M.Com.
Master of Commerce

CHOICE BASED CREDIT SYSTEM (CBCS)

Curriculum and Syllabus

Regular (2023 – 2024)

Enable | Enlighten | Enrich
KARPAGAM
ACADEMY OF HIGHER EDUCATION
(Deemed to be University)
(Established Under Section 3 of UGC Act, 1956)

DEPARTMENT OF COMMERCE
FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT

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)
Pollachi Main Road, Eachanari (Post), Coimbatore – 641 021,
Tamil Nadu, India
Phone: 0422- 2980011-2980015, Fax No: 0422 – 2980022 - 23
Email: info@karpagam.com, Web: www.kahedu.edu.in

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Coimbatore – 641 021

FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT

POST – GRADUATE PROGRAMMES

(REGULAR PROGRAMME)

REGULATIONS
(2023)

CHOICE BASED CREDIT SYSTEM (CBCS)

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FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT
POST-GRADUATE PROGRAMMES
(M.Sc., M.Com.)

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 Post Graduate (PG) Degree programmes 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 P.G. PROGRAMMES OFFERED

The various P.G. Programmes offered by the KAHE are listed in the table below.

S. No.	Programme Offered
1	M.Sc. Biochemistry
2	M.Sc. Microbiology
3	M.Sc. Biotechnology
4	M.Sc. Physics
5	M.Sc. Chemistry
6	M.Sc. Mathematics
7	M.Sc. Computer Science
8	M.Com.
9	MA English

1.2 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.

1.3 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

S. No.	Name of the Programme Offered	Eligibility
1	M.Sc. Biochemistry	B.Sc. Degree with Biology / Biochemistry / Chemistry / Biotechnology / B.F.Sc. / Polymer Chemistry / Microbiology/ Zoology / Botany / Plant Science / Plant Biotechnology / Animal Science / Animal Biotechnology / B.Pharm / Industrial Chemistry / Applied Microbiology / Medical Microbiology / Human Genetics / Medical Genetics / Molecular Biology / Genetics Technology / Environmental Science / Environment Biotechnology / Genetics Engineering / Bioinformatics / Plant Biology & Biotechnology / Animal Cell & Biotechnology / Agriculture / Medical Lab Technology / Nutrition & Dietetics
2	M.Sc. Microbiology	B.Sc. Microbiology / Applied Microbiology / Industrial Microbiology / Medical Microbiology / Botany / Zoology / Biology / Biotechnology / Molecular Biology / Genetic Engineering / Biochemistry / Agriculture / Forestry / Medical Lab Technology / Life Sciences

3	M.Sc. Biotechnology	B.Sc. Degree with Biology / Biochemistry / B.Sc Biology with Chemistry Ancillary / B.F.Sc. / Microbiology / Zoology / Botany / Plant Science /Plant Biotechnology / Animal Science /Animal Biotechnology / B.Pharm / Applied Microbiology / Medical Microbiology / Human Genetics / Medical Genetics / Molecular Biology / Genetics / Environmental Science / Environment Biotechnology / Genetics Engineering / Bioinformatics / Plant Biology & Biotechnology / Animal Cell & Biotechnology / Agriculture / B.Tech (Biotech)
4	M.Sc. Physics	B.Sc. Physics, B.Sc. Physics (CA) / B.Sc. Applied science
5	M.Sc. Chemistry	B. Sc. Chemistry, Industrial Chemistry, Polymer Chemistry
6	M.Sc. Mathematics	B.Sc. Mathematics / B.Sc. Mathematics with Computer Applications
7	M.Sc. Computer Science	B.Sc. Computer Science / Computer Technology / Information Technology / Electronics / Software Systems / BCA/ B.Sc. Applied Sciences
8	M.Com	B.Com./BCom.(CA)/B.Com(PA)/B.Com(Finance&Insurance)/ B.Com.(e-Commerce)/ B.Com.(IT) /B.B.M. /B.B.M.(CA) /B.B.A./B.B.A (CA) / B.Com (CS), B.A. Co-Operation / Bachelor's Degree in Bank Management/ B.A. Economics / B. Com Financial Analytics/ B. Com International Accounting and Finance
9	MA English	BA (English)/Any UG degree with Part II – English for four semester.

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
M.Sc., M.Com., MA	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 All programmes are offered under Choice Based Credit System with a total credit ranges from 87 to 93 for the PG programmes.

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.

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 is 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).

