

1. "A Guide to the Project Management Body of Knowledge (PMBOK Guide) – Fourth Edition, An American National Standard, ANSI/PMI 990001-2008"
2. A Risk Management Standard, AIRMIC Publishers, ALARM, IRM: 2002

3. Gene Dixon, "Service Learning and Integrated Collaborative Project Management", Project Management Journal, DOI:10.1002/pmi, February 2011, pp.42-58
4. Jerome D. Wiest and Ferdinand K. Levy, "A Management Guide to PERT/CPM", Prentice Hall of India Publishers Ltd., New Delhi, 1994.
5. Punmia B. C. and Khandelwal K.K., "Project Planning and Control with PERT/CPM", Laxmi publications, New Delhi, 1989.
6. Srinath L.S., "PERT & CPM- Principles and Applications", Affiliated East West Press Pvt., Ltd., New Delhi, 2008
7. Sengupta. B and Guha. H, "Construction Management and Planning", Tata McGraw Hill, New Delhi, 1995
8. SangaReddi. S and Meiyappan. PL, "Construction Management", Kumaran Publications, Coimbatore, 199

**23MBAPI303D MANAGEMENT OF HUMAN RESOURCES, SAFETY AND QUALITY 4H - 3C**

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

1. To impart the basic knowledge about the Human Resources Management.
2. To understand the concept of Labor Legislation.
3. To understand the Valuation of Various Categories of Safety Management.
4. To impart the basic knowledge of Safety Implementation.
5. Know the Sectoral Quality Management In Construction.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Real Human Resources Management.	Understand
CO2	Identify the concept of Labor Legislation.	Identify
CO3	Identify the Valuation of Various Categories of Safety Management.	Identify
CO4	Summarize the basic knowledge of Safety Implementation.	Summarize
CO5	Analyse the Sectoral Quality Management In Construction.	Analyse

**Mapping with Programme Outcomes**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12
CO1	S	S	S	-	-	-	-	M	-	-	-	S
CO2	S	S	S	-	-	-	-	M	-	-	-	S
CO3	S	S	S	-	-	-	-	M	-	-	-	M
CO4	S	S	S	-	-	-	-	M	-	-	-	M
CO5	S	S	S	-	-	-	-	M	-	-	-	L
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

**UNIT I - HUMAN RESOURCES MANAGEMENT****(10 hours)**

Introduction - Concept- Growth - Role and function - Manpower planning for construction companies - Line and staff function - Recruitment, selection, placement, induction and training; over staffing; Time office and establishment functions; wage and salary administration - Discipline - Separation process.

**UNIT II - LABOR LEGISLATION****(10 hours)**

Labor laws- Labor law relating to construction industry- Interstate migration- Industrial relations- Collective bargaining- Worker's participation in management - Grievance handling - Discipline - Role of law enforcing agencies and judiciary -Women in construction industry.

**UNIT III - SAFETY MANAGEMENT****(8 hours)**

Importance of safety- Causes of accidents -Responsibility for safety - Role of various parties in safety management -Safety benefits- Approaches to improve safety in construction for different works - Measuring safety.

**UNIT IV - SAFETY IMPLEMENTATION****(10 hours)**

Application of ergonomics to the construction industry - Prevention of fires at construction site- Safety audit.

**UNIT V - QUALITY MANAGEMENT IN CONSTRUCTION****(10 hours)**

Importance of quality - Elements of quality - Quality characteristics- Quality by design - Quality conformance -Contractor quality control - Identification and traceability - Continuous chain management - Brief concept and application - Importance of specifications- Incentives and penalties in specifications - Workmanship as a mark of quality - Final inspection - Quality assurance techniques - Inspection, testing, sampling - Documentation - Organization for quality control, Cost of quality - Introduction to TQM, Six sigma concept- ISO 14000 in quality management.

**SUGGESTED READINGS:**

1. Arya Ashok, "Human Resources Management – Human Dimensions in Management" March 24-26, 2011, Organizational Development Programme Division – New Delhi
2. Arya Ashok, "Essence of Labour Laws"- [www.odiindia.in/about-the-books.pdf](http://www.odiindia.in/about-the-books.pdf)
3. Arya Ashok "Discipline & Disciplinary procedure" Organisation Development Institute, 1998
4. Arya Ashok, "Management case studies – An analytical and Developmental Tool" Organisation Development Institute, New Delhi, 1999
5. Corleçon Coulter, Jill Justice Coulter, The Complete Standard Hand Book of Construction Management", Prentice Hall, (1989)
6. Dwivedi R.S., "Human Relations and Organisational Behaviour", (BH – 1987)
7. Grant E.L., and Levens worth, "Statistical Quality Control", Mc Graw Hill, 1984.
8. James J Obrien, "Construction Inspection Hand Book – Quality Assurance and Quality Control", Van NO strand, New York, 1989
9. Josy J. Farrilaro, "Hand Book of Human Resources Administration" Mc.Graw Hill(International Edition) 1987.

10. Juran Frank, J.M. and Gryna F.M. “Quality Planning and Analysis”, Tata Mc Graw Hill, 1982.
11. Malik, P.L., “Handbook of Labour & Industrial Law”, Eastern book company, Lalbagh, Lucknow, 2010
12. Manoria C.B., “Personnel Management”, Himalaya Publishing House, 1992.

**COURSE OBJECTIVES:**

1. To impart the basic knowledge about the Economics and Financial Management in Construction.
2. To understand the concept of Market Structure and Construction Economics.
3. To understand the Valuation of Various Categories of Evaluating Alternative Investments.
4. To impart the basic knowledge of Funds Management.
5. Know the Sectoral Economics of Costing.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Economics and Financial Management in Construction	Understand
CO2	Identify the concept of Market Structure and Construction Economics.	Identify
CO3	Identify the Valuation of Various Categories of Evaluating Alternative Investments.	Identify
CO4	Summarize the basic knowledge of Funds Management.	Summarize
CO5	Analyse the Sectoral Economics of Costing.	Analyse

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	-	-	-	1	-	-	-	3
CO2	3	3	3	-	-	-	-	1	-	-	-	3
CO3	3	3	3	-	-	-	-	1	-	-	-	2
CO4	3	3	3	-	-	-	-	1	-	-	-	2
CO5	3	3	3	-	-	-	-	1	-	-	-	1
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

**UNIT I - BASIC PRINCIPLES****(10 hours)**

Time Value of Money - Cash flow diagram - Nominal and effective Interest - Continuous interest - Nominal and effective interest- continuous interest. Single Payment Compound Amount Factor (P/F, F/P) – Uniform series of Payments (F/A,A/F,F/P,A/P)– Problem time zero (PTZ)- equation time zero (ETZ). Constant increment to periodic payments – Arithmetic Gradient (G), Geometric Gradient (C) )

**UNIT II-MARKET STRUCTURE AND CONSTRUCTION ECONOMICS****(8 hours)**

Types of Market Structure in the Construction Industry – Markets and the competitive environment Perfect competition -. Monopolistic competition - Oligopoly - Monopoly – Characteristics and economic Profit – Construction Economics – BOOT, BOT, BOO Methods - Depreciation – Inflation Taxes

**UNIT III - EVALUATING ALTERNATIVE INVESTMENTS****(10 hours)**

Present worth analysis, Annual worth analysis, Future worth analysis, Rate of Return Analysis (ROR) and Incremental Rate of Return (IROR) Analysis, Benefit/Cost Analysis, Break Even Analysis - Replacement Analysis- Equipment Replacement Analysis.

**UNIT IV - FUNDS MANAGEMENT****(10 hours)**

Project Finance - Sources - Working capital management- Inventory Management- Mortgage Financing-- Interim construction financing - Security and risk aspects

**UNIT V ECONOMICS OF COSTING****(10 hours)**

Construction accounting-Chart of accounts- Meaning and definition of costing - Types of costing - Methods of calculation (Marginal costing, cost sheet, budget preparation) – Equipment Cost Replacement Analysis - Role of costing technique in real estate and infrastructure management.

**SUGGESTED READINGS:**

1. Pandey, I.M, Financial Management, 12th Edition Vikas Publishing House Pvt. Ltd., 2012.
2. Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2012.
3. Paul A. Samuelson, William D. Nordhaus, Sudip Chaudhuri and Anindya Sen, Economics, 19th edition, Tata McGraw Hill, 2010.
4. Blank, L.T., and Tarquin,a.J , Engineering Economy,4th Edn. Mc-Graw Hill, 1988.
5. Patel, B M, Project management- strategic Financial Planning, Evaluation and Control, Vikas Publishing House Pvt. Ltd. New Delhi, 2000.
6. Shrivastava,U.K., Construction Planning and Management,2nd Edn. Galgotia Publications Pvt. Ltd. New Delhi, 2000.



Instruction Hours / week: L: 3 T: 0 P: 0 Marks: Internal: 50

Total: 50

**Course Objectives**

1. To train learners to crack competitive exams
2. To know of various tools that is essential for Competitive Exams
3. To enhance their ability to speak in English and face an interview.
4. To make the student apply, prepare and clear the competitive exams.
5. To prepare the student to concentrate, stay positive and confident.
6. To take even failure at ease and continue the target of clearing competitive exams.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	The student may settle in life with a government job.	Apply
CO2	The student may develop various skills	Understand
CO3	The successful student may guide other students to success.	Understand
CO4	Analyse logical reasoning questions, error analysis, and correct usage of words.	Analyse
CO5	Develop the knowledge of grammatical system of English language.	Apply
CO6	Elaborate on the correct structure of sentence	Understand

**Mapping with Programme Outcomes**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12
CO1	M	M	S	M	M	S	L	M	M	L		
CO2	L	M	M	M	M	L	M	S	M	L		
CO3	L	M	L	M	M	L	L	M	M	L		
CO4	M	M	M	S	S	M	M	S	M	L		
CO5	M	S	M	M	M	M	L	M	M	L		

**S-Strong; M-Medium; L-Low**

**UNIT I Grammar** (8 hours)  
Number-Subject, Verb and Agreement-Articles-Sequences of Tenses-Common Errors

**UNIT II Word Power** (8 hours)  
Idioms and Phrases-One word substitution-Synonyms-Antonyms-Words often confused

**UNIT III Paragraph** (8 hours)

Expansion of an idea

**UNIT IV Writing** (8 hours)  
Essay- Letters-Memos-Agenda-Resume writing

**UNIT V Speaking** (4 hours)

Public Speaking-Group discussion-Interview-Spoken English

### **SUGGESTED BOOKS**

V. Saraswathi, Maya K. Mudbhatkal (2014). English for Competitive Examinations.  
Emerald: Chennai.

Instruction Hours /  
week:

L: 3

T: 0

P: 0

Marks: Internal: 50

Total: 50

**COURSE OBJECTIVES:****To make the students**

1. To familiarize with regard to the concept to Investment Planning and its methods
2. To examine the scope and ways of Personal Tax Planning;
3. To analyze Insurance Planning and its relevance
4. To develop an insight into retirement planning and its relevance.
5. To construct an optimal portfolio in real life situations

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Familiarize with regard to the concept of Investment Planning and its methods	Understand
CO2	Examine the scope and ways of Personal Tax Planning;	Analyze
CO3	Analyze Insurance Planning and its relevance	Analyze
CO4	Develop an insight in to retirement planning and its relevance.	Create
CO5	Construct an optimal portfolio in real life situations	Create

**UNIT I****(7 hours)**

**Introduction to Financial Planning** - Financial goals, Time value of money, steps in financial planning, personal finance/ loans, education loan, car loan & home loan schemes. Introduction to savings, benefits of savings, management of spending & financial discipline, Netbanking and UPI, digital wallets, security and precautions against Ponzi schemes and online frauds such as phishing, credit card cloning, skimming.

**UNIT II****(7 hours)**

**Investment Planning** - Process and objectives of investment, Concept and measurement of return & risk for various assets class, Measurement of portfolio risk and return, Diversification & Portfolio formation. Gold Bond; Real estate; Investment in Greenfield and brown field Projects; Investment in fixed income instruments –financial derivatives

& Commodity market in India. Mutual fund schemes including SIP; International investment avenues.

### **UNIT III**

**(7 hours)**

**Personal Tax Planning** -Tax Structure in India for personal taxation, Scope of Personal tax planning, Exemptions and deductions available to individuals under different heads of income and gross total income, Special provision u/s 115BAC vis-à-vis General provisions of the Income- tax Act, 1961.Tax avoidance versus tax evasion.

### **UNIT IV**

**(7 hours)**

**Insurance Planning** - Need for Protection planning. Risk of mortality, health, disability and property. Importance of Insurance: life and non-life insurance schemes. Deductions available under the Income-tax Act for premium paid for different policies.

### **UNIT V**

**(8 hours)**

**Retirement Benefits Planning** - Retirement Planning Goals, Process of retirement planning, Pension plans available in India, Reverse mortgage, New Pension Scheme. Exemption available under the Income-tax Act, 1961 for retirement benefits.

### **SUGGESTED READINGS**

1. Indian Institute of Banking & Finance. (2017). Introduction to Financial Planning. New Delhi: Taxmann Publication.
2. Pandit, A. (2014). The Only Financial Planning Book that You Will Ever Need. Mumbai: Network Publications Ltd.
3. Sinha, M. (2008). Financial Planning: A Ready Reckoner. New York: McGraw Hill Education.
4. Halan, M. (2018). Let's Talk Money: You've Worked Hard for It, Now Make It Work for You. New York: HarperCollins Publishers.
5. Tripathi, V. (2017). Fundamentals of Investment. New Delhi: Taxmann Publication.

Instruction Hours /  
week:

L: 3

T: 0

P: 0

Marks: Internal: 50

Total: 50

**COURSE OBJECTIVES:**

To make the students

1. To understand the basic concepts of organizational behavior.
2. To analyze the individual behavior traits required for performing as an individual or group.
3. To obtain the perceiving skills to judge the situation and communicate the thoughts and ideas.
4. To understand how to perform in group and team and how to manage the power, politics and conflict.
5. To recognize the importance of organizational culture and organizational change.
6. To realise the importance of groups and teamwork and managing of conflict between the members of the organization

**COURSE OUTCOMES:**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Analyse organizational behavior issues in the context of the organizational behavior theories and concepts.	Analyse
CO2	Assess the behavior of the individuals and groups in organization and manage the stress.	Evaluate
CO3	Interpret team, power, politics and conflict arising between the members.	Evaluate
CO4	Explain how organizational change and culture affect the working relationship within organizations.	Understand
CO5	Understand and exhibit the communication skills to convey the thoughts and ideas of case analysis to the individuals and group.	Understand
CO6	Understand the application of OB using appropriate concepts, logic and theoretical conventions	Understand

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									L
CO2					M					
CO3					M					
CO4									M	
CO5				M						
CO6	M									

**S-Strong; M-Medium; L-Low**

#### **UNIT I Organization behaviour : Introduction**

**(7 hours)**

Organization Behavior: Meaning and definition - Fundamental concepts of OB - Contributing disciplines to the OB field – OB Model - Significance of OB in the organization success - Challenges and Opportunities for OB.

#### **UNIT II Behaviour and Personality**

**(7 hours)**

Attitudes – Sources - Types - Functions of Attitudes. Values – Importance - Types of Values. Personality – Determinants of personality- Theories of Personality - psycho-analytical, social learning, job-fit, and trait theories.

#### **UNIT III Perception**

**(7 hours)**

Perception – factors influencing perception - Person Perception – Attribution Theory – Frequently Used Shortcuts in Judging Others- Perceptual Process- Perceptual Selectivity - Organization Errors of perception – Linkage between perception and Decision making.

#### **UNIT IV Group and Stress Management**

**(7 hours)**

Foundation of Group Behavior - Types of Groups - Stages of Group Development - Group Norms - Group Cohesiveness – Stress – Causes of stress – Effects of Occupational Stress- Coping Strategies for Stress.

#### **UNIT V Organization Culture and Change**

**(8 hours)**

Organizational culture- Characteristics of Culture- Types of Culture – Creating and Maintaining an Organizational Culture. Organizational change – Meaning - Forces for Change - Factors in Organizational Change - Resistance to change- Overcoming resistance to change.

#### **SUGGESTED READINGS:**

1. Fred Luthans. (2017). *Organizational Behavior: An Evidence - Based Approach*, 12<sup>th</sup> edition, McGraw Hill Education, NewDelhi.
2. Steven Mcshane and Mary Ann VonGlinow (2017), *Organizational Behavior*, 6th edition, McGraw Hill Education, NewDelhi
3. Robbins, S. P., and Judge, T.A. (2016). *Organizational Behaviour*.(16<sup>th</sup> edition).New Delhi: Prentice Hall of India.
4. Laurie J. Mullins (2016), *Management and Organisationalbehaviour*, 10<sup>th</sup> edition, Pearson Education, NewDelhi
5. Robbins, S. P., and Judge, T.A. (2016). *Essentials of Organizational Behavior*.13<sup>th</sup> edition, Pearson Education.

**E- Resources:**

<https://nptel.ac.in/courses/110/105/110105033/>

**Course Objectives**

Enable the student

1. Learn the concepts of RPA, its benefits, types and models
2. Gain the knowledge in application of RPA in Business Scenarios
3. Identify measures and skills required for RPA
4. Adopt to the implementations of Automation
5. Able to process information and draw inference
6. Understand the concepts of robot skills

**Course Outcomes (COs)**

Upon completion of this course students will be able to:

1. Demonstrate the benefits and ethics of RPA K1, K2
2. Understand the Automation cycle and its techniques K2
3. Draw inferences and information processing of RPA K3, K4
4. Understand the Automation concepts
5. Implement & Apply RPA in Business Scenarios K5
6. Analyze on Robots & leveraging automation

**Unit I – Introduction****(7 hours)**

Introduction to RPA - Overview of RPA - Benefits of RPA in a business environment - Industries & domains fit for RPA - Identification of process for automation - Types of Robots - Ethics of RPA & Best Practices - Automation and RPA Concepts - Different business models for implementing RPA - Centre of Excellence – Types and their applications - Building an RPA team - Approach for implementing RPA initiatives.

**Unit II – Automation****(8 hours)**

Role of a Business Manager in Automation initiatives - Skills required by a Business Manager for successful automation - The importance of a Business Manager in automation - Analyzing different business processes - Process Mapping frameworks - Role of a Business Manager in successful implementation – Part 1 - Understanding the Automation cycle – First 3 automation stages and activities performed by different people



### **Unit III - Automation Implementation**

**(7 hours)**

Evaluating the Automation Implementation Detailed description of last 3 stages and activities performed by different people - Role of a Business Manager in successful completion – Part 2 - Activities to be performed post-implementation - Guidelines for tracking the implementation success - Metrics/Parameters to be considered for gauging success - Choosing the right licensing option - Sending emails - Publishing and Running Workflows

### **Unit IV – Robot**

**(7 hours)**

Ability to process information through scopes/systems - Understand the skill of information processing and its use in business - Leveraging automation - Creating a Robot - New Processes. Establish causality by variable behavior - Understand the skill of drawing inference or establishing causality by tracking the behavior of a variable as it varies across time/referenced variable - Leveraging automation for this skill - Robot & new process creation.

### **Unit V – Robot Skill**

**(7 hours)**

Inference from snapshots of curated terms – Omni-source data curation - Multisource trend tracking - Understand the skill of drawing inference from the behavior of curated terms by taking snapshots across systems in reference to time/variable(s) - Leveraging automation for this skill – Robot creation and new process creation for this skill.

### **Suggested Readings**

1. Tom Taulli, February 2020. “The Robotic Process Automation Handbook” Apress, Reference Books 1 Steve Kaelble” Robotic Process Automation” John Wiley & Sons, Ltd.
2. Alok Mani Tripathi, March 2018. “Learning Robotic Process Automation: Create Software robots and automate business processes with the leading RPA tool”, Packet Publishing Limited

### **Websites**

1. [https://www.tutorialspoint.com/uiopath/uiopath\\_robotic\\_process\\_automation\\_introduction.htm](https://www.tutorialspoint.com/uiopath/uiopath_robotic_process_automation_introduction.htm)
2. <https://www.javatpoint.com/rpa> 3  
[https://onlinecourses.nptel.ac.in/noc19\\_me74/preview](https://onlinecourses.nptel.ac.in/noc19_me74/preview)

**Course Objectives**

1. To understand about computer forensics and investigations.
2. To know about digital evidence and crime.
3. To analyse and validate forensics data.
4. To know about e-mail investigation.
5. To understand about Mobile device forensics.