S.No.	Name of the Department	Course Code	Name of the Course
1	M.A English	23EGPOE301	English for Competitive Examinations
2	M.Com	23CMPOE301	Personal Finance and Planning
3	MBA	23MBAPOE301	Organizational Behavior
4	MCA	23CAPOE301	Robotics Process Automation
5	M.Sc Computer Science	23CSPOE301	Cyber Forensics
6	M.Sc Mathematics	23MMPOE301	Coding theory
7	M.Sc Physics	23PHPOE301	Material Characterization
		23PHPOE302	Numerical Methods and Programming
8	M.Sc Chemistry	23CHPOE301	Chemistry in Everyday Life
9	M.Sc Microbiology	23MBPOE301	Fermentation Technology
10	M.Sc Biochemistry	23BCPOE301	Nutrition and Dietetics
11	M.Sc 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	M.Sc., M.Com., MA	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 advice 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

S. No.	Category	Maximum Marks
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
Continuous Internal Assessment : Total		40

*****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

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

* *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	Objective type (20x1=20)
Part - B	Short Answer Type (3 x 2 = 6)
Part - C	3 Eight marks questions 'either – or' choice (3 x 8 = 24 Marks)

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 and C)
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 Questions of six marks each (5 x 6 = 30 Marks.) Question No. 21 to 25 will be 'either-or' type, covering all five units of the syllabus; i.e.,

Instruction	Remarks
	Question No. 21: Unit - I, either 21 (a) or 21 (b), Question No. 22: Unit - II, either 22 (a) or 22 (b), Question No. 23: Unit - III, either 23 (a) or 23 (b), Question No. 24: Unit - IV, either 24 (a) or 24 (b), Question No. 25: Unit - V, either 25 (a) or 25 (b)
Part - C	Question No.26. One Ten marks Question (1 x 10 = 10 Marks)

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
Viva-voce	: 10 Marks
Total	**: 60 Marks**

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:

Letter grade	Marks Range	Grade Point	Description
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:

i. The list of courses enrolled during the semester and the corresponding grade scored.

ii. The Grade Point Average (**GPA**) for the semester and

iii. The Cumulative Grade Point Average (**CGPA**) of all courses enrolled from first semester onwards.

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

$$\textbf{GPA} \text{ of a Semester} = \frac{\text{Sum of the product of the GP by the corresponding credits of the courses offered in that Semester}}{\text{Sum of the credits of the courses of that Semester}}$$

i.e. **GPA** of a Semester = $\frac{\sum_i CiGPi}{\sum_i Ci}$

Sum of the product of the GPs by the corresponding credits of the courses offered for the entire programme

CGPA of the entire programme = ----------

Sum of the credits of the courses of the entire programme

i.e. **CGPA** of the entire programme = $\frac{\sum_n \sum_i CniGPni}{\sum_n \sum_i Cni}$

where,

Ci is the credit fixed for the course 'i' in any semester
GPi 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-totaling 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

25.1. 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.

25.2. 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,**	

DEPARTMENT OF COMMERCE
FACULTY OF ARTS, SCIENCE, COMMERCE AND MANAGEMENT
PG PROGRAM (CBCS) – M.Com.
(2023–2024 Batch and Onwards)

Course code	Name of the course	Objectives and out comes		Instruction hour / week			Credits	Maximum marks			P.No.
		PEOs	POS	L	T	P		CIA	ESE	Total	
SEMESTER I											
23CMP101	Managerial Economics	I,II, III	a,b,c	4	0	0	4	40	60	100	23
23CMP102	Management Accounting	I,II, III, IV	a,b,c	3	1	0	4	40	60	100	26
23CMP103	Human Resource Management	I,II, III	a,b,c	4	0	0	4	40	60	100	28
23CMP104	Advanced Corporate Accounting	I,II, III, IV	a,b,c	3	1	0	4	40	60	100	30
23CMP105	Marketing Management	I,II, III	a,b,c	4	0	0	4	40	60	100	32
23CMP106	Elective I	I,II, III	a,b,c	4	0	0	4	40	60	100	34-39
23CMP111	Computerized Accounting System - Practical	I,II, III	a,b,c	0	0	4	2	40	60	100	40
-	Journal Paper Analysis and Presentation			2	0	0	0	0	0	0	
Semester I Total				**24**	**2**	**4**	**26**	**280**	**420**	**700**	
SEMESTER II											
23CMP201	Financial Management	I,II, III	a,b,c	4	0	0	4	40	60	100	43
23CMP202	Operations Research	I,II, III, IV	a,b,c	3	1	0	4	40	60	100	45
23CMP203	Applied Cost Accounting	I,II, III	a,b,c	3	1	0	4	40	60	100	47
23CMP204	Financial Reporting I	I,II, III, IV	a,b,c	4	0	0	4	40	60	100	49
23CMP205	Direct Taxation and Tax Planning	I,II, III	a,b,c	3	1	0	4	40	60	100	51
23CMP206	Elective II	I,II, III	a,b,c	4	0	0	4	40	60	100	54-59
23CMP211	Data Analysis Using Excel	I,II, III	a,b,c	0	0	4	2	40	60	100	60
	Journal Paper Analysis and Presentation			2	0	0	0	0	0	0	
Semester II Total				**23**	**3**	**4**	**26**	**280**	**420**	**700**	
SEMESTER III											
23CMP301	Financial Reporting II	I,II, III	a,b,c	4	0	0	4	40	60	100	63
23CMP302	Research Methodology	I,II, III, IV	a,b,c	4	0	0	3	40	60	100	66
23CMP303	Indirect Taxation	I,II, III	a,b,c	3	0	0	3	40	60	100	68
23CMP304	International Finance	I,II, III, IV	a,b,c	3	0	0	3	40	60	100	70
23CMP305	Insurance and Risk Management	I,II, III	a,b,c	3	0	0	3	40	60	100	72
23CMP306	Elective III	I,II, III	a,b,c	4	0	0	4	40	60	100	74-79
23CMP311	SPSS (Practical)	I,II, III	a,b,c	0	0	4	2	40	60	100	80
23***OE301	Open Elective	I,II, III	a,b,c	3	0	0	2	0	0	100	82-105
23CMP391	Internship	I,II, III, IV	a,b,c	0	0	0	2	0	0	100	106
	Journal Paper Analysis and Presentation			2	0	0	0	0	0	0	
Semester III Total				**26**	**0**	**4**	**26**	**280**	**420**	**900**	

Course code	Name of the course	Objectives and out comes		Instruction hour / week			Credits	Maximum marks			P.No.
		PEOs	POS	L	T	P		CIA	ESE	Total	
SEMESTER IV											
23CMP401	Entrepreneurship Development	I,II, III	a,b,c	4	0	0	4	40	60	100	107
23CMP402	Digital Marketing	I,II, III, IV	a,b,c	4	0	0	3	40	60	100	109
23CMP491	Project	I,II, III	a,b,c	0	0	20	8	80	120	200	112
	Journal Paper Analysis & Presentation			2	0	0	0	0	0	0	
Semester IV Total				**10**	**-**	**20**	**15**	**160**	**240**	**400**	
Grand Total							**93**	**1000**	**1500**	**2700**	

LIST OF ELECTIVE COURSES

Course code	Name of the course	Objectives and out comes		Instruction hour / week			Credits	Maximum marks			P.No.
		PEOs	Pos	L	T	P		CIA	ESE	Total	
SEMESTER I											
23CMP106A	Environmental Management Accounting	I,II, III		4	0	0	4	40	60	100	34
23CMP106B	Financial Derivatives	I,II, III		4	0	0	4	40	60	100	36
23CMP106C	Business Environment	I,II, III		4	0	0	4	40	60	100	38
SEMESTER II											
23CMP206A	Security Analysis and Portfolio Management	I,II, III		4	0	0	4	40	60	100	54
23CMP206B	International Trade and Practice	I,II, III		4	0	0	4	40	60	100	56
23CMP206C	Business Analytics	I,II, III		4	0	0	4	40	60	100	58
SEMESTER III											
23CMP306A	Organizational Behaviour	I,II, III		4	0	0	4	40	60	100	74
23CMP306B	Corporate Governance, Ethics and Social Responsibility	I,II, III		4	0	0	4	40	60	100	76
23CMP306C	Retail Marketing	I,II, III		4	0	0	4	40	60	100	78