**Course Outcomes (COs)**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Define, understand and explain various investigation procedures and summarize duplication of digital evidence.	Remember
CO2	Apply the knowledge of digital evidences.	Understand
CO3	Design and develop various forensics tools and analyse the network forensics.	Create
CO4	Demonstrate the systematic study of high-tech forensics	Understand
CO5	Understand the importance of reports.	Evaluate

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	L	L	M	L	M	M	M	M	L	L	M	M
CO2	S	M	M	M	L	L	M	M	S	S	L	M
CO3	S	M	L	L	S	S	L	M	S	S	S	L
CO4	L	S	S	S	M	M	S	L	L	L	M	S
CO5	L	M	S	M	L	L	S	S	L	L	L	S

**S-Strong; M-Medium; L-Low**

**Unit I – Computer forensics and investigations****(7 HOURS)**

Computer forensics and investigations as a profession – Preparing for computer investigations – Taking a systematic approach–Procedures for corporate high-tech investigations–Data recovery work stations and software– Conducting an investigation.

**Unit II – Data Acquisition****(7 HOURS)**

Data acquisition – Storage formats for digital evidence – Validating data acquisitions – Processing crime and incident scenes–Identifying digital evidence–Collecting evidence in

private sector incident scenes – Preparing for search-seizing digital evidence at the scene-  
storing digital evidence –Reviewing a case.

### **Unit III – Computer Forensics Tools**

**(7 HOURS)**

Current computer forensics tools–Software tools–Hardware tools–The Macintosh file structure and boot process – Computer forensics analysis and validation – Addressing data –Hiding techniques.

### **Unit IV – Network Forensics**

**(7 HOURS)**

Virtual machines – Network forensics – Developing standard procedures – Live acquisitions – email investigations – Investigating e-mail crimes and violations – Understanding e-mail servers – Cell phone and mobile device forensics.

### **Unit V – Mobile Device Forensics**

**(8 HOURS)**

Understanding mobile device forensics – Acquisition procedures –Report writing for high-tech investigations – Importance of reports – Guidelines for writing reports –Expert testimony in high-tech investigations.

### **SUGGESTED READINGS**

1. Bill Nelson, Amelia Phillips and Christopher Steuart. (2018). Computer Forensics and Investigations, Cengage Learning, 5<sup>th</sup> Edition.
2. Eoghan Casey.(2017). “Handbook of Digital Forensics and Investigation”, Academic Press, 1<sup>st</sup> Edition,
3. John R Vacca,.(2016).“Computer Forensics”, Cengage Learning, 2<sup>nd</sup> Edition.

### **WEB LINKS**

1. [www.cps.brockport.edu/~shen/cps301/figures/figure1.pdf](http://www.cps.brockport.edu/~shen/cps301/figures/figure1.pdf)
2. [www.forensicsguru.com/devicedataextractionsimcell.php](http://www.forensicsguru.com/devicedataextractionsimcell.php)
3. [www.nptel.ac.in/courses/106101060](http://www.nptel.ac.in/courses/106101060)
4. [www.samsclass.info/121/ppt/ch11.ppt](http://www.samsclass.info/121/ppt/ch11.ppt)
5. [www.garykessler.net/library/role\\_of\\_computer\\_forensics.html](http://www.garykessler.net/library/role_of_computer_forensics.html)
6. [www.ukessays.com/essays/information-technology/computer-forensics-and-crimeinvestigations-information-technology-essay.php](http://www.ukessays.com/essays/information-technology/computer-forensics-and-crimeinvestigations-information-technology-essay.php)

week:

**Course Objectives**

This course enables the students to learn

1. Elements of coding theory and its applications.
2. Understand the concept of bounds in coding theory.
3. About the encoding and decoding.
4. Analyze the concept of cyclic coding
5. Acquiring the knowledge special cyclic codes.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Recognize the basic concepts of coding theory.	Apply
CO2	Understand the importance of finite fields in the design of codes.	Understand
CO3	Detect and correct the errors occur in communication channels with the help of methods of coding theory.	Apply
CO4	Apply the tools of linear algebra to construct special type of codes.	Apply
CO5	Use algebraic techniques in designing efficient and reliable data transmission methods.	Understand

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1							S			
CO2							S			
CO3							S			
CO4							S			
CO5							S			

**S-Strong; M-Medium; L-Low**

**UNIT I - ERROR DETECTION, CORRECTION AND DECODING (7 hours)**

Communication channels – Maximum likelihood decoding – Hamming distance – Nearest neighborhood minimum distance decoding – Distance of a code.

**UNIT II - LINEAR CODES****(7hours)**

Linear codes – Self orthogonal codes – Self dual codes – Bases for linear codes – Generator matrix and parity check matrix – Encoding with a linear code – Decoding of linear codes – Syndrome decoding.

**UNIT III - BOUNDS IN CODING THEORY:****(7 hours)**

The main coding theory problem – lower bounds - Sphere covering bound – Gilbert Varshamov bound – Binary Hamming codes – q-ary Hamming codes – Golay codes – Singleton bound and MDS codes – Plotkin bound.

**UNIT IV - CYCLIC CODES:****(7 hours)**

Definitions – Generator polynomials – Generator matrix and parity check matrix – Decoding of Cyclic codes.

**UNIT V - SPECIAL CYCLIC CODES:****(8 hours)**

BCH codes – Parameters of BCH codes – Decoding of BCH codes – Reed Solomon codes.

**SUGGESTED BOOKS**

1. San Ling and Chaoping Xing (2004). Coding Theory: A first course, Cambridge University Press.
2. Lin. S & Costello. D. J. (1983). Jr., Error Control Coding: Fundamentals and Applications, Prentice-Hall, Inc., New Jersey.
3. Vera Pless (1982). Introduction to the Theory of Error Correcting Codes, Wiley, New York.
4. Berlekamp E.R. (1968). Algebraic Coding Theory, Mc Graw-Hill.
5. H. Hill (1986). A First Course in Coding Theory, OUP.

**WEB LINKS**

- <https://www.youtube.com/watch?v=XepXtl9YKwc>
- <https://www.youtube.com/watch?v=oeQWxhlnCHM>
- <https://www.youtube.com/watch?v=Z-QGtxlQWak>

23PHPOE301	<b>MATERIALS CHARACTERIZATION</b>			Semester – III 3H – 2C
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Instruction Hours / week:	L: 3	T: 0	P: 0	Marks: Internal: 50	Total: 50
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### Course Objectives

1. To Study materials is always important, for any application, including fabrication of satellites.
2. To introduce various methods available for characterizing the materials. The characterization of materials specifically addresses that portfolio with which researchers and educators must have working familiarity.
3. To provide an introduction to materials characterization and its importance
4. To discuss different types of characterization techniques and their uses.
5. To introduce the students to the principles of optical and electron microscopy, X-ray diffraction and various spectroscopic techniques Introduction:
6. To understand the materials characterization and available techniques

### Course Outcomes (COs)

After completing the course the students will / can able to

1. Handle with X-ray, thermal, microscopic, and electrical methods of characterization.
2. Understand and describe the fundamental principles behind the methods of characterization which are included in the curriculum
3. Analyze, interpret and present observations from the different methods.
4. Evaluate the uncertainty of observations and results from the different methods.
5. Understand the history of materials science with basic understanding of metals, binary alloys, magnetic materials, dielectric materials and polymers
6. Understand nucleation, growth and phase transformation kinetics

### UNIT -I

(7 hours)

X-ray techniques for materials characterization X-ray diffraction: Principle, measuring system and applications for characterization of powdered materials. X-ray diffraction profile and analysis: FWHM and line broadening, Crystallite size effect and Scherrer formula, Effect of strain (tensile vs compressive, uniform vs. non-uniform) Introduction to Extended X-ray absorption fine structure (EXAFS), Surface extended X-ray absorption (SEXAFS).

### UNIT - II

(7 hours)

Microscopic techniques Principles, instrumentations and applications of Optical microscope, Scanning Electron Microscope (SEM), Transmission Electron Microscope

(TEM) for characterization of different samples. Energy dispersive X-ray microanalysis (EDS) - Basic aspects of Atomic force microscopy (AFM).

### **UNIT - III**

**(7 hours)**

Spectroscopic methods Principle, instrumentation and applications of UV-Visible Diffuse Reflectance (UV-Vis DRS) spectroscopy, Ft-Ir, Raman and Fluorescence spectroscopy. Hand of experience on operation of UV-Vis-DRS, FT-IR, Raman and data analysis..

### **UNIT -IV**

**(7 hours)**

Thermoanalytical Methods Principle, instrumentation and applications of Thermogravimetric Analysis (TGA), Differential Temperature Analysis (DTA) and Differential Scanning Calorimetry (DSC). Factors affecting the TGA/DTA/DSC results and their interpretations. Hand on on experience of operation of TG/DSC and data analysis.

### **UNIT -V**

**(8 hours)**

Electroanalytical Techniques Voltammetric principles, hydrodynamic voltammetry, stripping voltammetry, cyclic voltammetry, criteria of reversibility of electrochemical reactions, quasi-reversible and irreversible processes, qualitative and quantitative analysis current-potential relation applicable for Linear Sweep Voltammetry (LSV) and Cyclic Voltammetry (CV), interpretation of cyclic voltammograms and parameters obtainable from voltammograms. Hand on experience on operation of CV and data analysis.

### **SUGGESTED READINGS:**

- 1) Theory and Applications of UV Spectroscopy, H.H.Jaffe and M.Orchin, IBH-Oxford.
- 2) Inorganic spectroscopic methods, A.K. Brisdon, Oxford Chem. Primers, 1997, New York.
- 3) Applied Electron Spectroscopy for Chemical Analysis Ed. H. Windawi and F.L.Ho, Wiley Inter science.
- 4) Introduction to Spectroscopy, Pavia, Brooks/Cole Cenage, 4th edition, 2009, Belmont.
- 5) Introduction to Photoelectron Spectroscopy, P.K.Ghosh, John Wiley.
- 6) Fundamental of Molecular Spectroscopy, C. N. Banwell and E. McCash, Tata McGraw Hill, 4th edition, 1994, New Delhi

23CHPOE301

## CHEMISTRY IN EVERYDAY LIFE

Semester – III

3H – 2C

Instruction Hours /  
week:

L: 3

T: 0

P: 0

Marks: Internal: 50

Total: 50

**Course Objectives**

This course enables the students

1. Gain knowledge in the importance of chemistry in food industry.
2. To understand the chemistry of medicines and cosmetics.
3. To study about chemistry in energy utilization and storage process.
4. Know about the chemistry of soaps, detergents and textiles.
5. To learn about the chemistry behind the polymers, fuel and agriculture.

**Course Outcomes (CO's)**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Illustrate the importance of chemistry in food industry.	Apply
CO2	Explain the chemistry of medicines and cosmetics.	Understand
CO3	Utilization of chemistry concepts in energy storage devices	Apply
CO4	Discuss about the chemistry of soaps, detergents and textiles.	Understand
CO5	Apply the concept of chemistry in polymers, fuel and agriculture industry.	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	L	M	L	S	L	M	M	S
CO2	S	S	L	M	M	S	M	M	L	M
CO3	M	S	S	S	M	S	M	S	M	S
CO4	S	S	M	M	S	S	M	S	M	S
CO5	S	S	S	M	S	S	M	S	M	S

**UNIT - I Importance of Chemistry in food**

(8)

Chemicals in food, colouring agents, artificial preservatives, flow stabilizers, binding substance, flavours and sweeteners, antioxidants, minerals, vitamins. Chemistry at the



breakfast table, raising agents- gluten, the taste maker- glutamic acid, stimulants- Caffeine, chemistry of onion, garlic and curcumin.

#### **UNIT - II Chemistry in medicines and cosmetics (8)**

Elements in the human body, drugs and their classification, drug-target interaction, action of different classes of drugs, antiseptics and disinfectants.

Cosmetics: Chemistry behind the lotions, fragrances, talcum powder, sunblock and sunscreen, toothpaste, lipsticks, nail polishes.

#### **UNIT - III Chemistry in energy (8)**

Solar energy - fuel from sun light - splitting of water - hydrogen from sunlight - hydrogen economy - fuel cells - batteries - photovoltaics - stealing the sun - nuclear energy - nuclear fission and fusion - production of electricity by a nuclear reactor - radioactivity and the hazards of radioactivity - living with nuclear power.

#### **UNIT - IV Importance of chemistry in soaps, detergents and textiles (6)**

Detergents and soaps, types of soaps and detergents, saponification, cleansing action of soaps and detergents, perfumes used in soaps.

Textiles: Chemistry behind wool, silk, jute, cotton, glass fibre, polyester, acrylic, nylon, and other raw materials.

#### **UNIT - V Chemistry of polymers, fuel and agriculture (6)**

Polymers, types, polyethylene, plastics, disposal of plastics, degradation of polymers and plastics using nano materials. Petrochemistry, petrol, diesel, LPG, CNG, kerosene, oils, and other fuels. Agriculture: fertilizers, herbicides, insecticides, and fungicides.

#### **SUGGESTED READINGS**

1. Tripathy, S. N., & Sunakar Panda (2004). *Fundamentals of Environmental Studies* (II Edition). New Delhi: Vrianda Publications Private Ltd.
2. Arvind Kumar (2004). *A Textbook of Environmental Science*. New Delhi: APH Publishing Corporation.
3. Anubha Kaushik, C. P., & Kaushik (2004). *Perspectives in Environmental Studies*. New Delhi: New Age International Pvt. Ltd. Publications.
4. Seymour R. B., & Charles, E. (2003). *Seymour's Polymer Chemistry: An Introduction*. Marcel Dekker, Inc.
5. Stocchi, E. (1990). *Industrial Chemistry* (Vol-I). UK: Ellis Horwood Ltd.
6. Jain, P. C., & Jain, M. (2004). *Engineering Chemistry*. Delhi: Dhanpat Rai & Sons.
7. Sharma, B. K., & Gaur, H. (1996). *Industrial Chemistry*. Meerut: Goel Publishing House.

**COURSE OBJECTIVE**

1. To encompass the use of microorganisms in the manufacture of food or industrial products on the basis of employment.
2. Get equipped with a theoretical and practical understanding of industrial microbiology
3. Appreciate how microbiology is applied in the manufacture of industrial products
4. Know how to source microorganisms of industrial importance from the environment
5. Know about the design of bioreactors, factors affecting growth and production, heat transfer, oxygen transfer
6. Understand the rationale in medium formulation & design for microbial fermentation, and sterilization of medium and air.

**COURSE OUTCOME**

Students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Provides knowledge in the large scale production of industrial product, and teaches the modern employment trends to cater the needs of industry.	Understand
CO2	Students will differentiate the types of fermentation processes	Apply
CO3	Understand the biochemistry of various fermentations	Understand
CO4	Identify techniques applicable for Improvement of microorganisms based on known biochemical pathways and regulatory mechanisms	Analyze
CO5	Comprehend the techniques and the underlying principles in downstream processing	Apply
CO6	Students can able to explore the practical skills in research activities.	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	M	M	M	S	L	M	M	M	M	M	M
CO2	M	M	S	S	L	L	M	M	M	M	M
CO3	M	S	M	M	M	M	M	M	M	M	M
CO4	M	S	M	M	M	S	S	M	M	M	M
CO5	L	S	M	M	M	M	M	S	L	S	L
CO6	S	S	S	L	M	M	M	M	L	M	M

S-Strong; M-Medium; L-Low

**EXPERIMENTS**

1. Provides knowledge in the large scale production of industrial product, and teaches the modern employment trends to cater the needs of industry.
2. Students will differentiate the types of fermentation processes
3. Understand the biochemistry of various fermentations
4. Identify techniques applicable for Improvement of microorganisms based on known biochemical pathways and regulatory mechanisms
5. Comprehend the techniques and the underlying principles in downstream processing
6. Students can able to explore the practical skills in research activities.

**Unit I - Basics of fermentation processes****(8 hours)**

Definition, scope, history, and chronological development of the fermentation industry. Component parts of the fermentation process. y. Component parts of fermentation process. Microbial growth kinetics, batch and continuous, direct, dual or multiple fermentations; scale up of fermentation, comparison of batch and continuous culture as investigative tools, examples of the use of fed batch culture.

**Unit II Isolation and Preservation****(7 hours)**

Isolation, preservation, and strain improvement of industrially important microorganisms. Use of recombination system (Parasexual cycle, protoplast fusion techniques), application of recombinant strains, and the development of new fermentation products.

**Unit III –Screening and Inoculum development****(7 hours)**

Screening (primary and secondary screening); detection and assay of fermentation products (Physico-chemical assay, biological assays). Inoculum development, criteria for transfer of inoculum, development of inoculum: Bacteria, Fungi and Yeast.

**Unit IV–Microbial Production****(7 hours)**

Fermentation type reactions (Alcoholic, bacterial, mixed acid, propionic acid, butanediol and acetone-butanol). Microbial production of enzymes (amylases, Proteases, cellulases, pectinases and lipases) primary screening for producers, large scale production. Immobilization methods.

**Unit V – Alcohols and Beverages****(7 hours)**

Fermentative production of industrial alcohol, production of beverages. Production of organic acids: citric acid, aminoacids: glutamic acid, production of vitamins. fungal enzymes and Single cell protein.

**SUGGESTED READING**

1. Casida, L.E.2007. Industrial microbiology, New age international (P) Ltd., New Delhi.
2. Clark, D.P and Pazdernik, N.J.2009. Biotechnology applying the genetic revolution, Elsevier Academic Press, UK.
3. Glazer, A and Nikaido.1995. Microbial biotechnology fundamentals of applied microbiology, W.H.Freemn and company, USA.
4. Glick, B.R and Pasternak, J.J.2003. Molecular Biotechnology Principles and Applications of Recombinant DNA, 3rd edition, ASM Press, USA.
5. Harider, S.I. and Ashok, A. 2009. Biotechnology, A Comprehensive Training Guide for the Biotechnology Industry, CRC Press, New York.
6. Sridhar, S.2010. Industrial Microbiology, Dominant Publishers, New Delhi.
7. Tanuja.S and Purohit, S.S. 2008. Fermentation Technology, Agrobios Publication, Jodhpur, India.

week:

**Course Objectives**

To equip the students with

1. Fundamentals of food, nutrients and their relationship to health
2. Respect to deriving maximum benefit from available food resources
3. Understanding of the consequences of vitamin and mineral deficiency/excess of vitamin
4. Respect to the nutrition in adult age
5. Nutrition deficiency diseases and their consequences
6. Food adulteration and prevention of food adulteration

**Course Outcomes(CO's)**

After successful completion, the students will understand:

	Course Outcomes	Blooms Level
CO1	The fundamentals of nutrition and their relationship to health	Understand
CO2	To derive maximum benefits from available food resources	Understand
CO3	The consequences of vitamin and mineral deficiency/excess of vitamin	Understand
CO4	The nutrition in adult age	Remember
CO5	Nutrition deficiency diseases and their consequences	Remember
CO6	The sources of food adulteration and measures to prevent it	Create

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	S	S	S	S	L	S	S
CO2	S	S	S	S	L	S	S
CO3	S	S	S	S	L	S	S
CO4	M	M	M	M	L	M	M
CO5	M	M	M	M	L	M	M
CO6	M	M	M	M	L	M	M

**S-Strong; M-Medium; L-Low**

## **UNIT 1**

**(7 hours)**

Basic concepts in food and nutrition-Understanding relationship between food, nutrition and health, Functions of food-Physiological, psychological and social. Dietary guidelines for Indians food pyramid. Junk foods and its causes.

## **UNIT II**

**(7 hours)**

Nutrients- Functions, dietary sources and clinical manifestations of deficiency/ excess of the following nutrients: Carbohydrates, lipids and proteins, Fat soluble vitamins-A, D, E and K, Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C, Minerals– calcium, iron and iodine

## **UNIT III**

**(8 hours)**

Adult nutrition

Physiological changes, RDA, nutritional guidelines, nutritional concerns and healthy food choices-Adult, Pregnant woman, Lactating mother, Elderly. Nutrition during childhood-Grow than development, nutritional guidelines, nutritional concern sand healthy food choices Infants, Pre school children, School children, Adolescents. Nutrition al needs of nursing mothers and infants, determinants of birth weight and consequences of low birth weight, Breast feeding biology, Breast feeding support and Counseling, Infant and young child feeding and care- Current feeding practices and nutritional concerns, guidelines for infant and young child feeding, Breast feeding, weaning and complementary feeding. Assessment and management of moderate and severe malnutrition among children, Micronutrient malnutrition among preschool children. Child health and morbidity, neonatal, infant and child mortality.

## **UNIT IV**

**(7 hours)**

Introduction to Nutritional deficiency diseases -Causes, symptoms, treatment, prevention of the following: Protein Energy Malnutrition (PEM), Vitamin A Deficiency (VAD), Iron Deficiency Anaemia (IDA), Iodine Deficiency Disorders (IDD), Zinc Deficiency, Flurosis Nutritional needs during pregnancy, common disorders of pregnancy (Anaemia, HIV infection, Pregnancy induced hypertension), relationship between maternal diet and birth. Maternal health and nutritional status, maternal mortality and issues relating to maternal health.

## **UNIT V**

**(7 hours)**

**Dietetics :** Diet for diabetes mellitus-Nutrition recommendations for patient with diabetes, Meal planning, Exchange list of different food groups, Glycemic index based formulation of diet for diabetic individual, Diabetic diets menu wise. Diet for Cardiovascular Diseases

-Dietary management and general guidelines for coronary heart disease, Dietary recommendations of WHO. Diet for Acute cardiac diseases. Influence of diet on carcinogenesis, Dietary risk factors and cancers at various sites in the human body, diet therapy, diet for cancer patients, managing eating problems during treatment. Hormonal imbalance-Poly cystic ovarian syndrome, hypogonadism, cushing syndrome. Causes of hormonal imbalance. Treatment- Dietary and stress management protocols to be followed.

### **SUGGESTED READINGS:**

- 1.Gordon M, Wardlaw and Paul M. (2012). Perspectives in Nutrition: U.S.A. McGraw Hill Publishers. 9rd Edition. New Delhi
- 2.Srilakshmi.B. (2014) Nutrition Science: New Age International (P) Ltd. Publishers.4th Edition. New Delhi.
- 3.Srilakshmi.B. (2015) Food Science:. New Age International (P) Ltd. Publishers. 6nd Edition., New Delhi
- 4.Darshan Sohi (2012). A Comprehensive Textbook of Nutrition & Therapeutic Diets. Jaypee Brothers Medical Publishers Pvt. Ltd.

Instruction Hours /  
week:

L: 3 T: 0 P: 0

Marks: Internal: 50

Total: 50

### Course Objectives

The main objectives of the course are

1. To apply knowledge and skills of seri biotechnology for development new mulberry variety and silkworm breeds suitable for varied agro-climatic zones.
2. To apply tools and techniques of biostatistics for critical analysis and interpretation of data accrued.
3. To use bioinformatics tools and techniques for the analysis and interpretation of biomolecular data for better understating mulberry and silkworm.
4. To demonstrate communication skills, scientific writing, data collection and interpretation abilities in all the fields of seribiotechnology.
5. Thorough knowledge and application of good laboratory and good manufacturing practices in sericulture and biotech industries.
6. To demonstrate entrepreneurship abilities, innovative thinking, planning, and setting up small-scale enterprises.

### Course Outcomes

On completion of the course, students are able to

COs	Course Outcomes	Blooms Level
CO1	Know the different components and chain link of sericulture industry.	Understand
CO2	Understand concepts of sericulture industry and demonstrate interdisciplinary skills acquired in mulberry plant cultivation and silkworm rearing.	Understand
CO3	laboratory and field skills in mulberry cultivation and silkworm rearing with an emphasis on technological aspects.	Create
CO4	To transfer the knowledge and technical skills to the Seri-farmers.	Understand
CO5	To analyze the environmental issues and apply in management of mulberry garden and silkworm rearing at field.	Analyze
CO6	Demonstrate comprehensive innovations and skills in improvement of mulberry and silkworm varieties for betterment of sericulture industry and human welfare.	Apply



## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	S	S	S	S	L	S	S
CO2	S	S	S	S	L	S	S
CO3	S	S	S	S	L	S	S
CO4	M	M	M	M	L	M	M
CO5	M	M	M	M	L	M	M
CO6	M	M	M	M	L	M	M

**S-Strong; M-Medium; L-Low**

### UNIT I

**(7 hours)**

Introduction to Sericulture - History of Sericulture – Sericulture organization in India, By products of silk industry. Mulberry and Non – mulberry silkworm types– Morphology and Life cycle of Bombyx mori,

### UNIT II

**(7 hours)**

Mulberry Cultivation: Mulberry Varieties – Methods of Irrigation –Nutrient Management and Weed control. Pruning and Harvesting – Crop improvement – Mechanism in Moriculture – Pest and Disease, deficiencies and symptoms in Mulberry.

### UNIT III

**(8 hours)**

Rearing of silkworm – Rearing Appliances – rearing operation. Harvesting and marketing of cocoons. Cocoon processing and reeling - Appliances used for reeling. Pre reeling process – Cocoon boiling. Reeling technology – re-reeling technology.

### UNIT IV

**(7 hours)**

Non – Mulberry Sericulture Scope of Non-mulberry Sericulture - Non-mulberry silk varieties and fauna, tasar, muga, eri – Silk Production and Marketing – Tropical tasar / muga – Morphology, anatomy grainage

### UNIT V

**(7 hours)**

Diseases of silkworm –Pebrine Protozoan, Flacherie bacterial, Nuclear Poly hedro sisviral and Muscardine fungal diseases. Pests of Silkworm.

## SUGGESTED READINGS:

1. Krisnamoorthy S., Improved Method of Rearing Young Age Silk Worms: Reprinted by CSB, Bangalore, 1986.
2. Tanaka Y., Sericology, CSB, Pub., Bangalore, 1964.
3. Ullal S.R., and Narasimhan M.N., Hand Book of Practical Sericulture, CSB, Bangalore, 1987.
4. Hisao Aruga, Principles of sericulture, Oxford and IBH Publishing Company, 1994.
5. Hrcrama Reddy, G. 1998. Silkworm Breeding, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi.

6. Otsuki et.al. 1987. Silkworm Egg Production (Translated from Japanese Language), Oxford wild IBH Publishing Co. Pvt. Ltd., New Delhi.
7. Yasuji Hamamura, 2001 Silkworm Rearing on Artificial Diet (Translated from Japanese Language), Oxford wild IBH Publishing Co. Pvt. Ltd., New Delhi.
8. Mahadevappa, D. Halliyal, V.G., Sankar, D.G and Bhandiwad, R. 2000. Mulberry Silk Reeling Technology, Oxford wild IBH Publishing Co. Pvt. Ltd., New Delhi.
9. Dandin, S.B et.al. 2003. Advances in Tropical Sericulture, National Academy of Sericulture Sciences India, Central Silk Board, Bangalore, India.
10. Ganga G., Sulochanachetty. J. An Introduction of Sericulture. Oxford, New Delhi – 1977.
11. Johnson M., and Kesary M., Sericulture, CSI Press, Marthandam, 2008.
12. Text Book of Tropical Sericulture, Pub., Japan Overseas Volunteers, 1975

**Instruction Hours / week: L: 0 T: 0 P: 0      Marks: Internal: 40 External: 60 Total: 100**

**COURSE OBJECTIVES:**

To make the students

1. To identify an issue to be analysed and to be solved in a business setup or real time scenario using primary or secondary data collection.
2. To understand the application of Research process in all functional areas.
3. To analyse the data and critically evaluate the result and formulate the suggestion for the problem identified.
4. To apply the theoretical and practical learning of doing research into lifelong practice.
5. To Communicate in oral and written form and prepare report
6. To enhance students knowledge in international culture and negotiation, where employability is made easy.

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Identify an issue to be analysed and to be solved in a business setup or real time scenario using primary or secondary data collection.	Remember
CO2	Understand the application of Research process in all functional areas.	Understand
CO3	Analyse the data and critically evaluate the result and formulate the suggestion for the problem identified.	Analyse
CO4	Apply the theoretical and practical learning of doing research into lifelong practice.	Apply
CO5	Develop Communication in oral and written form and prepare report	Apply
CO6	Understand the concept of organizational study	Understand

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1		<b>M</b>								
CO2		<b>M</b>							<b>L</b>	
CO3		<b>M</b>	<b>L</b>							
CO4		<b>M</b>								<b>L</b>
CO5				<b>M</b>						
CO6									<b>M</b>	<b>L</b>

**S-Strong; M-Medium; L-Low**

Students shall undergo a minimum of 30 working days (6 weeks) internship during the summer. The student has to select a manufacturing firm. Not more than one student should undergo an internship in one firm. The student should maintain an internship diary and fill in the completed duties and get the attestation from the reporting staff in the organization. The candidate shall bring the attendance certificate and completion certificate from the firm where the internship work carried out. On completion of the Internship work, he/she shall submit the report to the Head of the Department. The Internship Report prepared according to approved guidelines and duly signed by the supervisor(s) shall be submitted to HoD for *Viva-Voce* Exam.

Two reviews will be conducted by minimum three faculty inclusive of Guide, HOD and a HOD nominated faculty which carries equal weightage.

The Internship Report should contain

1. Title page
2. Declaration page
3. Certificate
4. Company Certificate
5. Table of contents
6. List of tables
7. List of Charts
8. Introduction to the Industry
9. Introduction to the Company
10. Organisation Chart
11. SWOT analysis and PEST Analysis
12. Product and Services offered
13. Financial Performance – Key indicators
14. Objective of the Internship
15. Department Analysis
  - a. Production
  - b. Marketing
  - c. HR
  - d. Finance
  - e. Other services department

In department analysis the student have to study on the department chart, No.of employees, Books and software databases maintained, Issues Found.

1. Key learning from the internship
2. Suggestions
3. Conclusion
4. Bibliography

## 5. Annexures

### **Guidelines :**

The report should have a minimum of 30 pages.

Times New Roman

Heading - 13 pts

Text – 12 Pts

One inch page border all sides line spacing.

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To learn about strategic planning in the corporate sector.
2. To analyze the environment and to identify opportunities and threat.
3. To understand the planning and evaluation techniques
4. To learn to apply quantitative and qualitative tools to evaluate and control
5. To know how to formulate the strategies for companies.
6. To understand Various approach to implementation of strategy

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Demonstrate a critical understanding of strategic management theories and apply lifelong.	Apply
CO2	Apply quantitative and qualitative tools to evaluate and control	Apply
CO3	Formulate appropriate strategies for companies.	Create
CO4	Demonstrate capabilities of problem-solving, critical thinking, team work and communication skills	Apply
CO5	Assess effectively strategic evaluation and control techniques	Evaluate
CO6	Understand the concept of Quantitative and Qualitative tools in Strategy Evaluation and Control.	Understand

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1			<b>M</b>							<b>L</b>
CO2			<b>M</b>							
CO3			<b>M</b>							
CO4			<b>M</b>							
CO5			<b>M</b>							
CO6			<b>M</b>							

**S-Strong; M-Medium; L-Low**

**UNIT I Strategic Management****(8 hours)**

Introduction, Fundamentals of Strategy, Conceptual Evolution of Strategy, Scope and Importance of Strategies, Purpose of Business, Difference between Goals and Objectives of Business, Strategic Intent through Vision and Mission Statements, Core Competencies of Business Strategic Management, Need, scope, key features and importance of strategic management, Role of Strategists in Decision Making, strategists at various management levels, Types of Strategies, Limitations of Strategic Management

**UNIT II Environment Analysis and Internal Analysis of Firm:****(8 hours)**

Introduction, Strategy Analysis and its Importance, Environmental Appraisal and Scanning Techniques, Organisational Position and Strategic Advantage Profile, Strategic Management Model

Challenges in Strategic Management: Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management in Various Situations, Strategic Management Implications and Challenges

**UNIT III Strategy Formulation:(8 hours)**

Introduction, Strategy Formulation, Process in Strategy Formulation, Strategy Implementation and its Stages, Reasons for Strategy Failure and Methods to Overcome, Strategy Leadership and Strategy Implementation, Strategic Business Units (SBUs)

Business Investment Strategies: Introduction, Business Plan and Business Venture, Business Investment Strategies

**UNIT IV Strategic Alliances:****(8 hours)**

Introduction, Strategic Alliances, Types of Strategic Alliances and Business Decisions, Problems Involved in Strategic Alliances

Concepts of Business Continuity Plan (BCP), Relevance and Importance of BCP, Steps in Business Continuity Plan, Business Impact Areas, BCP and its Influence on Strategic Management, BCP and its Influence on Policy Making, Contingency Planning

**UNIT V Strategic Control and Evaluation:****(8 hours)**

Introduction, Strategy Evaluation, Strategic Control, Difference Between Strategic Control and Operational Control, Concept of Synergy and its Meaning, Key Stakeholder's Expectations

Recent Trends in Strategic Management: Introduction, Strategic Thinking, Organisational Culture and its Significance, Organisational Development and Change, Change

Management, Models of Leadership Styles and its Roles, Strategic management in a new globalised economy. Managing technology and Innovation strategic issues for non-profit organization – New Business models and strategies for Indian Economy.

**Suggested Readings:**

1. AzharKazmi , Adela Kazmi (2015), Strategic management, 4th edition, McGraw Hill, New Delhi
2. Charles W.L. Hill , Gareth R. Jones, (2012), Strategic Management: An Integrated Approach, 9th edition, Cengage, New Delhi.
3. Fred R. David, Forest R. David, PurvaKansal (2018), Strategic Management Concepts: A Competitive Advantage Approach, 16th edition, Pearson Education, New Delhi.
4. John Pearce, Richard Robinson, AmitaMital (2017), Strategic Management: Formulation, Implementation and Control, 12th edition, McGraw Hill , New Delhi,
5. Barney/Hesterly (2015), Strategic Management and Competitive Adv: Concepts and Cases, 5th edition, Pearson Education, New Delhi.
6. Roman Pichler (2012), Agile Product Management with Scrum: Creating Products That Customers Love, Pearson Education, New Delhi.
7. Idris Mootee (2017), Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School, Wiley, New Delhi.

**E-Resources :**<https://nptel.ac.in/courses/110108047/>



**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of derivative, derivative types as a hedging tool and application of derivative in India.
2. To apply the derivative as a hedging tool.
3. To apply the understanding of derivative, derivative types as a hedging tool.
4. To understand Basic Principles of Option Trading
5. To know the Functions and Growth of Futures Markets and Futures Market Trading Mechanism
6. To understand the Regulation of Financial Derivatives in India

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the concept of derivative, derivative types as a hedging tool and application of derivative in India	Understand
CO2	Apply the understanding of derivative, derivative types as a hedging tool lifelong.	Apply
CO3	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, problem solving, planning and team work.	Apply
CO4	Explain about concepts of Bonds, Derivatives, Futures and Options management pertaining to investments	Under stand
CO5	Gain knowledge in Clearing, settlement and risk management in commodity trading	Under stand
CO6	Gain knowledge in Emerging Structure of Derivatives Markets in India	Understand

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3		M		M						
CO4			M							
CO5	M									
CO6							M			

**S-Strong; M-Medium; L-Low**

### UNIT I Derivatives

**(8 hours)**

Features of a Financial Derivative – Types of Financial Derivatives – Basic Financial derivatives – History of Derivatives Markets – Uses of Derivatives – Critiques of Derivatives – Forward Market: Pricing and Trading Mechanism Forward Contract concept – Features of Forward Contract Classification of Forward Contracts – Forward Trading Mechanism – Forward Prices Vs Future Prices.

### UNIT II Options and Swaps

**(8 hours)**

Concept of Options – Types of options – Option Valuation – Option Positions Naked and Covered Option – Underlying Assets in Exchange-traded Options – Determinants of Option Prices – Binomial Option Pricing Model – Black-Scholes Option Pricing – Basic Principles of Option Trading – SWAP: Concept, Evaluation and Features of Swap – Types of Financial Swaps – Interest Rate Swaps – Currency Swap – Debt Equity Swap.

### UNIT III Futures

**(8 hours)**

Financial Futures Contracts – Types of Financial Futures Contract – Evolution of Futures Market in India – Traders in Futures Market in India – Functions and Growth of Futures Markets – Futures Market Trading Mechanism – Specification of the Future Contract – Clearing House – Operation of Margins – Settlement – Theories of Future prices – Future prices and Risk Aversion – Forward Contract Vs. Futures Contracts.

### UNIT IV Hedging and Stock Index Futures

**(8 hours)**

Concepts – Perfect Hedging Model – Basic Long and Short Hedges – Cross Hedging – Basis Risk and Hedging – Basis Risk Vs Price Risk – Hedging Effectiveness – Devising a Hedging Strategy – Hedging Objectives – Management of Hedge – Concept of Stock Index – Stock Index Futures – Stock Index Futures as a Portfolio management Tool – Speculation and Stock Index Futures – Stock Index Futures Trading in Indian Stock Market.

## **UNIT V Financial Derivatives Market in India**

**(8 hours)**

Need for Derivatives – Evolution of Derivatives in India – Major Recommendations of Dr. L.C. Gupta Committee – Equity Derivatives – Strengthening of Cash Market – Benefits of Derivatives in India – Categories of Derivatives Traded in India – Derivatives Trading at NSE/BSE Eligibility of Stocks – Emerging Structure of Derivatives Markets in India -Regulation of Financial Derivatives in India – Structure of the Market – Trading systems – Badla system in Indian Stock Market – Regulatory Instruments.

### **SUGGESTED READINGS:**

1. John C. Hull , SankarshanBasu (2018), Options, Future & Other Derivatives, 10th edition, Pearson Education, New Delhi.
2. Don M. Chance, Robert Brooks , Sanjay Dhamija (2019), An Introduction to Derivatives and Risk Management, 10th edition, Cengage Learning.
3. Gupta S L (2017), Financial Derivatives : Theory, Concepts And Problems, 2nd Edition PHI Learning Pvt Limited,
4. Sundaram Das (2017), Derivatives Principles and Practice, 1st Edition, McGraw Hill Education,
5. T. V. Somanathan , V. Anantha Nageswaran , Harsh Gupta (2017), Derivatives, 2nd Edition, Cambridge University Press.
6. N R Parasuraman (2014), Fundamentals of Financial Derivatives, 3rd Edition , Wiley Publishing,

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the exchange rate movements, hedging using currency derivatives, and analyse the impact on international trade and investments
2. To comprehend on the basics of international financial markets, international financial options and foreign direct investments and its application.
3. To understand the concept of Management of Foreign Exchange Exposure
4. To know the Exchange rate movements, factors that influence exchange rates, movements in cross exchange rates and concepts of international arbitrage
5. To analyse the International capital structure, cost of capital and the capital structure of MNCs
6. To understand capital budgeting from parent firm's perspective and expecting the future expected exchange rate analysis

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the exchange rate movements, hedging using currency derivatives, and analyse the impact on international trade and investments	Understand
CO2	Comprehend on the basics of international financial markets, international financial options and foreign direct investments and its application in lifelong practice.	Apply
CO3	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO4	Develop knowledge on international financial institutions	Understand
CO5	Acquire knowledge on foreign trade.	Understand
CO6	Understand Financing of foreign trade and Documentation	Understand

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2	M									
CO3			M							
CO4				M						
CO5				M						
CO6				M						

**S-Strong; M-Medium; L-Low**

### **UNIT I International Financial Environment (8 hours)**

International Financial Environment, ‘Globalization’, Goals of International Financial Management.

Balance of Payments: concepts and principles of balance of payments and its various components. The Current Account Deficit and Surplus and Capital Account Convertibility.

### **UNIT II Exchange Rates and Currency Derivatives (8 hours)**

Exchange rate movements, factors that influence exchange rates, movements in cross exchange rates, concepts of international arbitrage, interest rate parity, and purchasing power parity and the International Fisher effect.

Currency Derivatives: forward markets and the different concepts, currency futures markets and currency options markets and functions.

### **Unit III Nature and Measurement of Foreign Exchange Exposure (8 hours)**

Nature and measurement of foreign exchange exposure. Types of exposures and the various types of translation methods.

Management of Foreign Exchange Exposure: concept of exposure forward and foreign exchange exposure, various tools and techniques of foreign risk management and the risk management products.

### **Unit IV International Capital Structure and International Capital Budgeting (8 hours)**

International capital structure, cost of capital, the capital structure of MNCs, cost of capital in segmented versus integrated markets.

Introduction of international capital budgeting, adjusted present value model, capital budgeting from parent firm’s perspective and expecting the future expected exchange rate analysis

**UNIT V Country Risk, International Taxation and FDI****(8 hours)**

Country Risk Analysis: country risk factors, assessment of risk factors. Techniques through which the country risks can be assessed as well as measured.

International Taxation: international tax system, principles of taxation, double taxation, tax havens and transfer pricing. International tax management strategy and Indian tax environment.

Foreign Direct Investment, International Portfolio and Cross- Border Acquisitions: flow, cost and benefits of Foreign Direct Investment. ADR and GDR, concept of portfolio, cases on cross border acquisitions.

**SUGGESTED READINGS:**

1. Paul R. Krugman, Maurice Obstfeld, Marc Melitz(2017), International Finance: Theory and Policy, Pearson Education.
2. Prakash. G. Apte (2017), International Finance: A Business Perspective, 2nd edition, McGraw Hill.
3. Cheol S. Eun, Bruce G. Resnick(2017), International Finance, 7th edition, McGraw Hill.
4. Rajiv Srivastava (2014), International Finance, 1st edition, Oxford University Press
5. V.A. Avadhani (2017), International Finance, Himalaya Publishing House.

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To understand Overview of Investment Company Industry
2. To apply the funding strategies applicable to Investment companies
3. To analyse and interpret the financial statements Operations.
4. To evaluate the results of tools applied in Investment Companies
5. To create the Capital Accounts and methods of computing Income of Investment Companies.
6. To Create the quality report of financial statements.