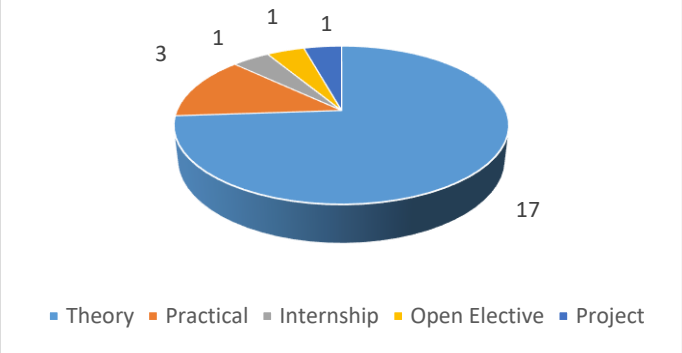
LIST OF OPEN ELECTIVE COURSES

Course code	Name of the course	Objectives and out comes		Instruction hour / week			Credits	Maximum marks			P.No.
		PEOs	Pos	L	T	P		CIA	ESE	Total	
SEMESTER III											
ENGLISH											
23EGPOE301	English for Competitive Examinations			3	0	0	2	40	60	100	
COMMERCE											
23CMPOE301	Personal Finance and Planning			3	0	0	2	40	60	100	

Course code	Name of the course	Objectives and out comes		Instruction hour / week			Cre dits	Maximum marks			P.No.
		PEOs	Pos	L	T	P		CIA	ESE	Total	
MANAGEMENT											
23MBAOE301	Organizational Behaviour			3	0	0	2	40	60	100	
COMPUTER APPLICATION											
23CAPOE301	Robotics Process Automation			3	0	0	2	40	60	100	
COMPUTER SCIENCE											
23CSPOE301	Cyber Forensics			3	0	0	2	40	60	100	
PHYSICS											
23PHPOE301	Materials Characterization			3	0	0	2	40	60	100	
23PHPOE302	Numerical Methods and Programming			3	0	0	2	40	60	100	
CHEMISTRY											
23CHPOE301	Chemistry in Everyday life			3	0	0	2	40	60	100	
MICROBIOLOGY											
23MBPOE301	Fermentation Technology			3	0	0	2	40	60	100	
BIOCHEMISTRY											
23BCPOE301	Nutrition and Dietetics			3	0	0	2	40	60	100	
BIOTECHNOLOGY											
23BTPOE301	Sericulture			3	0	0	2	40	60	100	
MATHEMATICS											
23MMP305B	Coding Theory			3	0	0	2	40	60	100	

COURSE DISTRIBUTION

Courses	Numbers
Theory	17
Practical	3
Internship	1
Open Elective	1
Project	1



PROGRAM OUTCOMES (PO)

a) Postgraduates will develop an understanding of various commerce functions such as finance, accounting, financial analysis, project evaluation, cost accounting.
b) Postgraduates will have exposure to solve complex commerce problems and analyze problems critically through research based or project based approach of learning.
c) Postgraduates will excerpt information from various sources and apply mathematical, analytical, statistical and IT tools for financial and accounting analysis.
d) Postgraduates will develop an ability to effectively communicate both orally and in written forms.
e) Postgraduates will appreciate the importance of working independently and in a team in order to achieve common goals.
f) Postgraduates will acquire critical and analytical thinking and will be able to apply the sam e in effective decision making.
g) 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.
h) Graduates will develop communication skills and build confidence to face the challenges of the corporate world.
i) Graduates will develop various managerial and accounting skills for better professional opportunities
j) Graduates will acquire entrepreneurial skills and able to start entrepreneurship

PROGRAM SPECIFIC OUTCOMES (PSO)

k) 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.
l) Postgraduates will acquire managerial positions or take up entrepreneurial ventures by applying the skills and knowledge gained

PROGRAM EDUCATIONAL OBJECTIVES(PEO)

1. Post graduates will gain advanced knowledge in the domain of commerce, management and finance
2. Postgraduates will be able to apply the accounting, finance and management tools and techniques to implement systematic decision-making process.
3. Post graduates will attain research insights, professional skills and competencies to enhance lifelong learning and excel in diverse career path.
4. Postgraduates will adapt to a rapidly changing global environment and become socially responsible and value driven citizens committed to sustainable growth..