**COURSE OUTCOMES:****At the end of this course, Students will be able to**

Cos	Course Outcomes	Blooms Level
CO1	Understand Overview of Investment Company Industry.	Remembering
CO2	Apply the funding strategies applicable to Investment companies.	Apply
CO3	Analyse and interpret the financial statements Operations.	Evaluate
CO4	Create the Capital Accounts and methods of computing Income of Investment Companies.	Evaluate
CO5	Explain the tools and techniques for analysing the financial statement	Understand

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		S								
CO2			M							
CO3					M					
CO4				M						
CO5	M									

**S-Strong; M-Medium; L-Low**

## **Unit I - Overview of Investment Company Industry**

**(8 hours)**

Introduction: Meaning, Definition and Classification. Types of Investment Company - Fair Value ASC 820 - Organization Providing Services to Investment: The Investment Adviser - The Distributor - The Custodian - The Transfer Agent - The Administrator. Regulations - Financial Reporting to shareholders - Accounting Rules and Policies - Effective Date of Transaction.

## **Unit II -Investment companies and Fund**

**(8 hours)**

Investment companies and Fund – Overview: Fund Administration - Hedge Fund – Defining the Hedge Fund - Types of Hedge Fund - Private Equity Funds - Venture capital fund. Domestic and offshore Hedge fund – Hedge fund strategy – Size of the Hedge fund market – Reasons for Rapid Growth of Hedge fund industry – Market benefits of Hedge fund industry – Hedge fund in Different Jurisdictions: Units states of America.

## **Unit III - Investment Accounts and Financial Instruments**

**(8 hours)**

Investment Objectives and Policies - Operations and Controls. Accounting: Net Assets value per share - Basis of recording securities transactions - Valuing Investments - Valuation Techniques: The Present Value Techniques - The fair value Hierarchy. Money Market Funds - Accounting for foreign investments.

Financial Instruments: Money Market Instruments - Repurchase Agreement -U.S Government Securities: Treasury Bills - Notes and Bonds. Securities: Mortgages-Backed Securities - High Yield Securities.

## **Unit IV - Capital Accounts**

**(8 hours)**

Introduction - Operations and Controls - Accounting for Capital Structure Transactions and Distributions - Auditing Procedures -Complex Capital Structure: Operational and Accounting Issue - Financial Statement Preparation - Audit Consideration - Methods of Allocating Income, Fund- Level Expenses and Realized and Unrealised Gains/Losses - Methods of Computing Income Distributions per shares. Taxes : Introduction - Taxation of Regulated Investment Companies.

## **Unit V - Financial Statement of Investment Companies**

**(8 hours)**

Financial Statement Introduction - Comparative Financial Statement- Schedule of Investments - Statement of Operations - Financial reporting - Common fund- Categories: Legal Structure and Investment types. Income statement- Integrated reporting – equity transactions- Income measurement. Fund GAV and NAV, IRR - Capital subscription, distribution, commitments - Distribution of waterfall and Management fees - Financial statements for funds / investment companies - SAL, SOP, SOC, SCF, SOI, FiHi.



## **SUGGESTED READINGS**

1. Sanjay Dhamija , “ Financial Reporting and Analysis”, SULTAN CHAND & SONS Educational Publishers New Delhi, First Edition : 2020.
2. Deepa Agarwal (2018), The Law & Practice of Financial Reporting and Auditor’s Responsibilities under Companies Act, 2013,1st edition, Bloomsbury Professional India, New Delhi
3. Deepa Agarwal (2017), Financial Reporting and Auditors Responsibility, 2nd edition, Bloomsbury Professional India, New Delhi.
4. M.S Narasimhan (2016), Financial Statement Analysis, 1st Edition, Cengage Learning India Private Limited, New Delhi.
5. Lawrence Revsine , Daniel Collins , Bruce Johnson , Fred Mittelstaedt , Leonard Soffer (2015), Financial Reporting and Analysis, 6th Edition, McGraw-Hill Education, New Delhi.
6. Subramanyam, K. R. and John, J.W.(2014), “Financial Statement Analysis”, 10 th Edition, Tata McGraw Hill, New Delhi.
7. Stephen H. Penman(2014) “Financial Statement Analysis and Security Valuation”, 4th Edition, Tata McGraw Hill, New Delhi.
8. Charles H. Gibson (2013), Financial Statement Analysis, 13th edition, Cengage Learning India Private Limited, New Delhi.

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To equip the students with the various dimensions of product management such as Brand Positioning and its Preference.
2. To develop familiarity and competence with the strategies
3. To understand the tactics involved in building, leveraging and defending strong brands in different sectors.
4. To equip the students with the various dimensions of product management such as Brand Positioning and its Preference.
5. To understand the concepts of Branding
6. To develop knowledge on Packaging and Labeling.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand what a product is, the various levels which make it up, and different types of products	Understand
CO2	Explain the concept of Branding of a product, concepts related to branding, its types,	Apply
CO3	Apply the learnt knowledge on packaging, labeling, brand rejuvenation, success strategies that are inculcated in this course	Apply
CO4	Assess alternative business models of Brands	Evaluate
CO5	Understand how products can be classified, and the nature of the product line and product mix	Understand
CO6	Demonstrate Brand valuation and Building global brands	knowledge

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	M						S	
CO2		M						D
CO3			M		S			S
CO4	M			M			S	
CO5			S		M			S
CO6	M						S	

**S-Strong; M-Medium; L-Low**

#### Unit I

**(8 hours)**

Products - Concepts - New Product Development – Strategies - Launching Strategies, Portfolio Management - BCG, GE, Porter's Model, Competitor's Analysis, Customer Analysis, Market potential, Product Demand pattern and Trend Analysis.

#### Unit II

**(8 hours)**

The Concept of Brands - The Economic Importance of Brands - The Social and Political Aspects of Brands - Difference between Marketing and Branding - Changing Rules of Marketing and Branding in India - Digital Dimension, Consumer Activism, Leveraging Technology

#### Unit III

**(8 hours)**

Introduction to Brand Positioning: The 4Ps – An Inherently Futuristic Model - 4Ps in the IT Age - Brand Positioning - Fundamentals of Brand Positioning - First Movers - Mistakes in Brand Positioning – Introspection - Gaining Brand Preference.

#### Unit IV

**(8 hours)**

The Brand Relevance Model: The First Mover Advantage - Managing a New Category - The Different Levels of Innovation - Understanding Brand Relevance – Categorization - Creating New Categories or Subcategories — Four Tasks - How Categorization Affects Information Processing and Attitudes

#### Unit V

**(8 hours)**

Packaging – Labeling - Brand Rejuvenation - Brand Success strategies - Brand Resilience - Brand Equity - Brand valuation - Building global brands - Branding failures.

### Suggested Readings:

1. Lehmann., and Winner. (2004). *Product Management*. New Delhi: Tata McGraw Hill.
2. Venugopal., K. (2010). *Product and brand management*. New Delhi: Himalaya Publishing House.
3. Subroto Sengupta. (2005). *Brand Positioning*. New Delhi: Tata McGraw Hill Education Private Limited.
4. David Aaker. (2011). *Brand Relevance – Making Competitors Irrelevant*. Jossey Bass.
5. Hamel, G., and Prahalad, C.K. (1994). *Competing for the Future*. Boston: Harvard Business School Press.
6. Kartikeya Kompella, (2006). *Building Brands: A guide to increasing the financial value of brands*. Viva Books Private Limited.

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To understand the basic Principles of selling and distribution management.
2. To design and forecast sales and sales budget.
3. To formulate strategies to manage the sales force team.
4. To understand the different distribution channels.
5. To give a broad understanding on Sales Management and its implications.
6. To identify the role of sales force management in the organization

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Understand the basic Principles of selling and distribution management.	Apply
CO2	Design and forecast sales and sales budget.	Apply
CO3	Formulate strategies to manage the sales force team.	Understand
CO4	Understand the different distribution channels.	Apply
CO5	Demonstrate capabilities of teamwork, critical thinking, and communication skills related to selling and distribution management.	Apply
CO6	Gain knowledge in designing channel systems and channel management	knowledge

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	M						S	
CO2		M						D
CO3			M		S			S
CO4	M			M			S	
CO5			S		M			S
CO6	M						S	

**S-Strong; M-Medium; L-Low**

**UNIT I Sales Management****(8 hours)**

Sales Management - Introduction, Objectives, Role of Sales Management in Marketing, Nature and Responsibilities of Sales Management, Careers in Sales Management, Modern Roles and Required Skills for Sales Managers

Understanding Personal Selling - Introduction, Objectives, Approaches to Personal Selling, Process of Personal Selling.

**UNIT II Sales Territories and Quotas****(8 hours)**

Designing Sales Territories, Sales quotas and sales organisation structures, Sales Forecasting and Developing Sales Budgets

**UNIT III Sales Force Management****(8 hours)**

Recruitment and selection of sales force, Reinforcing a Sales Training Program, Motivating a Sales Force and Sales Force Compensation , Controlling the sales force

**UNIT IV Channel Management****(8 hours)**

Marketing Channels, Designing Channels, Selection and Recruitment of Channel Partners, Channel Relationships Management, Channel Evaluation, Information Systems for Channels.

Wholesaling-Introduction, Functions of Wholesalers, Types of Wholesalers, Future of Wholesaling

Retailing - Introduction, Origin of Retailing, Scope of Retailing, Retailing Scenario: An Overview, Retailing: Importance and Success Factors, Retail Formats

**UNIT V Distribution Management and New Trends (8 hours)**

Indian Distribution Scenario at Present, Vertical Marketing System, Horizontal and Multi-Channel Marketing Systems, Understanding Distribution of services.

Sales Management Information System, Relationship Marketing, Role of E-commerce in Selling, International Sales Management, Challenges Faced by International Sales Managers

**SUGGESTED READINGS:**

1. Krishna K. Havaladar, Vasant M. Cavale(2017), Sales and Distribution Management, 3rd edition, McGraw Hill.
2. Richard R. Still, Edward W. Cundiff , Norman A. P. Govoni, Sandeep Puri, (2017), Sales and Distribution Management, 6th edition, Pearson Education,
3. Tapan K. Panda, Sunil Sahadev(2011), Sales and distribution Management, 2nd edition, Oxford University Press
4. Pingali Venugopal(2008), Sales and Distribution Management: An Indian

Perspective, 1st edition, Sage Texts.

5. Ramendra Singh(2016), Sales and Distribution Management, Vikas Publishing.
6. Nag(2017), Sales and Distribution Management, 1st edition, McGraw Hill.

**E-resources:**

- <https://nptel.ac.in/courses/110/105/110105122/>
- <https://nptel.ac.in/courses/110/104/110104117/>

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concept of International marketing environment and the international market entry modes
2. To comprehend the 4Ps of marketing in international perspective.
3. To formulate marketing strategies appropriate for international marketing of products and services.
4. To have an exposure in international marketing management concept
5. To understand the international marketing management and market segmentation.
6. To know the process of promoting the product in the international market

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the concept of International marketing environment and the international market entry modes and apply lifelong	Understand
CO2	Comprehend the 4Ps of marketing in international perspective.	Apply
CO3	Formulate marketing strategies appropriate for international marketing of products and services.	Understand
CO4	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO5	Understand about the various disciplines contribution in understanding buyer behaviour in a holistic manner familiar with the advances in International marketing	Understand
CO6	Acquire knowledge to analyze consumers behaviour and use them in designing marketing strategies	knowledge



### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PSO1	PSO2
CO1	M						S	
CO2		M					M	
CO3			M		S			S
CO4	M			M			S	
CO5			S		M			M
CO6	M						S	

**S-Strong; M-Medium; L-Low**

#### **UNIT I Introduction to International Marketing (8 hours)**

Introduction, Scope of International Marketing, International Marketing vs. Domestic Marketing, Principles of International Marketing, Customer value and the value equation, Competitive or differential advantage, Management Orientations, MNCs and TNCs, Benefits of international marketing.

#### **UNIT II International Market Environment (8 hours)**

International Marketing Environment : Introduction, Political Environment, Political systems, legal and Regulatory Environment, Socio-cultural Environment, Economic Environment, Technological Environment, Challenges in Global Marketing.

International Marketing Research Introduction, Concept of Marketing Research, Need for Marketing Research, Approach to Marketing Research, Scope of International Marketing Research, International Marketing Research Process, market surveys, marketing information system

International Market Entry Strategies Introduction, Different Entry Modes and Market Entry Strategies, joint Ventures, Strategic Alliances, Direct Investment, Manufacturing and Franchising.

#### **UNIT III International Product Policy and Planning (8 hours)**

International Product Policy and Planning : Introduction, Products: National and International, the new Product Development, International Product Planning, Product Adoption and Standardization, International Market Segmentation, Influences on Marketing Plan and Budget, International Product Marketing, Marketing of Services

#### **UNIT IV International Pricing Policy: (8 hours)**

International Pricing Policy: Introduction, Price and Non-Price Factors, Methods of Pricing, International Pricing Strategies, Dumping and Price Distortion, Counter Trade

**UNIT V International Promotional Strategies & Legal and Ethical Issues in International Marketing (8 hours)**

International Promotional Strategies Introduction, Communications Process, principles of communication, Status of Promotion, Promotion Appeals, Media Selection, Personal Selling, Public Relations and Publicity, Sales Promotion, advertising, e-marketing

Legal and Ethical Issues in International Marketing Introduction, Nature of International Business Disputes and Proposed Action, Legal Concepts Relating to International Business, International Dispute Settlement Machinery, ethical Consideration in International Marketing and Marketing Communications.

**SUGGESTED READINGS:**

1. Philip R. Cateora, Mary C. Gilly, John L. Graham(2017), International Marketing, McGraw Hill
2. Srinivasan R. (2016), International Marketing, 4th edition, PHI Learning Private Limited
3. Warren J. Keegan (2017), Global Marketing Management, 8th edition, Pearson Education.
4. Rakesh Mohan Joshi(2014), International Marketing, 2nd edition, Oxford University Press
5. J. Keegan Warren (Author), C. Green Mark (2018), Global Marketing, 9th edition, Pearson Education

**23MBAPH402A INDUSTRIAL RELATIONS AND LABOUR  
WELFARE****4H-3C****Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:**

To make the students

1. To comprehend on industrial relations, industrial conflicts, employee discipline, collective bargaining and industrial safety.
2. To apply the legal aspects of industrial relations, industrial conflicts, employee discipline, collective bargaining and industrial safety lifelong.
3. To learn about industrial relations concept and objectives.
4. To know about the industrial conflict and handling the disputes.
5. To know about the different types of labor.
6. To understand Procedure for taking disciplinary action, Indian law on punishment

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>Cos</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Comprehend on industrial relations, industrial conflicts, employee discipline, collective bargaining and industrial safety.	Understand
CO2	Apply the legal aspects of industrial relations, industrial conflicts, employee discipline, collective bargaining and industrial safety lifelong.	Apply
CO3	Demonstrate capabilities of analysing problems, team work and communication skills.	Understand
CO4	To adapt the knowledge of Industrial safety, Occupational hazards	Create
CO5	Demonstrate knowledge of Statutory welfare measures – Welfare Funds – Education and training schemes	Understand
CO6	Compose the Education and training schemes	Create

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1		M					M			
CO2		M								
CO3		M								
CO4	M	M								
CO5	M	M								
CO6		M								

**S-Strong; M-Medium; L-Low**

### UNIT I Industrial Relations

**(8 hours)**

Industrial Relations: Concept, Scope, Approaches, Industrial Relations System. Workers participation in Management, Code of discipline, Tripartite bodies, ILO. Trade Unions: Meaning, Objectives, Functions, Theories, Structure of Trade Unions. Trade Union Movement in India.

### UNIT II Industrial Safety

**(8 hours)**

INDUSTRIAL SAFETY - Causes of Accidents – Prevention – Safety Provisions – Industrial Health and Hygiene – Importance – Problems – Occupational Hazards – Diseases – Psychological problems – Counseling – Statutory Provisions.

INDUSTRIAL CONFLICTS -Disputes – Causes – Strikes – Prevention – Industrial Peace – Government Machinery – Conciliation – Arbitration – Adjudication.

### UNIT III Labour legislation

**(8 hours)**

Factories Act, 1948 – Health – Safety - Welfare, Employees State Insurance Act, 1948; Workmen's Compensation Act, 1923.

### UNIT IV Trade union Acts, Industry disputes and Wages Act

**(8 hours)**

Trade Unions Act, 1926; Industrial Disputes Act, 1947. Minimum Wages Act, 1948; Payment of Wages Act, 1936; Payment of Bonus Act, 1965.

### UNIT V Labour Welfare

**(8 hours)**

Meaning, Definition, Scope, Theories, Principles and approaches. Statutory and Non – Statutory labour welfare : Intra – mural and extra – mural welfare. Child Labour – Female Labour – Contract Labour Differently abled Labour

## SUGGESTED READINGS:

1. Piyali Ghosh, Shefali Nandan (2017), Industrial Relations and Labour Laws, 1st edition, McGraw Hill, New Delhi.
2. P.R.N. Sinha, Sinha InduBala, Shekhar Seema Priyadarshini (2017), Industrial Relations, Trade Unions and Labour Legislation, 3rd edition, Pearson education,

New Delhi.

3. Mamoria, C.B., and Sathish Mamoria. (2016). Dynamics of Industrial Relation. New Delhi: Himalaya Publishing House.
4. Arun Monappa, Ranjeet Nambudiri, Patturaja Selvaraj (2017), Industrial Relations and Labour Laws, 2<sup>nd</sup> edition, McGraw Hill, New Delhi.
5. C.S. Venkata Ratnam & Manoranjan Dhal (2017), Industrial Relations, 2<sup>nd</sup> edition, Oxford University Press, New Delhi.

### **E-Resources**

- [https://nptel.ac.in/content/storage2/nptel\\_data3/html/mhrd/ict/text/122105020/lec12.pdf](https://nptel.ac.in/content/storage2/nptel_data3/html/mhrd/ict/text/122105020/lec12.pdf)
- <https://www.youtube.com/watch?v=6J-VvleH06k>
- <https://www.youtube.com/watch?v=Y4XHzX5VE7g>

**23MBAPH402B STRATEGIC HUMAN RESOURCE  
MANAGEMENT****4H - 3C****Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the transformation in the role of HR functions from being a support function to strategic function and apply lifelong.
2. To explore the relationship between the management of people and pursuit of an organisations strategic goals and objectives.
3. To understand the HR Management and system at various levels in general and in certain specific industries or organizations.
4. To make aware of the concepts, techniques and practices of human resource development
5. To analyse the issues and strategies required to select and develop manpower resources
6. To develop relevant skills necessary for application in HR related issues

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the transformation in the role of HR functions from being a support function to strategic function and apply lifelong.	Understand
CO2	Explain the relationship between the management of people and pursuit of an organisations strategic goals and objectives.	Evaluate
CO3	Asses the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, problem-solving, planning and team work.	Evaluate
CO4	To apply the appropriate employee relations measures and strategic HRM Concept	Apply
CO5	Understand the HRM functions and latest developments in the field of HR and effectively communicate ideas, explain procedures and interpret results and solutions in written and	Understand

	oral forms to different audiences	
CO6	Gain knowledge in reward strategy and employee relations strategy	Understand

### MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1		M								
CO2		M								
CO3		M					M			
CO4							M			
CO5		M						M		
CO6		M								

**S-Strong; M-Medium; L-Low**

### UNIT I The Conceptual Framework of Strategic HRM

**(8 hours)**

HRM defined, Human resource systems, Aims of HRM, Characteristics of HRM, Reservations about HRM,

The concept of strategy - Strategy defined, The concept of strategy, The formulation of strategy, The concept of strategic human resource management, Strategic HRM defined, Basis of strategic HRM, Principles of strategic HRM, Aims of strategic HRM, Concepts of strategic HRM, Perspectives on strategic HRM, The best-practice approach, The best-fit approach, Bundling, The reality of strategic HRM, Practical implications of strategic HRM theory.

### UNIT II The Practice of Strategic HRM

**(8 hours)**

HR strategies –Overview of HR strategies, Specific HR strategies, Criteria for an effective HR strategy, How should HR strategies be developed? Developing HR strategies, Implementing HR strategies, The strategic role of HR, The strategic nature of HR, The strategic partner model, What being strategic means, The strategic role of HR directors, The strategic role of heads of HR functions, The strategic role of HR business partners, The strategic contribution of HR advisers or assistants, The impact of strategic HRM, How HR impacts on organizational performance, How strategic HRM concepts impact on practice, Strategic HRM in action, Formulating HR strategy, The content of HR strategies, Corporate issues, Achieving integration, What are the most characteristic features of strategic HRM in action?

### UNIT III Employee resourcing strategy and Talent Management strategy(8 hours)

The objective of employee resourcing strategy, The strategic HRM approach to resourcing, Integrating business and resourcing strategies, Bundling resourcing strategies

and activities , The components of employee resourcing strategy, Human resource planning, Employee value proposition, Resourcing plans

Talent management strategy- Talent management defined, The process of talent management. Developing a talent management strategy Retention strategy, Flexibility strategy

#### **UNIT IV Employee engagement strategy and learning and development strategy**

**(8 hours)**

Employee engagement strategy - Engagement and organizational commitment, the significance of engagement, Engagement and discretionary behaviour, What is an engaged employee? What are the factors that influence engagement? Strategies for enhancing engagement, measuring engagement

Learning and development strategy, Strategic human resource development (SHRD) Strategies for creating a learning culture, Organizational learning strategies, Learning organization strategy, Individual learning strategies.

#### **UNIT V Reward strategy and Employee Relations Strategy**

**(8 hours)**

Reward strategy defined, Why have a reward strategy, Characteristics of reward strategies, The structure of reward strategy, The content of reward strategy, Guiding principles, Developing reward strategy, Effective reward strategies, Reward strategy and line management capability.

Employee relations strategy, Employee relations strategy defined, Concerns of employee relations strategy, Strategic directions, The background to employee relations strategies, The HRM approach to employee relations, Policy options, Formulating employee relations strategies, Partnership agreements, Employee voice strategies

#### **SUGGESTED READINGS:**

1. Michael Armstrong (2011), Armstrong's Handbook of Strategic Human Resource Management, 5th edition, Kogan Page.
2. Jeffrey A Mello (2012), Strategic Management of Human Resources, 3rd edition, Cengage Learning, New Delhi.
3. Randall S Schuler and Susan E Jackson (2008), Strategic Human Resource Management, 2nd edition, Wiley India.
4. Michael Armstrong (2006), Strategic Human Resource Management: A Guide to Action, 3rd edition, Kogan Page.
5. GREER (2002), Strategic Human Resource Management: A General Managerial Approach, 2nd edition, Pearson Education, New Delhi.
6. RajibLochanDhar (2010), Strategic Human Resource Management, Excel Books.



**23MBAPH402C INTERNATIONAL HUMAN RESOURCE  
MANAGEMENT****4H - 3C****Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

- To understand the concept of International Human resource management, staffing, training and industrial relation pertaining to international work force management and apply the learning lifelong.
- To formulate recruitment, training policies pertaining to international human resource management.
- To understand the concepts and practical implications of performance management, Training methods and career planning International HRM.
- To know about compensation and reward management and its practice of International HRM in industry
- To be familiar with Employee relations and its application for the development of International HRM
- To understand the Current scenario in international training and development

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the concept of International Human resource management, staffing, training and industrial relation pertaining to international work force management and apply the learning lifelong.	Understand
CO2	Formulate recruitment, training policies pertaining to international human resource management.	Create
CO3	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Understand
CO4	Asses the dynamic relationship between strategy, people, technology, and the processes that drive organizations.	Evaluate
CO5	Gain knowledge in Emerging Trends and Perspectives in	Understand

	HRMCrossCulturalDimensions	
CO6	Compile the details of International HRM concepts to take correct business decisions	Create

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POS1	POS2
CO1		M								M
CO2	M									
CO3		M								
CO4							M			
CO5		M					M			
CO6							M			M

**S-Strong; M-Medium; L-Low**

### UNIT I International Human Resource Management

**(8 hours)**

An Overview, Introduction and Concepts in International Human Resource Management, Developments leading to International HRM Perspectives, International Human Resource Management

Models of IHRM-Matching model, Harvard Model, Contextual Model, 5P Model European Model. SHRM: Evolution of MNE's, Business strategies, IHRM Strategies, SIHRM. Barriers in effective global HRM. Socio-cultural context, Organizational dynamics and IHRM:

Role of culture in International HRM, Country and Regional Cultures, Country Culture versus MNE Culture. Culture and employee management issues/ impact of Country culture on IHRM

### UNIT II Staffing Practices in International Human Resource Management (8 hours)

International Workforce planning and staffing: International labour market International Recruitment function; head-hunters, cross-national advertising, e-recruitment; International staffing choice, different approaches to multinational staffing decisions, Types of international assignments, Selection criteria and techniques, use of selection tests, interviews for international selection, international staffing issues, Successful expatriation, role of an expatriate, female expatriation, repatriation, re-entry and career issues.

### **UNIT III Industrial Relations and Strategic HRM**

**(8 hours)**

International Practices in Industrial Relations, Shifts in IHRM and IR, International Strategic Human Resource Management, International Labour Standards, Global Unions, Regional Integration and Framework Agreements, HR/IR issues in MNCs and Corporate Social Responsibility

### **Unit IV Developing Global Mindset**

**(8 hours)**

Global Leadership, Cross cultural context and international assignees, Current scenario in international training and development, training & development of international staff, types of expatriate training, sensitivity training, Career Development, repatriate training, developing international staff and multinational teams, knowledge transfer in multinational companies.

### **Unit V International Workforce and International HRIS**

**(8 hours)**

Working with multicultural and ethnic groups, Health and safety and International Assignees, Crisis Management, Global HR Shared Services, Managing HR in virtual organization.

Emerging trends in International HRM, Sensitivity to Cultural Diversity, Global Organisation Structures, Emerging Trends in Employee Relations and Employee Involvement, Convergence or divergence in personnel management in developed and developing economies, International HRM and Strategic Research

**HRIS:** Meaning, Role of IT in HR, Designing of HRIS, Applications of HRIS in Employee Management, Limitation of HRIS.

### **SUGGESTED READINGS:**

1. Dowling, Peter J., Marion Festing, and Allen D. Engle (2017). International Human Resource Management, 7<sup>th</sup> edition, Cengage Learning
2. Aswathappa, K. and Sadhana Dash (2017), International Human Resource Management, 2<sup>nd</sup> edition, McGraw-Hill
3. Edwards, Tony and Chris Rees (2007), International Human Resource Management, 1<sup>st</sup> edition,; Pearson Education.
4. Srinivas R. Kandula(2018), International Human Resource Management,1st edition, SAGE Texts.
5. Anne-Wil Harzing , Ashly Pinnington(2017), International Human Resource Management, 4th edition, SAGE Texts.

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To Understand the principles, methods and techniques of systems development
2. To Comprehend on the problems relating to systems development.
3. To understand and apply the various stages of a phased systems analysis method
4. To apply the tools for designing and analyzing the software required.
5. To provides practical knowledge on security aspects of system.
6. To describe the concepts of systems analysis and information systems development

**COURSE OUTCOMES**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the principles, methods and techniques of systems development	Understand
CO2	Recognize the problems relating to systems development.	Knowledge
CO3	Understand and apply the various stages of a phased systems analysis method	Understand
CO4	Identify the tools for designing and analyzing the software required.	Knowledge
CO5	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO6	Recognize System Implementation	Knowledge

**MAPPING WITH PROGRAMME OUTCOMES**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1			M							
CO2				S						
CO3					M					
CO4		L								
CO5	M									
CO6			L							

**S-Strong; M-Medium; L-Low**

### **UNIT I System**

**(8 hours)**

System - Definition - Types of Systems, Delineating Systems, Products, and Tools, Precedented versus Unprecedented Systems: Analytical Representation of a System: Systems that require engineering Data and Information -Types of information: operational, tactical, strategic and statutory Project Team Skills and Roles: Skills and Roles of a Project Team, Business Analyst, Systems Analyst, Infrastructure Analyst, Change Management Analyst, Project Manager

### **UNIT II The Architecture of Systems and SDLC**

**(8 hours)**

Introduction: Introducing the System Architecture Construct: Introduction of the System Elements: Understanding System Element Entity Relationships: Guiding Principles:The Systems Development Life Cycle: Feasibility: Analysis: Planning and Design: Implementation: Testing, Maintenance. Requirements determination, requirements specifications, Feasibility analysis, final specifications, hardware and software study, Role of systems analyst – attributes of a systems analyst – tools used in system analysis

### **UNIT III System Design**

**(8 hours)**

System design, system implementation, system evaluation, system modification, Structured Design, Input design, and Output design, Form Design. Systems Development Methodologies: Rapid Application Development, Newer (current) methodologies, selecting the Appropriate Development MethodologyData oriented systems design: Entity relationship model – E-R diagrams – relationships cardinality and participation – normalizing relations – various normal forms and their need – some examples of relational data base design.Object oriented systems modelling: What are objects? – Why objects? – Objects and their properties – classes – inheritance – polymorphism – how to identify objects in an application – how to model systems using objects – some cases of object oriented system modeling

### **UNIT IV System Analysis**

**(8 hours)**

Introduction to System analysis, Problem Definition, Information requirements, Information gathering tools, Tools of structured Analysis – Data Flow Diagrams, Data Dictionary, Decision Tree, Decision tables and structured English., File Organization, Sequential Indexed Sequential, Chaining and Inverted list organization. System Testing: Test Plan AND test data, types of system test.

### **UNIT V System Implementation**

**(8 hours)**

Implementation Plan, activity network for conversion, combating resistance to change.  
Hardware/Software Selection: Procedure for selection, Major phases in selection, Make v/s buy decision, Criteria for software selection.

### **SUGGESTED READINGS**

1. Hoffer et.al (2011), Modern Systems Analysis and Design, 6th Edition, Pearson Education.
2. Goyal A (2011), Systems Analysis and Design, Prentice Hall India Learning Private Limited
3. Seppo J. Ovaska Phillip A. Laplante(2013), Real-Time Systems Design and Analysis: Tools for the Practitioner, 4th edition, Wiley India.
4. Kendall and Kendall(2015), Systems Analysis and Design, 9th edition, Pearson Education.

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concepts of Knowledge Management
2. To understand and apply the tools used for capturing tacit knowledge and learning from the captured knowledge lifelong.
3. To acquainted with the recent trends and developments in technology which covers Key Challenges Facing the Evolution of Knowledge Management and knowledge management aspects.
4. To understand Telecommunications and Networks in Knowledge Management
5. To know the Future of Knowledge Management and Protecting Intellectual Property
6. To understand the Information Mapping in Information Retrieval

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Recognize the concepts of Knowledge Management	Knowledge
CO2	Understand and apply the tools used for capturing tacit knowledge and learning from the captured knowledge lifelong.	Understand
CO3	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Apply
CO4	Understand Business strategies related to Knowledge Management	Understand
CO5	Identify knowledge in Transformation of an enterprise through Knowledge Management	Knowledge
CO6	Do Knowledge Creation and Codification	Knowledge

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1			M							
CO2				S						
CO3					M					
CO4		L								
CO5	M									
CO6			L							

**S-Strong; M-Medium; L-Low**

### UNIT I Technologies to Manage Knowledge

**(8 hours)**

Knowledge Management - The foundations of knowledge management- including cultural issues- The Evolution of Knowledge management: From Information Management to Knowledge Management - Key Challenges Facing the Evolution of Knowledge Management - Ethics for Knowledge Management.

Technologies to Manage Knowledge: Artificial Intelligence and Understanding Knowledge: Cognitive Psychology , Data, Information and Knowledge , Kinds of Knowledge, Expert Knowledge, Thinking and Learning in Humans , Knowledge vs Intelligence, dumb search, Heuristic search in Knowledge-Based Systems, Knowledge Based Systems for KM,

### UNIT II Creating the Culture Of Learning

**(8 hours)**

Organization and Knowledge Management - Building the Learning Organization. Knowledge Markets: Cooperation among Distributed Technical Specialists – Tacit Knowledge and Quality Assurance.

Capturing the Tacit Knowledge: Expert Evaluation, Developing Relationship with Experts , Fuzzy Reasoning & Quality of Knowledge Capture , Interviewing as a Tacit Knowledge Capture Tool

### UNIT III Knowledge Management Tools

**(8 hours)**

Telecommunications and Networks in Knowledge Management - Internet Search Engines and Knowledge Management - Information Technology in Support of Knowledge Management - Knowledge Management and Vocabulary Control - Information Mapping in Information Retrieval - Information Coding in the Internet Environment - Repackaging Information.

On-Site Observation (Action Protocol) , Brainstorming, Electronic Brainstorming, Protocol Analysis (Think-Aloud Method) , Consensus Decision Making, Repertory Grid ,Nominal Group Technique (NGT) , Delphi Method ., Concept Mapping, Blackboarding .



#### **UNIT IV Knowledge Creation and Codification**

**(8 hours)**

Knowledge Creation & Knowledge Architecture: Knowledge Creation, Nonaka's Model of Knowledge Creation & Transformation, Knowledge Architecture, Acquiring the KM System.

Modes of Knowledge Conversion, Codifying Knowledge, Codification, Tools/Procedures Knowledge Maps, Decision Table, Decision Tree, Frames, Production Rules, Case-Based Reasoning, Knowledge-Based Agents, Knowledge Developer's Skill Set, Knowledge Requirements, Skills Requirements.

#### **UNIT V Learning from Data**

**(8 hours)**

Learning from Data: The Concept of Learning, Data Visualization, Neural Network (Artificial) as Learning Model, Supervised/Unsupervised Learning, Applications in Business, Relative Fit with KM, Association Rules, Classification Trees.

Discovering New Knowledge – Data Mining: Objectives of Data Mining, Classical statistics & statistical pattern recognition, Induction of symbolic rules, Induction trees, Artificial Neural Networks, Supervised Learning: Back Propagation, Unsupervised Learning: Kohonen Network, The Future of Knowledge Management, Protecting Intellectual Property (IP)

#### **SUGGESTED READINGS**

1. Awad Elias M (2011), Knowledge Management, 2nd edition, Prentice Hall India Learning Private Limited
2. Hislop (2013), Knowledge Management in Organizations, Oxford University Press
3. Sheldadebowski(2007), Knowledge Management, Wiley India.
4. B. Kar(2018), Knowledge Management - New Horizons, 1st edition, Viva Books Private Limited
5. Ulla De Stricker (2014), Knowledge Management Practice in Organizations (Advances in Knowledge Acquisition, Transfer, and Management), Idea Group, U.S.

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

- To understand the fundamental concept of a decision support system (DSS) and its effects on management.
- To know about the process of managerial decision making and components of modeling.
- To study about the key components' of DSS and their purpose in decision making.
- To examine user interface decision issues and evaluate the user interface and capabilities of decision support system.
- To study about the process of developing decision support system.
- To understand how it supports the manager in the decision making process.

**COURSE OUTCOMES**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	To explain concept of a decision support system and its effect on industry 4.0.	Knowledge
CO2	To identify decision factors, models and analysis decision support system to support a smart production system.	Knowledge
CO3	To relate techniques of DSS and validate DSS techniques to solve a complex industrial problems.	Understand
CO4	To understand the term of an interactive system providing information tool and interface	Understand
CO5	To appraise the framework of DSS and design a knowledge based system for a decision making.	Evaluate
CO6	To recognize how to implement the Decision making process	Understand

## MAPPING WITH PROGRAMME OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1			M							
CO2				S						
CO3					M					
CO4		L								
CO5	M									
CO6			L							

**S-Strong; M-Medium; L-Low**

### UNIT I

**(8 hours)**

Introduction: Decision concept – Steps – Decision Support System – Components – Characteristics – Classifications and Applications.

### UNIT II

**(8 hours)**

Model Management: Model – Modeling Process – Types of Models – Optimization – Simulation – Heuristic: Descriptive – Predictive Model Base – Modeling Languages – Model Directory, Model Base Management System – Model Execution, Integration and Command Processing – Model Packages.

### UNIT III

**(8 hours)**

Data Management System: Data Base – Sources of Data – Data Directory – Data Structure and Data Base Languages – Query Facility – Data Management System – DBMS as DSS Development Tool.

### UNIT IV

**(8 hours)**

Dialog Management: User Interface – Graphics – Multimedia – Visual Interactive Modeling – Natural language processing – Speech Recognition and Understanding – Issues in User interface.

### UNIT V

**(8 hours)**

Development of Decision Support System: Development Process – Software and Hardware; Data Acquisition – Model Acquisition – Dialog development – Integration – Testing and Validation – Training and Implementation.

## SUGGESTED READINGS

1. Janakiraman, V.S. and Sarukesi, Decision Support Systems, 2ndEdition, PHI Learning, 2009.
2. Marakas, G.M., Decision Support Systems in the 21st century, 2ndEdition, PHI Learning, 2009.

3. Sauter, V., Decision Support Systems for Business Intelligence, 2ndEdition,John Wiley & Sons, 2011.
4. Taylor, J., Decision Management Systems: A Practical Guide to Using Business Rules and Predictive Analytics, IBM Press, 2011.
5. Turban, E., Delen, E. and Sharda, R., Decision Support and Business Intelligence Systems, 9thEdition, Pearson, 2011.

**COURSE OBJECTIVES:****To make the students**

1. To Demonstrate competency in effective utilization of materials in manufacturing and service organization
2. To demonstrate competency in the practical application of materials management principles in industrial inventory systems.
3. To Understand the principles of effective materials management
4. To know the demonstrate competency in effective utilization of materials in manufacturing and service organization
5. To know the Importance of good purchasing system, organization of purchasing functions, purchase policy and procedures
6. To understand the principles of effective materials management

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the competency in effective utilization of materials in manufacturing and service organization	Understand
CO2	Determine the competency in the practical application of materials management principles in industrial inventory systems	Evaluate
CO3	Summarize the principles of effective materials management	Understand
CO4	Analyse the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Analyse
CO5	Summarize the importance of Pre-commitment and Demand Uncertainty and Peak-load pricing under perfect competition	Understand
CO6	Assess Natural Gas Storage and Transmission in Revenue Management in Practice	Evaluate

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	L									
CO2		M								
CO3			M							
CO4	L									
CO5				M						
CO6						S				

**S-Strong; M-Medium; L-Low**

#### UNIT I MATERIALS MANAGEMENT

**(8 hours)**

Material management and productivity, functions of material management, organization structures in material management, role of material management techniques in improved material productivity.

#### UNIT II MATERIALS PLANNING

**(8 hours)**

Objectives, material requirement planning, manufacturing resource planning, JIT production planning, strategic material planning, material control: acceptance, sampling, inspection, make or buy break even analysis, breakeven point theory, whether to add or drop a product line store management and warehousing, product explosion.

#### UNIT III INVENTORY MANAGEMENT

**(8 hours)**

Inventory v/s stores, types of inventory, inventory control, inventory build –up, EOQ, various inventory models, inventory models with quantity discount, exchange curve concept, coverage analysis, optimal stocking and issuing policies, inventory management of perishable commodities, ABC – VED analysis, design of inventory distribution systems, surplus management, information system for inventory management, case studies.

#### UNIT IV PURCHASING MANAGEMENT

**(8 hours)**

Importance of good purchasing system, organization of purchasing functions, purchase policy and procedures, responsibility and limitations, purchasing decisions, purchasing role in new product development, role of purchasing in cost reduction, negotiations and purchase, purchasing research: identification of right sources of supply, vendor rating,

standardization, vendor certification plans, vendor and supply reliability, developing new source of supply.

## **UNIT V COST REDUCTION**

**(8 hours)**

Cost control v/s cost reduction, price analysis, material cost reduction techniques, variety reduction, cost 20% reduction and value improvement, techniques of cost control, standard costing, cost effectiveness, cost analysis for material management, material flow cost control.

Student Learning Outcomes: · Demonstrate competency in effective utilization of materials in manufacturing and service organization · Demonstrate competency in the practical application of materials management principles in industrial inventory systems. · Understand the principles of effective materials management

### **SUGGESTED READINGS**

1. N. Chapman Stephen et.al (2017), Introduction to Materials Management, Pearson Education.
2. Chitale (2014), Materials Management a Supply Chain Perspective: Text and Cases, 3rd edition, Prentice Hall India Learning Private Limited
3. Gopalkrishnan P and Abid Haleem(2015), Handbook of Materials Management, 2nd edition, Prentice Hall India Learning Private Limited
4. PatidarJeet (2011), Purchasing and Materials Management, S.Chand.
5. Arnold (2009), Introduction to Materials Management, 6th edition, Pearson Education India.

**COURSE OBJECTIVES:****To make the students**

- To understand the importance of world class manufacturing and how the evolution of manufacturing taken place
- To understand the concept and the importance of manufacturing strategy for industrial enterprise competitiveness.
- To understand various manufacturing strategies and to learn how to formulate and implement the strategy
- To understand the advances and recent developments in the manufacturing organizations
- To apply appropriate techniques in the analysis and evaluation of company's opportunities for enhancing competitiveness in the local regional and global context.
- To learn framework for managing individual and group performance and improve problem solving skills.

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept and importance of strategy planning for manufacturing industries	Understand
CO2	Identify formulation and implement strategies for manufacturing and therefore enterprise competitiveness.	Remembering
CO3	Develop familiarity with different decision making tools for evaluation and selection of best practices for world class manufacturing.	Create
CO4	Develop skills for implementation of World-class Manufacturing concepts and philosophies	Create
CO5	Apply principles and techniques in the identifiable formulation and implementation of manufacturing strategy for competitive in global context.	Apply
CO6	Analyse the capabilities of problem-solving, critical thinking, and communication skills to infer the output.	Analyse



## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	<b>L</b>									
CO2		<b>M</b>								
CO3			<b>M</b>							
CO4										
CO5	<b>L</b>		<b>M</b>							
CO6						<b>M</b>				

**S-Strong; M-Medium; L-Low**

### Unit I

**(8 hours)**

Historical Perspective World class Excellent organizations – Models for manufacturing excellence: Schonberger, Halls, Gunn and Maskell models, Business Excellence.