MAPPING of PEOs and POs

PEOs	Programme Outcomes											
	a	b	c	d	e	f	g	h	i	j	k	l
PEO 1	S	S	S	S	M	M	M	M	M	M	M	M
PEO 2	S	S	S	S	S	S	S	S	M	M	M	M
PEO 3	S	S	S	S	S	S	S	M	S	M	M	M
PEO 4	M	M	M	S	S	S	S	S	S	S	S	S

S-Strong; M-Medium; L-Low

23CMP101 MANAGERIAL ECONOMICS SEMESTER – I
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To gain knowledge on concept of demand and supply & to understand the concept of production, cost and revenue function
2. To know the pricing policies adopted in various market structures
3. To estimate impact of inflation on business cycle and personal disposable income
4. To assess impact of monetary and fiscal policy on economic development
5. To enable students to obtain managerial problem-solving skills

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge on concept of demand and supply & understand the concept of production, cost and revenue function	Understand
CO2	Know the pricing policies adopted in various market structures	Understand
CO3	Estimate impact of inflation on business cycle and personal disposable income	Analyze
CO4	Assess impact of monetary and fiscal policy on economic development	Evaluate
CO5	Enable students to obtain managerial problem-solving skills	Analyze

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	L	S	S	S	M	S	M	S
CO2	L	S	M	S	L	M	M	S	S	L
CO3	S	S	S	M	M	S	L	M	M	M
CO4	M	L	S	S	M	M	S	S	L	S
CO5	S	M	S	M	S	L	S	M	S	M

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Managerial Economics: Law of Demand and Supply - Introduction – Meaning - Nature and Scope of Managerial Economics - Significance in Decision Making. Consumer's Behavior and Demand: Meaning of Consumer's Equilibrium – Utility approach – Law of Equilibrium – Marginal utility–Consumers Surplus–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.

UNIT II **(10)**

Production, Cost and Revenue Function: Producer's Behaviour and Supply - Basic concepts in production – Firm – Fixed and Variable Factors – Short and Long run – Total Product – Marginal Product – Average Product – Production Function – Law of Returns – Law of Returns to Scale – Economies and Diseconomies of Scale – Producer's Equilibrium.

Cost and Revenue Function: Cost of Production – Opportunity cost – Fixed and Variable Costs–Total Cost Curves – Average Cost Curves – Marginal Cost – Long run and Short run Cost Curves – Total Revenue – Average Revenue – Marginal Revenue – Break Even Point Analysis.

UNIT III **(10)**

Market Competition and Price Structures : 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 – Predatory pricing - Price Discrimination – Degrees of Price Discrimination- Pricing objectives and Pricing Methods. Oligopoly Market Competition–Features – Price Leadership–Price Rigidity–Cartel– Collusive and Non-Collusive oligopoly – Oligopsony – Features – Monopolistic Competition – Features–Product Differentiation–Selling Cost– ShortRun and LongRun Equilibrium–Monopsony- Duopoly Market – Features.

UNIT IV **(10)**

Macro-Economic Indicators: Production Method – Income Method – Expenditure Method Phases of Business Cycle – Causes of cyclical movements – Price Movements: Inflation, Deflation, and Deflation – Types of Inflation – Effects of Inflation – Control of Inflation- 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.

UNIT V **(9)**

Monetary Policy and Fiscal Policy : Objectives of Monetary Policy – Types of Monetary Policy – Instruments of Monetary Policy – Objectives of Fiscal Policy – Types of Fiscal Policy – Instruments of Fiscal Policy – Budget Preparation – Financial Stimulus.

Balance of Trade and Balance of Payments – Current Account and Capital Account of BOP – Disequilibrium in BOP.

SUGGESTED READINGS:

1. Varshney and Maheshwari, Managerial Economics, Sultan Chand and Sons, New Delhi.
2. Mehta, P, Business Economics, Sultan Chand and Sons, New Delhi
3. Geetika and Piyali Ghosh (2017), Managerial Economics, 3rd edition , McGraw Hill Education, New Delhi.
4. Christopher R.Thomas and S.Charles Maurice (2017), Managerial Economics : foundation of business analysis and strategy, 10th edition, McGraw Hill Education,

New Delhi
5. Paul Samuelson, William D. Nordhaus (2017), Micro Economics, 19th edition, McGraw Hill Education, New Delhi
6. William F. Samuelson (Author), Stephen G. Marks (2013), Managerial Economics, 6th edition, Wiley, New Delhi
7. https://swayam.gov.in/nd1_noc20_mg67/preview
8. https://swayam.gov.in/nd2_imb20_mg38/preview

23CMP102 MANAGEMENT ACCOUNTING SEMESTER – I
4H–4C

Instruction Hours / Week: L: 3 T: 1 P: 0 **Marks:** Internal: **40** External: **60** Total: **100**
End Semester Exam: 3Hours

COURSE OBJECTIVES:

To make the students

1. To carry out horizontal and vertical analysis & interpret financial statements
2. To understand the applications of standard costing in real life situations
3. To know the principles and practice of marginal costing
4. To apply with techniques of budgetary control in real life
5. To apply the techniques of management accounting in real time business