### Unit II

**(8 hours)**

Benchmark, Bottlenecks and Best Practices, Concepts of benchmarking, Bottleneck and best practices, Best performers – Gaining competitive edge through world class manufacturing – Value added manufacturing -Value Stream mapping – Eliminating waste Toyota Production System.

### Unit III

**(8 hours)**

Building Strength Through Customer – Focused Principles- Customer – Focused principles – General principles – Design – Operations – Human resources -Quality and Process improvement – Promotion and Marketing-Value and Valuation. Product Costing – Motivation to improve – Value of the enterprises QUALITY – The Organization : Bulwark of stability and effectiveness – Employee stability – Quality Individuals Vs. Teams -Team stability and cohesiveness – Project cohesiveness and stability.

### Unit IV

**(8 hours)**

Human Resource Management in WCM: Adding value to the organization-Organizational learning -techniques of removing Root cause of problems-People as problem solvers-New organizational structures. Associates-Facilitators- Teamsman ship-Motivation and reward in the age of continuous improvement.

## Unit V

(8 hours)

Typical Characteristics of WCM Companies Performance indicators like POP, TOPP and AMBITE systems-what is world class Performance -Six Sigma philosophy. Indian Scenario on world class manufacturing -Task Ahead. Green Manufacturing, Clean manufacturing, Agile manufacturing.

### SUGGESTED READINGS:

1. Richard B. Chase, Nicholas J. Aquilano, F. Robert Jacobs – Operations Management for Competitive Advantage, McGraw-Hill Irwin, ISBN 0072323159
2. Moore Ran, Making Common Sense Common Practice: Models for Manufacturing Excellence, ElsevierMultiworth
3. Narayanan V. K., Managing Technology and Innovation for Competitive Advantage, Pearson Education Inc.
4. Korgaonkar M. G., Just In Time Manufacturing, MacMillan Publishers India Ltd.,
5. Sahay B. S., Saxena K. B. C., Ashish Kumar, World Class Manufacturing, MacMillan Publishers
6. Jim Todd, “World-class Manufacturing”, McGraw Hill, London, 1995
7. Nicholas, John M., “Competitive Manufacturing Management”, Tata McGraw Hill Education Pvt. Ltd. New Delhi, 2012.
8. Sahay, B.S., Saxena, K.B.C. and Kumar, A., World-class Manufacturing- A Strategic Perspective, Macmillan India Limited, New Delhi, 2005

**23MBAPO402C TECHNOLOGY MANAGEMENT AND****INTELLECTUAL PROPERTY RIGHTS 4H - 3C****Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concept of Technology management, Technology Adoption, Diffusion, Absorption, development, transfer and apply learning lifelong.
2. To comprehend on the intellectual property rights.
3. To apply the understanding of intellectual property rights.
4. To Understand an entrepreneurial perspective, the objective is for students to analyse Enterprise Resource Planning
5. To know about Purpose and function of trademarks and acquisition of trade mark rights
6. To understand agencies and treaties and importance of intellectual property rights

**COURSE OUTCOMES:**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the concept of Technology management, Technology Adoption, Diffusion, Absorption , development and transfer and apply learning lifelong.	Understand
CO2	Characterize the intellectual property rights.	Understand
CO3	Apply the understanding of intellectual property rights.	Apply
CO4	Assess the behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Evaluate
CO5	Identify and evaluate opportunities for new technologies	Evaluate
CO6	Summarize the basics of the four primary forms of intellectual property rights.	Understand

## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02
CO1	L									
CO2		M								
CO3				M						
CO4	L									
CO5			M							
CO6					S					

**S-Strong; M-Medium; L-Low**

### **UNIT 1: Technology Management and Technology strategy (8 hours)**

Concept and Meaning of Technology and Technology Management- Technology; Technology management, Evolution and Growth of Technology, Role and Significance of Technology Management, Impact of Technology on Society and Business- Technology and competition; Key issues in managing technological innovation, Forms of Technology- Process technology; Product technology

technology Strategy- Elements of an accessible technology strategy, Innovation Management, Competitive Advantage- Components of competitive advantage; Creating competitive advantage using value chain, Technology Management Evaluation or Assessment, Concept of Technology Forecasting- Characteristics of technology forecasting ; Forecasting, Forecasting Methods and Techniques,

### **UNIT II Technology Adoption, Diffusion and Absorption (8 hours)**

Technology Adoption, Technology Diffusion- of technology diffusion; Perspectives of innovation diffusion process; Activities necessary for diffusion process, Technology Absorption- Role of technology absorption; Benefits of technology absorption; Constraints in technology absorption,

### **UNIT III Technology Generation, development and transfer (8 hours)**

Technology Generation- Process; , Technology Development, Importance of Technology Generation and Development, Need for Technology Strategy, Importance of Research and Development (R&D)- Corporate research and product lifetimes; Production costs and R&D; Translation of R & D efforts to technology

Technology Transfer: Transfer of Technology, Models of Technology Transfer- Traditional technology transfer models; Qualitative technology transfer models, Technology Transfer Modes, Dimensions of Technology Transfer, Features of Technology Package, Routes of Technology Transfer

#### **UNIT – IV Intellectual property and Patents**

**(8 hours)**

Intellectual property: Introduction, types of intellectual property, international organizations, agencies and treaties, importance of intellectual property rights.

Patents : Macro economic impact of the patent system Patent and kind of inventions protected by a patent document Ways to protect inventions - Granting of patent - Rights of a patent - extensive patent protection – Reasons for protecting inventions by patents - Searching a patent Drafting of a patent Filing of a patent The different layers of the international patent system (national, regional and international options)

#### **UNIT – V: Trade Marks and Copy rights**

**(8 hours)**

Purpose and function of trademarks, acquisition of trade mark rights, protectable matter, selecting, and evaluating trade mark, trade mark registration processes.

Fundamental of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law. Law of patents: Foundation of patent law, patent searching process, ownership rights and transfer

#### **SUGGESTED READINGS:**

1. Tarek Khalil, Ravi Shankar (2017), Management of Technology: the Key to Competitiveness and Wealth Creation, 2nd edition, McGraw Hill, New Delhi.
2. Sanjiva Shankar Dubey(2017), Technology and Innovation Management, PHI Learning Private Limited, New Delhi.
3. DrS.N.Singh (2018), Technology Management : "Influencing Factors And Their Significance, 1st edition, Notion Press.
4. Anil Kumar H S, Ramakrishna B(2017), Fundamentals of Intellectual Property Rights: For Students, Industrialist and Patent Lawyers, Notion Press.
5. Bouchoux (2013), Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets, 4th edition, Cengage Learning, New Delhi.

#### **E-Resources**

- <https://nptel.ac.in/courses/110/105/110105139/>
- <https://nptel.ac.in/courses/109/106/109106137/>

**COURSE OBJECTIVES:****To make the students**

1. To Understand the concept of machine language
2. To comprehend and apply the predictive analytics, basic probabilistic supervised learning, unsupervised learning and deep learning concepts in business decision making
3. To develop a structured approach to apply judgment, and generate insight from data for enhanced decision making.
4. To create data for analytics through Active learning and Reinforcement learning
5. To understand the best practices for Supervised Learning
6. To know the applications of unsupervised machine learning

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the basics of machine language	Understand
CO2	Apply the predictive analytics modeling	Apply
CO3	Evaluate the best decisions applying the basic probabilistic, supervised learning, unsupervised learning and deep learning	Evaluate
CO4	Create and use appropriate models of data analysis to answer business-related questions.	Create
CO5	Understand and communicate data findings effectively to any audience, orally, visually and in written formats.	Understand
CO6	Identify knowledge in Automate Feature Extraction using Deep Learning	Knowledge

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PO10	PSO2
CO1	S										
CO2		M									
CO3			M								

CO4		<b>M</b>									
CO5			<b>M</b>								
CO6	<b>S</b>										

**S-Strong; M-Medium; L-Low**

#### **UNIT I Introduction:**

**(8 hours)**

Machine Language - Problems, data, and tools; Visualization. Prescriptive analytics  
Creating data for analytics through designed experiments, creating data for analytics through Active learning, creating data for analytics through Reinforcement learning, Graph Visualization, Data Summaries, Model Checking & Comparison.

#### **UNIT II Basic Probabilistic Modeling**

**(8 hours)**

Probability and classification, Bayes optimal decisions, Naive Bayes and Gaussian class-conditional distribution, Linear classifiers, Bayes' Rule and Naive Bayes Model

#### **UNIT III Supervised Learning**

**(8 hours)**

Supervised Machine Learning, Types of Supervised Machine, Learning Algorithms - Bias-Variance Dichotomy, Model Validation Approaches, Logistic Regression, Linear Discriminant Analysis, Quadratic Discriminant Analysis, Regression and Classification Trees, Support Vector Machines-Challenges in Supervised machine learning, Advantages of Supervised Learning, Disadvantages of Supervised Learning -Best practices for Supervised Learning

#### **UNIT IV Unsupervised Learning**

**(8 hours)**

Unsupervised Learning - Example of Unsupervised Machine Learning, need for Unsupervised Learning, Types of Unsupervised Learning - Clustering, Clustering types: Hierarchical clustering, K-means clustering, K-NN (k nearest neighbors), Principal Component Analysis, Singular Value Decomposition, Independent Component Analysis - Associative Rule Mining, Supervised vs. Unsupervised Machine Learning, Applications of unsupervised machine learning, Disadvantages of Unsupervised Learning

## **UNIT V Deep Learning**

**(8 hours)**

Deep Learning - Deep Learning Process, Automate Feature Extraction using Deep Learning, Difference between Machine Learning and Deep Learning , usage of Machine Learning or Deep Learning.

### **SUGGESTED READINGS**

1. John Paul Mueller, Luca Massaron (2016), Machine Learning (in Python and R) For Dummies, 1st edition, Wiley India.
2. SaikatDutt, Subramanian Chandramouli, Amit Kumar Das(2018), Machine Learning, 1st edition, Pearson Education, New Delhi.
3. Tom M. Mitchell (2017), Machine Learning, 1st edition, McGraw Hill, New Delhi.
4. Suresh Samudrala (2019), Machine Intelligence: Demystifying Machine Learning, Neural Networks and Deep Learning, 1st edition, Notion Press
5. AlpaydinEthem(2015), Introduction to Machine Learning, 3rd edition, PHI Learning Pvt. Lt



**23MBAPA402B DATA VISUALIZATION FOR MANAGERS  
– USING R AND TABLEAU****4H - 3C****Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the basics of data visualization
2. To understand the concepts, tools and techniques of data visualization.
3. To develop a structured approach to apply judgment, and generate insight from data for enhanced decision making.
4. To create Maps in R and build interactive web pages
5. To understand the basic functions in Tableau, like inputting data and building charts
6. To Create visualizations to tell stories with data

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand the basics of data visualization	Understand
CO2	Design visualizations that represent the relationships contained in complex data sets and adapt them to highlight the ideas you want to communicate.	Apply
CO3	Create and use appropriate models of data analysis to answer business-related questions.	Create
CO4	Understand data findings effectively to any audience, orally, visually and in written formats.	Understand
CO5	Develop to use colors, shapes, and other tools to dig deep into data	Create
CO6	Design Maps & How to build interactive web pages	Create

## Mapping with Programme Outcomes

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PS O1	PO 10	PS O2
CO1	S										
CO2		M									
CO3			M								
CO4		M									
CO5			M								
CO6	S										

**S-Strong; M-Medium; L-Low**

### **UNIT I Data visualization (8 hours)**

Introduction –Importance of visualization in analytics, exploratory and explanatory visualization, data types and ways to encode data, importance of limiting the amount of data presented in an analysis, data cleaning and use of data with integrity. Downloading and installing R - Downloading and installing Tableau

### **UNIT II Basic Visualization Tools using R (8 hours)**

Optimal visualization types - Binning values - Calculated fields - Table calculations - Level of Detail calculations - Bar Charts - Histograms - Pie Charts - Line Plot - Multiple Line Graphs - Scatter Plot - and Regression

### **UNIT III Specialized Visualization Tools how to create Maps & How to build interactive web pages (8 hours)**

Word Clouds, Radar Charts, Waffle Charts, Box Plots

Configuring Data Environment- Connecting to Data, Metrics vs dimensions, Data types and defaults, Aliases and names,

Creating Maps in R, Introduction to Shiny, Creating and Customizing Shiny Apps, Additional Shiny Features

### **UNIT IV Tableau - Data visualization (8 hours)**

Introduction to data visualization Data for data graphics Tableau introduction

Exploratory Visualization : Data Joins , Best Practices, Creating visualizations with Tableau, Sorting, Top N, bottom N, Filtering, Maps, Use chart type, color, size, and shape to get the most out of data visualizations - Do basic functions in Tableau, like inputting data and building charts. Learn to use colors, shapes, and other tools to dig deep into data.

Learn to use calculations to create new data columns.

## **UNIT V Design Principles and Dashboard Creation using Tableau (8 hours)**

Design principles, Categorical, time series, and statistical data graphics, Geospatial displays

Storytelling Multivariate displays, - What are the main approaches to storytelling with data? - Dashboards vs. Storyboards vs. Infographics - Designing with the user in mind Dashboards, interactive and animated displays - Build Tableau dashboards - Create visualizations to tell stories with data

Large datasets - Fiscal Year Calculations – Parameters - Dashboard design principles - Dashboard interactivity - Connected “drill-down” dashboards

### **SUGGESTED READINGS**

1. Cole Nussbaumer Knaflic(2015), Storytelling with Data: A Data Visualization Guide for Business Professionals, 1st edition, Wiley India.
2. Kieran Healy(2018), Data Visualization: A Practical Introduction, Princeton University Press
3. Seema Acharya(2018), Data Analytics Using R, 1st edition, McGraw Hill Education
4. Daniel G. Murray(2018), Tableau Your Data!, Fast and Easy Visual Analysis with Tableau Software, 2nd edition, Wiley India
5. Joshua N. Milligan(2015), Learning Tableau, Packt Publishing Limited
6. Radhika Datar, Harish Garg (2019), Hands-On Exploratory Data Analysis with R: Become an expert in exploratory data analysis using R packages, Packt Publishing Limited
7. Yu-Wei Chiu (David Chiu) (2016), R for Data Science Cookbook, Packt Publishing Limited
8. Kaelen Medeiros (2018), R Programming Fundamentals: Deal with data using various modeling techniques, Packt Publishing Limited

### **E-Resources**

- <https://nptel.ac.in/courses/111104100/>
- <https://www.youtube.com/watch?v=gWZtNdMko1k&list=PLWPirh4EWFpGXTBu8ldLZGJCUEtMBpJFK>
- <https://www.youtube.com/watch?v=SFpzzr21Pav&list=PL34t5iLfZddskPZVTm03hed8K93RsyP24>

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To equip with an understanding of the “importance and role of supply chain analytics” in the modern business enterprises
2. To comprehend on how business firms can take advantage with the help of supply chain analytics.
3. To apply supply chain analytics with analytical platforms.
4. To understand the Calibration Model Establishes Position and Performance Gap, Models for Purchasing, Procurement and Strategic Sourcing
5. To know the concept Models for Order Management and Inventory Management
6. To understand the Future trends of Supply Chain Modelling

**Course Outcomes**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understanding the need for supply chain analytics in the modern era.	Understand
CO2	To analyse the competitive advantage using supply chain analytics.	Analyze
CO3	Application of supply chain analytics in various analytical platforms.	Create
CO4	Examining behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO5	Understand the different ways of payment and payment services available.	Understand
CO6	Identify knowledge in supply chain analytics management	Knowledge

### Mapping with Programme Outcomes

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PS O1	PO 10	PS O2
CO1	S										
CO2		M									
CO3			M								
CO4		M									
CO5			M								
CO6	S										

**S-Strong; M-Medium; L-Low**

#### **UNIT I Supply Chain Analytics**

**(8 hours)**

Definition, relevance and scope Supply Chain Analytics, recent trends in Supply Chain Analytics

#### **UNIT II Overview of Supply Chain Models and Modelling Systems**

**(8 hours)**

Descriptive models, Optimization modes, Off-the shelf modelling system (SLIM), Supply chain operations reference model (SCOR), The network KEIRETSU, Nature-Inspired Intelligence in Supply Chain Management

#### **UNIT III Application of Supply Chain Models – I**

**(8 hours)**

A Calibration Model Establishes Position and Performance Gap, Models for Purchasing, Procurement, and Strategic Sourcing, Logistics Models, from Manufacturing to Accepted Delivery, Models for Forecasting, Demand Management, and Capacity Planning, Models for Order Management and Inventory Management'

#### **UNIT IV Application of Supply Chain Models – II**

**(8 hours)**

Models for Sales and Operations Planning, Advanced Planning and Scheduling Models, Models for Supplier Relationship Management, Models for Customer Relationship Management, Models for Collaborative Design and Manufacturing, Collaborative Planning, Forecasting, and Replenishment Models

#### **UNIT V Future trends of Supply Chain Modelling**

**(8 hours)**

Recent developments in theory technology and practices. Future developments and expected improvement in efficiency levels and operational simplicity

### **SUGGESTED READING**

1. MuthuMathirajan et.al(2016), Analytics in Operations/Supply Chain Management, I.K International Publishing House Private Ltd.
2. Gerardus Blokdyk (2018), Supply Chain Execution Predictive Analytics Second

Edition, 5starcooks

3. Iris Heckmann (2018), Towards Supply Chain Risk Analytics: Fundamentals, Simulation, Optimization, Springer
4. Gerardus Blokdyk (2017), Supply Chain Analytics Complete Self-assessment Guide, Createspace Independent Pub
5. Nada R. Sanders (2014), Big Data Driven Supply Chain Management: A Framework for Implementing Analytics and Turning Information Into Intelligence, Pearson FT Press

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES**

1. Understand the historical relevance and concepts of corporate entrepreneurship
2. Evaluate the reasons why traditionally-organized companies find this culture so challenging. Identify the elements of a corporate culture that either inhibit or support the process of intrapreneurship.
3. Analyze how intrapreneurial activities relate to a company's ability to drive innovation throughout the organization.
4. Compare the attributes of various organizations regarded as leaders of intrapreneurship and analyze the benefits of such.
5. Understand the synergy necessary between leadership, corporate culture and organizational dynamics to drive successful intrapreneurship.

**COURSE OUTCOME****At the end of this course, Students will be able to**

<b>Cos</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Summarize the key characteristics of corporate culture	Remember
CO2	Explain and critique the relationship between corporate culture and entrepreneurial culture	Understand
CO3	Categorize and evaluate the potential drivers and barriers to corporate culture	Analyse
CO4	Describe the Forms, Levels and Degrees of Corporate Entrepreneurship	Understand
CO5	Categorize, critique and apply different approaches, tools and techniques related to entrepreneurial culture	Apply

## MAPPING WITH PROGRAMME OUTCOMES

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	S									
CO2	M									
CO3							M			
CO4					M					
CO5					M					

**S-Strong; M-Medium; L-Low**

### UNIT I

**(8 hours)**

Intrapreneurship -Setting the stage -Entrepreneurship vs. Intrapreneurship, Forms, Levels and Degrees of Corporate Entrepreneurship - Corporate Culture and the Impact on Intrapreneurship - Corporate entrepreneurs: are they different? - Championing Intrapreneurship in Corporate Environments - Leadership, Strategy & Intrapreneurship - Organizational Approaches to Intrapreneurship

### UNIT II

**(8 hours)**

Introduction to Entrepreneurial Culture Concept of Organizational Culture. Relationship between corporate culture and entrepreneurial behavior. Levels of culture. Categories of culture: Macro-cultures, subcultures and Micro-culture. Components of culture that are common in Entrepreneurial driven organizations

### UNIT III

**(8 hours)**

Building an entrepreneurial culture Entrepreneurial culture and set of attitudes. Functions of organization culture - Behavioral control, Encourages stability, Provides source of identity. Determinants of organizational culture that influence creativity and innovation

### UNIT IV

**(8 hours)**

Executing Entrepreneurial Culture through leadership role Influence of founder/ leader in culture. The impact of culture on organizational performance/ relationship between strategy and culture. Leadership and the dynamics of how culture begin, evolve and change. New Approaches of Leadership in Multicultural world. Mechanisms used by leaders to embed and transmit culture organizational socialization

### UNIT V

**(8 hours)**

Building sustaining organizations through teams Introduction to Teams / effective groups. Types of teams. Team dynamics valuating team effectiveness. How to develop high performance work teams winning teams. Self managed team Module V How Entrepreneurial culture emerges in new teams / groups? Stages of group evolution- Group



formation, Group building, Group work & functional familiarity and Group maturity. Linking culture, structure and strategy.

### **SUGGESTED READINGS**

1. AlziraSalama (2011), Creating and Re-creating Corporate Entrepreneurial Culture, Ashgate Publishing Limited
2. Ashis Gupta (2009), 'Indian Entrepreneurial Culture: Its Many Paradoxes, New Age International Pvt Ltd Publisher
3. Edgar Schein (2004). Organizational Culture and Leadership, Jossey- Bass, John Wiley & Sons, 3rd Edn McGraw-Hill Professional
4. Mendenhall, M.E., Osland, J.S., Bird, A., Oddou, G.R., Maznevski, M.L. (2013). Global Leadership: Research, Practice and Development (2nd Ed.). New York: Routledge
5. Robert Hisrich& Claudine Kearney (2011).Corporate Entrepreneurship: How to Create a Thriving Entrepreneurial Spirit Throughout Your Company
6. Schermerhorn, J.R. Jr.; Hunt, J.G. & Osborn, R.N. (2008), Managing Organizational Behaviour, 9th Edition, John Wiley & Sons
7. Yukl G ( 2009). Leadership in Organizations, Pearson Prentice Hall, Inc

**COURSE OBJECTIVES:****To make the students**

1. To understand the concept of rural entrepreneurship, factors influencing the rural entrepreneurship and the strategies to select and formulate a business plan for rural entrepreneurs.
2. To understand and apply the ecosystem to support the entrepreneurship venture in rural area.
3. To know about Natural and Human Resource Base Panchayati Raj System & Government Schemes
4. To analyse Recent Trends in Rural Entrepreneurship
5. To know Project Appraisal Government Policies for Micro and Small Enterprises Rural Business Environment
6. To understand Growth and Replicability issues Entrepreneurial Opportunities

**COURSE OUTCOMES:****Learners should be able to**

COs	Course outcome	Blooms level
CO1	Describe the concept of rural entrepreneurship, factors influencing the rural entrepreneurship and the strategies to select and formulate a business plan for rural entrepreneurs.	Understand
CO2	List behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analyzing, planning and team work	Remember
CO3	Interpret in Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being	Apply
CO4	Understand Various forms of management creativity	Understand
CO5	Gain knowledge in Developing Leaders and Planning Succession, Leadership Issue for Future Entrepreneurs	Knowledge

**Mapping with Programme outcome:**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M							
CO4	M									
CO5					M					

**UNIT I Introduction of Rural Entrepreneurship****(8 hours)**

Understanding Entrepreneurship Evolution of Entrepreneurship in Rural India Types of Rural Entrepreneurship Entrepreneurial Competencies Challenges for Rural Entrepreneurs.

**UNIT II Institutional Eco Systems for Promotion of Rural Entrepreneurship****(8 hours)**

Rural Eco-System, Natural and Human Resource Base Panchayati Raj System & Government Schemes Rural Skill Sets and Enhancing Opportunities Institutional Support for Finances and Technical Back-stopping Private-Public Partnership and Corporate Social Responsibility Systems.

**UNIT III Micro and Small Rural Enterprise****(8 hours)**

Understanding Micro and Small Enterprises Project Identification and Selection Project Formulation, Project Appraisal Government Policies for Micro and Small Enterprises Rural Business Environment-Social, Economic, Political and Cultural Issues.

**UNIT IV Rural Enterprise Incubation****(8 hours)**

Scanning Rural Environment- Economic, Technical, Technological & Market Business Opportunity Identification and Project Selection Business Plan Preparation Forward and Backward Linkages Market Linkages Development Rural Marketing.

**UNIT V Recent Trends in Rural Entrepreneurship****(8 hours)**

Study of Rural Entrepreneurs- Growth and Replicability issues Entrepreneurial Opportunities-Potential and Limitations Active Interaction with key Stakeholders- Panchayats, NGOs, Schools etc Working Together and Finalize Interventions - Networking with all Rural Support Systems (Case studies in India)

**SUGGESTED READINGS**

1. B M Singh, K V N Namboodiri (2007), Unleashing Rural Entrepreneurship, ICFAI University Press

2. SahariaRidip Ranjan(2015), Management Dimensions of Rural Entrepreneurship, LAP Lambert Academic Publishing
3. Issa Mohamed, Venkatakrishnan V(2013), Rural Entrepreneurship, LAP Lambert Academic Publishing
4. Jitendra Ahirrao (2013), Entrepreneurship & Rural Women in India , 1st edition, New Century Publications.
5. G D Banerjee, Srijeet Banerji(2012), Rural Entrepreneurship Development Programme in India, 1st edition, Abhijeet Publications
6. M. Soundarapandian(2010), Rural Entrepreneurship : Growth And Potentials, Kanishka Publishers Distributors.

**INDIAN MODELS OF ECONOMY, BUSINESS AND MANAGEMENT****Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100****End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

- To Understand the concept of Indian economy and Indian Models of economy
- To select the appropriate business model suitable for the economic condition.
- To Comprehend on the sustainability innovation, Patent, IPR and its impact in Entrepreneurship
- To Exhibit group leadership, oral and written communication, critical thinking, analysing, planning and team work.
- To analyse emerging global power, growth and development in recent years
- To understand the Features of the Indian Business models and reason for the failure of the western models

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>COURSE OUTCOME</b>	<b>BLOOM'S LEVEL</b>
CO1	Understand the concept of Indian economy and Indian Models of economy	Understand
CO2	Select the appropriate business model suitable for the economic condition	Create
CO3	Characterize the sustainability innovation, Patent, IPR and its impact in Entrepreneurship	Analyze
CO4	Exhibit group leadership, oral and written communication, critical thinking, analyzing, planning and team work.	Understand
CO5	Gain knowledge in Sustainability Innovation and Entrepreneurship	Knowledge
CO6	Characterize Experimentation in Innovation Management, Idea Championship, Participation for Innovation and Co-creation for Innovation	Understand

**Mapping with Program outcome:**

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1					M					
CO2						M				
CO3		M								
CO4					M					
CO5					M					
CO6					M					

**UNIT I Indian economy over the years****(8 hours)**

Indian Economy - agriculture, trade, industry and other critical sector under the Ancient periods, Common Era, British Period, Independent India

**UNIT II Western Economy & Indian Economic Models – Features and Challenges****(8 hours)**

**Western Economy over the years : Overview.** Feudalism, Mercantilism, Capitalism, Colonial economies, Industrialization, Communism, Globalization, Market capitalism and Recent developments

Features of western models – Problems & Challenges. Economic models in independent India - Socialistic and market models. Functioning models of India : Features, Uniqueness, Strength and Weakness

**UNIT III Business models****(8 hours)**

What is a Business Model ,Who is an Entrepreneur, Western Vs. Indian Models, India as an emerging global power, growth and development in recent years, issues and opportunities – Non corporate, Cluster and Corporate model. Features of the Indian Business models and reason for the failure of the western models. Recent Business models : Blue Ocean Strategy-I, Blue Ocean Strategy-II.

**UNIT IV Sustainability Innovation and Entrepreneurship****(8 hours)**

Types of Sustainable Entrepreneurship, Conditions for Sustainabiling Innovation, SME strategic involvement in sustainable development, Exploration of business models for material efficiency services.

**UNIT V : Management of Innovation****(8 hours)**

Experimentation in Innovation Management, Idea Championship, Participation for Innovation, Co-creation for Innovation , Proto typing to Incubation, reaction of IPR, Management of Innovation, creation of IPR, Types of IPR, Patents in India, Copyrights

and other important IP. Business Models and value proposition, Business Model Failure: Reasons and Remedies, Incubators : Business Vs Technology, Managing Investor for Innovation, Future markets and Innovation needs for India.

### **SUGGESTED READINGS**

1. Kanagasabapathi P, (2006) “Indian Model of Economy, Business and management”,
2. Kai-Ingo Voigt, Oana Buliga, Kathrin Michl(2016), Business Model Pioneers: How Innovators Successfully Implement New Business Models (Management for Professionals), Springer.
3. Adam J. Bock, Gerard George(2019), The Business Model Book, Pearson Education.
4. Alexander Osterwalder, Yves Pigneur(2011), Business Model Generation, Wiley India.
5. George Soros (2005), “Open Society”, Viva Books, New Delhi.
6. Angus Madison,(2003) “The World Economy – A millennial Perspective”, Overseas Press Limited, New Delhi.
7. Agarwala P N(2001), “A Comprehensive History of Business in India – from 3000 BC to 2000 AD”, Tata McGraw Hill.

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To Understand the concept of Indian economy and Indian Models of economy
2. To select the appropriate business model suitable for the economic condition.
3. To Comprehend on the sustainability innovation, Patent, IPR and its impact in Entrepreneurship
4. To Exhibit group leadership, oral and written communication, critical thinking, analysing, planning and team work.
5. To analyse emerging global power, growth and development in recent years
6. To understand the Features of the Indian Business models and reason for the failure of the western models

**COURSE OUTCOMES:**

COs	Course Outcomes	Blooms Level
CO1	Understand the fundamentals of ERP systems	Understanding
CO2	Gain knowledge about the functional ERP modules	Applying
CO3	Select the right ERP systems based on the organizational requirements	Remembering
CO4	Identify the ERP implementation strategies	Applying
CO5	Communicate the case analysis effectively in oral and written forms	Creating
CO6	Perceive the future trends in ERP systems	Evaluating

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	L	M								
CO2	M	S								
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**



**Unit- I****(8 hours)**

Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be consider in planning design and implementation of cross functional integrated ERP systems.

**Unit- II****(8 hours)**

Small medium and large enterprise vendor solutions, BPR, Business Engineering and best Business practices - Business process Management. Overview of ERP modules - sales and Marketing, Accounting, Finance, Materials and Production management.

**Unit III****(8 hours)**

Planning Evaluation and selection of ERP systems-Implementation life cycle – ERP implementation, Methodology and Frame work Training – Data Migration. People Organization in implementation Consultants, Vendors and Employees.

**Unit IV****(8 hours)**

Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of and ERP Implementation.

**Unit- V****(8 hours)**

Extended ERP systems and ERP bolt –on -CRM, SCM, Business analytics etc-Future trends in ERP systems-web enabled, Wireless technologies.

**SUGGESTED READINGS**

1. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
2. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2006.
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
4. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2006.
5. Summer, ERP, Pearson Education, 2008.

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To get awareness about the global trade and global supply chains
2. To understand best practices for strategic global supply chain management
3. To identify the market globalization drivers
4. To know the importance of global supply chain infrastructure
5. To learn about the global logistics strategies
6. To familiarize with global purchasing strategies

**COURSE OUTCOMES:**

COs	Course Outcomes	Blooms Level
CO1	Identify the global supply chain strategy	Applying
CO2	Realize the impact on supply chain by the various market globalization drivers	Applying
CO3	Gain knowledge about legal considerations in global supply chain activities	Remembering
CO4	Design a global logistics strategy	Creating
CO5	Understand the strategies for managing inventory	Understanding
CO6	Perform global supply chain through online	Evaluating

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	S									
CO2	M	S								
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

**Unit I****(8 hours)**

Establishing a Global Supply Chain Strategy - Insight into global trade and global supply chains Expertise in emerging markets and global supply chains-Best practices for strategic global supply chain management- How to integrate global supply chain functions -Strategic benefits of global supply chains.

**Unit II****(8 hours)**

Implications of Industry Globalization -Drivers for Supply Chains Ways to identify key market global drivers- Knowledge of how market globalization drivers influence supply chains -Exploration of the declining role of governments as producers and customers, and how their new role adds value for global supply chains -How competitive globalization drivers better facilitate global supply chains -The influence of competitive globalization drivers, including the increase in world trade levels, increased “born-global” companies and the growth of global networks.

**Unit III****(8 hours)**

Evaluating Global Supply Chain Infrastructure -Analysis of transportation, communication, utilities and technology infrastructure -Supply chain security, risks and value Legal considerations, international contracts and insurance issues Commercial documents and customs clearance International commerce terms (incoterms).

**Unit IV****(8 hours)**

Leveraging Logistics in Global Supply Chains -How to design a global logistics strategy- Managing global inventory -Global packaging and materials handling - Understanding of global distribution centers Ocean, air, land and intermodal transportation.

**Unit V****(8 hours)**

Purchasing in Global Supply Chains Key elements of a global purchasing strategy - International to global purchasing - Types of global purchasing strategies for outsourcing and off shoring -Selecting suppliers and designing global supplier networks Maximizing Operations in Global Supply Chains- Expertise in international wholesaling, retailing and franchising How to go global online -Using global EDGE diagnostic tools for global market channel partners- Managing Global Supply Chains Value of managing global supply chains- Coordination mechanisms in global supply chains -Inter-organizational relationships in global supply chains Knowledge of stakeholders and global supply chain sustainability -Guidelines for managing global supply chains.

**SUGGESTED READINGS:**

- 1.C S VenkataRatnam. (2007). Globalisation and Labour Management Relations: Response Books.
- 2.N Viswanadham& S Kameshwaran. (2013). Ecosystem aware Global Supply chain Management

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To understand the basic fundamentals of GIS
2. To identify the various data sources available for GIS
3. To know the different data types and models used in GIS
4. To gain knowledge about GIS data analysis
5. To learn about GIS as a decision support system
6. To familiarize with the various GIS applications

**COURSE OUTCOMES:**

COs	Course Outcomes	Blooms Level
CO1	Understand the components of GIS	Understanding
CO2	Know how to acquire data from data sources	Remembering
CO3	Identify the different spatial data models	Applying
CO4	Analyze the GIS data by using various tools	Analyzing
CO5	Apply the GIS for business solutions	Applying
CO6	Gain knowledge about the various other applications of GIS	Remembering

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M	S								
CO2	M	S								
CO3	M	S								
CO4	M	S								
CO5	M	S								
CO6	M	S								

**S-Strong; M-Medium; L-Low**

**Unit I:****(8 hours)**

GIS -Definition – Principles – Concepts –Components of GIS, Functions of GIS , Uses of GIS ; Important GIS Vendors – ESRI – ArcGIS, MAPINFO, GEOMEDIA - Open source GIS- QGIS

**Unit II:****(8 hours)**

Data sources (Open Source for Vector data - glcf, Google Earth, Bing Maps, Bhuvan for Raster data) Data acquisition from data sources – ( Topographic, Cartographic, Remotely sensed, Census, other records and Surveys). Data input -Scanning, Registration, Digitizing, Editing

**Unit III:****(8 hours)**

GIS data– Spatial and Attribute data. Data types- spatial, attribute, topology - Spatial data models – Raster and vector – advantages and disadvantages Data conversion. R2V, V2R. shp, dxf etc., Attribute data models – Hierarchical , relational and network .Database Management Systems: types -merits and demerits

**Unit IV:****(8 hours)**

GIS data analysis – Query(onscreen query, attribute query, spatial query) Classification, reclass, Overlay, Buffer, interpolation Advanced analysis – Network analysis , Terrain analysis, Morphometric analysis, creation of TIN and DEM and multi criteria evaluation (MCE)

**Unit V:****(8 hours)**

GIS Application: GIS as a Decision Support System, GIS for Business solutions, application of GIS in Land Information System and site suitability analysis, probability analysis, Location and Network analysis Application of mapping in Retail business and international trade. Tracking, Environmental Management, coastal management, Emergency Response System

**SUGGESTED READINGS:**

1. Burrough P.A. Principles of Geographic information Systems for Land Resource Assessment Oxford University Press, New York, 1986
2. Aronoff S. Geographic Information Systems: A Management Perspective, DDL Publication Ottawa, 1989.
3. Chang, & K.-T. (2008). Introduction to geographic information systems. Boston: McGraw-Hill.
4. Davis, B. E. (2001). GIS: A visual approach. Albany, NY: Delmar Thomson Learning.
5. Fraser Taylor D.R. Geographic information Systems. Pergamon Press, Oxford, 1991.

6. Maquire D.J.M.F. Goodchild and D.W. Rhind (eds.). Geographic information Systems: Principles and Application. Taylor & Francis, Washington, 1991.
7. Mark S Monmonier. Computer-assisted Cartography. Prentice-Hall, Englewood Cliff, New Jersey, 1982

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To familiarize with the essentials of Event Management;
2. To understand the potential of MICE and Event Tourism
3. To plan and execute the plan for an Event within time schedule and cost.\
4. To Identify event marketing, customer care, marketing tools to develop and communicate appropriate event management
5. To be aware of travel industry fairs and its significance
6. To understand the nature and demand of Conference markets

**COURSE OUTCOMES:**

COs	Course Outcomes	Blooms Level
CO1	Understand with the essentials of Event Management	Apply
CO2	Understand the potential of MICE and Event Tourism	Apply
CO3	Plan and execute the plan for an Event within time schedule and cost	Understand
CO4	Identify event marketing, customer care, marketing tools to develop and communicate appropriate event management	Apply
CO5	Judging of travel industry fairs and its significance	Apply
CO6	Exhibit behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply

**Mapping with Programme Outcomes**

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M				M			



CO4								M		M
CO5				M	M					
CO6				M	M					

#### **UNIT I Introduction to Events:**

**(8 hours)**

Scope - Nature and Importance – Types of Events - Unique features and similarities – Practices in Event Management - Key steps to a successful event.

#### **UNIT II The Dynamics of Event Management:**

**(8 hours)**

Event Planning and organizing – Problem Solving and Crisis Management – Leadership and Participants Management – Managing People and Time – Site and Infrastructure Management.

#### **UNIT III Introduction to MICE:**

**(8 hours)**

Planning MICE, Components of the Conference Market, Characteristics of Conferences and Conventions, MICE as a supplement to Tourism, the nature and demand of Conference markets- The Economic and Social significance of Conventions, process of Convention Management.

#### **UNIT IV Event Marketing**

**(8 hours)**

Customer care – Marketing tools – Promotion, Media Relations and Publicity - Event Co-ordination - Visual and Electronic Communication – Event Presentation – Event Evaluation – Case Studies of events of National and International importance.

#### **UNIT V Travel Industry Fairs**

**(8 hours)**

Benefits of Fairs - ITB, WTM, BTF, TTW, FITUR, KTM, IITM, CII-Events, PATA Travel Mart.

#### **SUGGESTED READINGS:**

1. Glenn Bowdin, Johnny Allen, et al.(2010), Events Management, 3rd edition, A Butterworth-Heinemann
2. Charles Bladenet,al (2012), Events Management: An Introduction, 1st edition, Routledge
3. Anton Shone & Bryn Parry (2019), Successful Event Management, 5th edition, Cengage Learning.
4. David C. Watt (1998), Event Management in Leisure and Tourism, Longman.
5. Dr. Anukrati Sharma and Dr. Shruti Arora(2018), Event Management and Marketing: Theory, Practical Approaches and Planning , 1st edition, Bharti Publications

Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:****To make the students**

1. To understand the growing importance of medical tourism in contemporary world.
2. To comprehend and analyze the push pull factors for medical tourists to select the appropriate medical tourism destination
3. To be aware of the legal aspects related to the medical tourism.
4. To understand the growth and development of medical tourism in India.
5. To know the Certification and Accreditation in health and medical tourism
6. To understand the Current and futuristic trends, Potentials, Issues and Challenges

**COURSE OUTCOMES:****Learners should be able to**

COs	Course Outcomes	Blooms Level
CO1	Understand the growing importance of medical tourism in contemporary world.	Apply
CO2	Comprehend and analyze the push pull factors for medical tourists to select the appropriate medical tourism destination	Apply
CO3	Aware of the legal aspects related to the medical tourism	Understand
CO4	Understand the growth and development of medical tourism in India	Apply
CO5	Display behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, analysing, planning and team work	Apply
CO6	Understand Legal Aspects of Medical Tourism	Apply

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3				M			M			
CO4								M	L	M
CO5				M	M					
CO6	M						M			

#### **UNIT I Introduction to Health Tourism: (8 hours)**

Origin and development over ages - health as a motivator to travel, - Ancient centres of healing, Quality of Life (QOL) – Concept - Scope of Health Measures. Health: Concept, Definitions and Importance of health to People, Business and Government.

#### **UNIT II Medical tourism: (8 hours)**

Concept, typology Genesis and growth of Medical Tourism - benefits of medical tourism, Factors responsible for growth of health and medical tourism. Medical Tourism Business- Global medical tourism scenario, Stakeholders, countries promoting medical tourism – Health and Medical Tourism markets at global level

#### **UNIT III Medical tourism product and package: (8 hours)**

Factors and Steps for designing product and tour package, development, issues and considerations, Approvals and formalities, Pre-tour arrangements, tour operations and post-tour management, Health Insurance, Claiming Health Insurance

#### **UNIT IV Legal Aspects of Medical Tourism: (8 hours)**

Certification and Accreditation in health and medical tourism, Ethical, legal, economic and environmental issues in health and medical tourism. An Introduction to National Accreditation Board for Hospitals & Healthcare (NABH) and Joint Commission International (JCI).

#### **UNIT V Medical tourism in India: (8 hours)**

Centres/Destinations, Current and futuristic trends, Potentials, Issues and Challenges, Trousing the challenges, Government Support.

**SUGGESTED READINGS:**

1. Jonathan Edelheit (Author), Renée-Marie Stephano(2010), Medical Tourism: An International Healthcare Guide For Insurers, Employers and Governments , Global Health Insurance Publications
2. D. Botterill (Editor), G. Pennings (Editor), T. Mainil (2013), Medical Tourism and Transnational Health Care, Palgrave Macmillan
3. Frederick J. DeMicco (2017), Medical Tourism and Wellness: Hospitality Bridging Healthcare (H2H), 1st edition, Apple Academic Press
4. Hank Kearney(2011), Medical Tourism and Emerging Markets (The Global Explosion in Emerging Markets Healthcare), PHM International, Inc

**Instruction Hours / week: L: 4 T: 0 P: 0****Marks: Internal: 40 External: 60 Total: 100  
End Semester Exam: 3 Hours****COURSE OBJECTIVES:****To make the students**

1. To understand the concept of tourism marketing and its role.
2. To describe how the fundamentals of buyer behaviour are integral to tourism marketing;
3. To know how research contributes to the formulation of tourism marketing decisions;
4. To appraise the social, ethical and economic aspects of tourism
5. To get awareness on issues around sustainability in tourism;
6. To plan and execute a relevant tourism marketing strategy.

**COURSE OUTCOMES:****Learners should be able to**

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	To examine and discuss the key concepts and principles of marketing as applied to destinations and the tourism experience	Apply
CO2	To demonstrate an evaluative understanding of current issues associated with destination marketing	Apply
CO3	To access, and examine the effectiveness of marketing strategies applied to tourism.	Understand
CO4	To engage in tourism and marketing research and inquiry to inform strategic decision-making and problem solving.	Apply
CO5	To demonstrate skills in oral and written communication related to Tourism	Apply
CO6	To demonstrate skills such as critical and analytical thinking in accordance with professional contexts	Apply

### Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	M									
CO2		M								
CO3			M				M			
CO4		M								
CO5				M						
CO6							M		L	

#### **Unit I:** (8 hours)

Tourism Attraction: Definition, Characteristics, Typology, Criteria for Tourist Attractiveness, development and design of tourist attractions, Life Cycle.

#### **Unit II:** (8 hours)

Tourism Definition Planning, Environmental Analysis, Resource Analysis, Regional Environmental Analysis, Market Analysis, Competitor Analysis, Regional Environmental Scanning.

#### **Unit III:** (8 hours)

Regional Goal Formulation – Strategy formulation, Product Portfolio Strategies, Tourism Portfolio model, analysis of Portfolio, approaches, Market segmentation in the regional context – Bases, Steps and categories, Target Marketing – targeting options, positioning strategy.

#### **Unit IV:** (8 hours)

Components of Destination Marketing Mix, Product Strategy – Nature & characteristics, managing existing Tourism Products, New Product development in Regional Tourism, Pricing Strategies – Tourists Perception of Price

#### **Unit V:** (8 hours)

The Tourism Distribution Strategy – Choice of distribution channel, Developing a Destination Promotional strategy, Evaluation and Control.

#### **Suggested Readings:**

1. Ernie Health & Geoffrey Wall, Marketing Tourism Destinations, John Wiley & Sons. Inc.
2. J. Christopheo Holloway & Chris Robinson, Marketing for Tourism
3. Philip Kotler, Jon Bower, Marketing for Hospitality and Tourism

Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

1. To impart the basic knowledge about the Urban Environmental Issues.
2. To understand the concept of Urban Master Plans.
3. To understand the Valuation of Urban Wastewater Management.
4. To impart the basic knowledge of Municipal Solid Waste Management.
5. Know the Case studies from developed nations and Urban management.

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Explain the Urban Environmental Issues.	Understand
CO2	Explain the concept of Urban Master Plans.	Understand
CO3	Explain the Valuation of Urban Wastewater Management.	Understand
CO4	Explain the basic knowledge of Infrastructure Asset Valuation.	Understand
CO5	Explain the Sectoral Infrastructure Valuation.	Understand

**Mapping with Programme Outcomes**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	3	3	3	-	-	-	-	1	-	-	-	3
CO2	3	3	3	-	-	-	-	1	-	-	-	3
CO3	3	3	3	-	-	-	-	1	-	-	-	2
CO4	3	3	3	-	-	-	-	1	-	-	-	2
CO5	3	3	3	-	-	-	-	1	-	-	-	1
Average	3	3	3	-	-	-	-	1	-	-	-	2.2

S-Strong; M-Medium; L-Low

**UNIT I URBAN ENVIRONMENTAL ISSUES****(8 hours)**

Urbanization- Population growth scenario -Migration - Pollution of surface water resources - Rivers, tanks, channels -Ground water exploitation - Waste water - Characteristics -Pollution problems - Solid waste -Air pollution - CPCB norms.

**UNIT II URBAN MASTER PLANS****(8 hours)**

Planning and organizational aspects -Urban waste resources management - Water in urban ecosystem -Urban water resources planning and organization aspects -Storm water management practices -Types of storage -Magnitude of storage -Storage capacity of urban components - Percolation ponds -Temple tanks -Rainwater harvesting -Urban water supply - Demand estimation - Population forecasting -Source identification -Water conveyance -Storage reservoirs -Fixing storage capacity - Distribution network -Types - Analysis -Computer applications - Conservation techniques - Integrated urban water planning - Smart city project planning - Green Building - LEED certification - Green audit.

**UNIT III URBAN WASTEWATER MANAGEMENT****(8 hours)**

Sewage generation -Storm drainage estimation -Industry contribution -Wastewater collection system -Separate and combined system -Hydraulic design of sewer and storm drain -Wastewater treatment -Disposal methods -Concept of decentralization - 3R concepts.

**UNIT IV MUNICIPAL SOLID WASTE MANAGEMENT****(8 hours)**

Sources of solid waste -Characteristics -Rate of generation -Segregation at source - Collection of solid waste -Methods of collection -Route analysis -Transfer and transfer stations -Processing and disposal of solid waste.

**UNIT V CASE STUDIES****(8 hours)**

Environmental economics- Social and physiological aspects of pollution - Successful urban management -Models- Urban management-Case studies from developed nations - Software.

**SUGGESTED READINGS:**

1. George Tchobanoglous, Hilary Theisen and Samuel A. Vigil “Integrated Solid Waste Management”, McGraw Hill Publishers, New York, 1993.
2. McGhee J., “Water supply and sewerage”, McGraw Hill Publishers, 1991
3. Martin P. Wanelista and Yousef. “Storm Water Management and Operations”, John Wiley and Sons, 1993.
4. Neil S. Grigg., “Urban Water Infrastructure Planning – Management and Operations”, John Wiley and Sons, 1986.



Instruction Hours / week: L: 4 T: 0 P: 0

Marks: Internal: 40 External: 60 Total: 100

End Semester Exam: 3 Hours

**COURSE OBJECTIVES:**

1. To provide the participants with a good knowledge on real estate marketing and management.
2. To impart the basic knowledge about the procedure and laws relating to transfer of completed project.
3. To understand the concept of Development Planning & Approval Process
4. To understand the Valuation of Various Categories of Real Estate
5. To impart the basic knowledge of Construction and Project Management.
6. Know the Sectoral Project Marketing & Handing Over

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Explain the fundamental concepts and techniques involved in real estate development process	Understand
CO2	Explain the procedure and laws relating to transfer of completed project.	Understand
CO3	Explain the Development Planning & Approval Process	Understand
CO4	Explain the basic knowledge of Construction and Project Management	Understand
CO5	Explain the Project Marketing & Handing Over	Understand

**Mapping with Programme Outcomes**

COs	P O 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
CO1	3	3	3	-	-	-	-	1	-	-	-	3
CO2	3	3	3	-	-	-	-	1	-	-	-	3
CO3	3	3	3	-	-	-	-	1	-	-	-	2
CO4	3	3	3	-	-	-	-	1	-	-	-	2
CO5	3	3	3	-	-	-	-	1	-	-	-	1
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

**UNIT I –CONCEPT****(8 hours)**

Fundamental concepts and techniques involved in real estate development process - Role of various organizations – CREDAI –BAI etc

**UNIT II – EVENTS AND PRE-PROJECT STUDIES****(8 hours)**

Modeling sequential events in real estate development process - Site evaluation-Land procurement – Development Team assembly - Market study

**UNIT III – DEVELOPMENT PLANNING & APPROVAL PROCESS (8 hours)**

Identifying technical inputs required, planning objectives, front end clearances from various authorities, timing of the project and scheduling.

**UNIT IV –CONSTRUCTION AND PROJECT MANAGEMENT****(8 hours)**

Identifying the elements of infrastructure and there source mobilization, disaggregating the project components, mobilizing the human and fiscal resources procuring and storing materials.

**UNIT V - PROJECT MARKETING&HANDING OVER****(8 hours)**

Over of the completed project- Communication tools required for presenting the project - In house sales promotion -Franchisee system -Joint venture and sharing issues - Procedure and laws Relating to transfer of completed project.

**SUGGESTED READINGS:**

1. GeraldR. Cortesi, “Mastering real estate principles” (2001); Dear born Trade Publising, NewYork, USA.
2. Fillmore W Galaty,“Modern real estate practice” (2002); Dearborn Trade publishing, NewYork, USA
3. Tanya Davis, “Real estate developer’s handbook” (2007), Atlantic pub company, Ocala, USA.
4. Mike E.Miles, “Real estate development-Principles & process 3<sup>rd</sup>edition” (2000); Urban Land Institute, ULI, Washington DC.

**23MBAPI402C VALUATION OF REAL ESTATE AND INFRASTRUCTURE ASSETS 4H - 3C**

**Instruction Hours / week: L: 4 T: 0 P: 0 Marks: Internal: 40 External: 60 Total: 100**

**End Semester Exam: 3 Hours**

**COURSE OBJECTIVES:**

1. To impart the basic knowledge about the Real Estate Valuation
2. To understand the concept of Approaches to Real Estate Valuation
3. To understand the Valuation of Various Categories of Real Estate
4. To impart the basic knowledge of Infrastructure Asset Valuation
5. Know the Sectoral Infrastructure Valuation

**Course Outcomes**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Explain the Real Estate Valuation.	Understand
CO2	Explain the concept of Approaches to Real Estate Valuation.	Understand
CO3	Explain the Valuation of Various Categories of Real Estate.	Understand
CO4	Explain the basic knowledge of Infrastructure Asset Valuation.	Understand
CO5	Explain the Sectoral Infrastructure Valuation.	Understand

**Mapping with Programme Outcomes**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12
CO1	S	S	S	-	-	-	-	L	-	-	-	S
CO2	S	S	S	-	-	-	-	L	-	-	-	S
CO3	S	S	S	-	-	-	-	L	-	-	-	M
CO4	S	S	S	-	-	-	-	L	-	-	-	M
CO5	S	S	S	-	-	-	-	L	-	-	-	L
Average	-	-	-	-	-	-	-	-	-	-	-	-

S-Strong; M-Medium; L-Low

**UNIT I- REAL ESTATE VALUATION****(8 hours)**

Scope and objectives – Concepts of valuation – Types of value –Value vs Price vs Cost – Different methods of valuation - SWOT analysis

**UNIT II- APPROACHES TO REAL ESTATE VALUATION****(8 hours)**

Sales comparison approach – Cost approach – Income approach –SWOT analysis

**UNIT III- VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE****(8 hours)**

Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation –Retail real estate valuation-Mixed-use real estate valuation

**UNIT IV- INFRASTRUCTURE ASSET VALUATION****(8 hours)**

Objective and approaches – Different categories of infrastructure assets – Valuation methodology – Key operational and financial parameters-Valuation framework and models.

**UNIT V- SECTORAL INFRASTRUCTURE VALUATION****(8 hours)**

Power sector – IT sector – Telecom sector – Aviation – Education sector-Other service sectors – Plant and Machinery – Case studies.

**SUGGESTED READINGS:**

1. Infrastructure valuation–Frederic Blanc-Brude and Majid Hasan, EDHEC Risk Institute
2. Infrastructure Asset Management – Frederic Blanc-Brude and Majid Hasan, EDHEC Risk Institute
3. Valuation techniques for infrastructure investment decisions, MichaelJ. Garvin, Department of Civil Engineering and Engineering Mechanics, Columbia University
4. <https://www.thebalance.com/different-types-of-real-estate-investments-you-can-make-357986>
5. [http://rbsa.in/valuation\\_of\\_infrastructure\\_assets\\_specialized\\_assets.html](http://rbsa.in/valuation_of_infrastructure_assets_specialized_assets.html)
6. [http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude\\_2015a.pdf](http://edhec.infrastructure.institute/wp-content/uploads/publications/blanc-brude_2015a.pdf)
7. Application of Real Options in Infrastructure Projects Charles Y.J.Cheah, PhD, CFA

**Instruction Hours / week: L: 2 T: 0 P: 0 Marks: Internal: 50 Total: 50****COURSE OBJECTIVES:**

To make the students

- To understand Indian ethos and values
- To appreciate the concepts of business ethics in leadership
- To analyze and resolve ethical dilemma
- To develop knowledge and understanding about the theoretical perspectives and frameworks of corporate governance, ethical, environmental and social dimensions.
- To focus on various natural and manmade hazards and its preparedness measures to come out of such calamities.
- To make students understand social responsibility of business and its impact.

**COURSE OUTCOMES:**

At the end of this course, students will be able to

<b>COs</b>	<b>Course Outcomes</b>	<b>Blooms Level</b>
CO1	Understand Indian ethos and values	Understand
CO2	Assess the concepts of business ethics in leadership	Evaluate
CO3	Analyze and resolve ethical dilemma	Analyse
CO4	Estimate behaviour and performance that demonstrates enhanced competence in decision-making, group leadership, oral and written communication, critical thinking, analysing, planning and team work.	Understand
CO5	Assess and Manage Ethical Dilemma	Analyse
CO6	Understand ethical issues related to business and good governance necessary for long term survival of business.	Understand

**Mapping with Programme Outcomes**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>
CO1								<b>M</b>		
CO2								<b>M</b>		
CO3								<b>M</b>		

CO4								<b>M</b>		
CO5								<b>M</b>		
CO6								<b>M</b>		<b>L</b>

**S-Strong; M-Medium; L-Low**

### **UNIT I Elements of Indian ethos**

**(4 hours)**

Union rather than dominion status of human beings–renunciation of self–laws of karma: Law of creation, law of humility, law of growth, law of responsibility, law of connection – Brain stilling, the Indian ethos for management.

Importance of Karma to managers– Nishkama Karma–Corporate Karma.

corporate Karma leadership (connecting company and cause, integrating, philanthropy into work environment)

### **UNIT II Management ideas form Vedas**

**(4 hours)**

Management ideas form Vedas, Mahabharata, Bible, Quran, Artha Shastra, Thirukkural, Kautilya's Arthashastra. Indian Heritage in Business, Management. Production and consumption–Ethics Vs Ethos, Indian Vs Western Management, Work Ethos and values for Indian managers– Relevance of value based management in global change–Impact of values on take holders, Trans–cultural Human values, Secular Vs spiritual values, value system in work culture.

### **UNIT III Stress management**

**(4 hours)**

Stress management meditation for mental health, yoga, contemporary approaches to leadership—Joint Hindu Family Business– Leadership Qualities of Karta– Indian systems of learning–Gurukul system of learning– Advantages and Disadvantages.

Spirituality: Meaning, why spirituality now, characteristics of spiritual organization, Achieving a spiritual organisation, achieving a spiritual organisation, criticism of spirituality.

### **UNIT IV Understanding the need for ethics**

**(4 hours)**

Understanding the need for ethics, ethical values, myths and ambiguity, ethical codes, ethical principles in business; Theories of Ethics, Absolutism Vs Relativism, Technological approach, the Deontological approach, Kohlberg's six stages of moral development (CMD)

### **UNIT V Managing Ethical Dilemma;(4 hours)**

Managing Ethical Dilemma; Characteristics, ethical decision making, ethical reasoning, the dilemma resolution process; ethical dilemmas in different business areas of finance, marketing, HRM, international business. Ethical culture in Organization, Developing codes of ethics and conduct, ethical and value based leadership. Role of scriptures in understanding ethics, Indian Wisdom and Indian approaches towards business ethics.

**SUGGESTED READINGS:**

1. Biswanath Ghosh (2009), Ethics in Management and Indian Ethos, Second Edition, Vikas Publishing Housing Pvt.Ltd, New Delhi.
2. Joanne B. Ciulla(2004) , Ethics the heart of Leadership, Praeger, London.
3. Michael Henderson, Dougal Thompson (2004) Values at Work: The Invisible Threads Between People, Performance and Profit, HarperCollinsPublishers PTY Limited
4. Swami Anubhavananda andAryakumar (2000), Ethics in management, insights from Ancient Indian wisdom, Ane Book, Chennai, 2000.
5. S. K. Chakraborty (1998), Values and Ethics for Organizations: Theory and Practices, OUP India

**E-Resources**

- <https://www.youtube.com/watch?v=dTs8meMCiJg>
- <https://www.youtube.com/watch?v=5HHzMJdHhf8>
- <https://www.youtube.com/watch?v=O2MjV1TfoAk>
- <https://www.youtube.com/watch?v=7j66AyiRhSI>

Instruction Hours / week: L: 0 T: 0 P: 20

Marks: Internal: 80 External: 120 Total: 200

**COURSE OBJECTIVES:**

To make the students

- To identify an issue to be analysed and to be solved in a business setup or real time scenario using primary or secondary data collection.
- To understand the application of Research process in the area of accounting / Finance / Marketing/HR/International business etc.
- To analyse the data and critically evaluate the result and formulate the suggestion for the problem identified.
- To apply the theoretical and practical learning of doing research into lifelong practice.
- To Communicate in oral and written form and prepare report
- To enhance students knowledge in international culture and negotiation, where employability is made easy.

**COURSE OUTCOMES:**

At the end of this course, students will be able to

COs	Course Outcomes	Blooms Level
CO1	Identify an issue to be analysed and to be solved in a business setup or real time scenario using primary or secondary data collection.	Remember
CO2	Understand the application of Research process in the area of accounting/Finance/Marketing/HR/International business etc.	Understand
CO3	Analyse the data and critically evaluate the result and formulate the suggestion for the problem identified.	Analyse
CO4	Apply the theoretical and practical learning of doing research into lifelong practice.	Apply
CO5	Develop Communication in oral and written form and prepare report	Apply
CO6	Understand the concept of organizational study	Understand



## Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1		M								
CO2		M							L	
CO3		M	L							
CO4		M								L
CO5				M						
CO6									M	L

**S-Strong; M-Medium; L-Low**

Capstone Projects are hands-on projects that allow the students to apply the concepts learned in a Specialization to a practical question or problem related to the Specialization topic. The duration of the project is for a minimum of 8 weeks. The candidate shall bring the attendance certificate and completion certificate from the firm where the project work carried out. On completion of the project work, he/she shall submit the report to the Head of the Department. The Report prepared according to approved guidelines and duly signed by the supervisor(s) shall be submitted to HoD for *Viva-Voce* Exam. The project has to be converted into a research paper and should be submitted for the publication in UGC referred CARE Journals / Scopus Journals / Web of Science Journals. A letter of submission is to be attached along with the *Viva-Voce* Marks. (The first Author is the student and the second author is the supervisor).

The capstone project has three reviews. Two midreview (can be done through skype if the students are pursuing projects in a company outside Tamilnadu. Final review is the Mock Viva Presentation done before the Viva Voce Examination.

The students should select a problem in Accounting, Finance, Marketing or any other arrears related to commerce.

Report should contain

- Introduction
- Introduction about the industry
- Introduction about the Company
- History and growth of organisation
- Organisation chart
- Products and services offered

- Competitors analysis
- SWOT/PEST analysis
- Review of literature – Minimum 20 papers from referred journal
- Need for the Study
- Objectives
- Research Methodology
- Research Design
- Sampling Design
- Sources of Data Collection
- Tools used for analysis
- Limitation
- Data analysis and interpretation
- Findings and Suggestions
- Conclusion
- Bibliography (APA format)

Soft binding of the collected data has to be also submitted for the evaluation.

**Guidelines :**

The report should have a minimum of 50 pages.

Times New Roman

Heading - 13 pts

Text – 12 Pts

One inch page border all sides

1.5 line spacing

# VALUE ADDED COURSE LIST

- Artificial intelligence and machine language for Business decision making
- Creativity and innovative management
- Stock market and investment strategies
- Six Sigma
- Managing Emotional intelligence
- Psychometric testing
- Financial modeling using spreadsheets
- Career Management