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Carry out horizontal and vertical analysis & interpret financial statements	Analyze
CO2	Understand the applications of standard costing in real life situations	Understand
CO3	Know the principles and practice of marginal costing	Understand
CO4	Apply with techniques of budgetary control in real life	Apply
CO5	Apply the techniques of management accounting in real time business	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	M	M	L	M	L	S	S	L
CO2	M	M	S	S	S	S	M	M	S	S
CO3	S	S	M	M	S	M	L	M	L	M
CO4	M	M	S	S	M	S	M	S	M	L
CO5	L	S	M	S	S	M	S	S	M	S

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Introduction - Meaning, Objectives, Nature and Scope of management accounting, Difference between cost accounting and management accounting, Cost control and Cost reduction, Cost management- Financial Statement Analysis - Objectives, Features, Horizontal and Vertical Analysis- Comparative and Common size Analysis.

UNIT II **(9)**

Financial Statement Analysis -Ratio Analysis: Meaning, Advantages, Limitations, Classifications of ratios Fund Flow Statement: Meaning, Uses, Limitations, Sources and uses of funds Cash Flow Statement: Meaning, Uses, Limitations, Sources and uses of cash, AS3 Standard format.

UNIT III **(9)**

Standard Costing - Standard Costing: Standard Costing and Variance Analysis: Meaning of Standard Cost and Standard Costing, Advantages, Limitations and Applications. Variance Analysis– Material, Labour, Overheads and Sales Variances. Disposition of Variances, Control Ratios.

UNIT IV **(12)**

Marginal Costing and Decision Making-Absorption versus Variable Costing: Distinctive features and income determination - Cost-Volume, Profit/Volume ratio. Break-even analysis- algebraic and graphic methods. Angle of incidence, margin of safety, Key factor, determination of cost indifference point. **Decision Making:** Steps in Decision Making Process, Concept of Relevant Costs and Benefits, Various short-term decision-making situations – profitable product mix, Acceptance or Rejection of special/export offers, Make or buy, Addition or Elimination of a product line, sell or process further, operate or shut down. Marginal Cost Based Lending Rates.

UNIT V **(9)**

Budgetary Control and Contemporary Issues -Budgeting and Budgetary Control: Concept of budget, types, objectives, merits and limitations. Budget administration. Functional budgets. Fixed and flexible budgets. Zero base budgeting. Programme and performance budgeting. Contemporary Issues: Responsibility Accounting: Concept, Significance, Different Responsibility Centres, Divisional Performance Measurement: Financial and Non-Financial measures. Transfer Pricing.

Note: Distribution of marks - 30% theory and 70% problems

SUGGESTED READINGS

1. M.Y. Khan, P.K. Jain (2018), Management Accounting, 7th Edition, McGraw Hill Education, New Delhi.
2. Sharma , Shashi K Gupta ,Management Accounting , Kalyani Publishers, Chennai.
3. Dr SN Maheshwari, CA Sharad K Maheshwari & Dr Suneel K Maheshwari(2018),A Text book of Accounting for Management, 4th Edition S Chand Publishing, NewDelhi.
4. Alnoor Bhimani, CharlesT. Horngren, SrikantM. Datar, Madhav Rajan(2015)Management and Cost Accounting,6th edition, Pearson Education, New Delhi.
5. Narasimhan (2017), Management Accounting, Cengage Learning Publishing, New Delhi
6. The Institute of Company Secretaries of India (2018), Corporate and Management Accounting, M P Printers
7. https://swayam.gov.in/nd1_noc20_mg65/preview
8. https://swayam.gov.in/nd2_imb20_mg31/preview

23CMP103 HUMAN RESOURCE MANAGEMENT SEMESTER – I
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To update knowledge on latest trends in human resource management & job analysis
2. To choose right form of training and performance appraisal techniques
3. To determine compensation and rewards for employees and workers
4. To build harmonious relationship between management and employees
5. To formulate dispute settlement strategy for global business

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Update knowledge on latest trends in human resource management & job analysis	Understand
CO2	Choose right form of training and performance appraisal techniques	Apply
CO3	Determine compensation and rewards for employees and workers	Evaluate
CO4	Build harmonious relationship between management and employees	Apply
CO5	Formulate dispute settlement strategy for global business	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	M	S	M	S	L	M	S	M
CO2	M	L	S	S	M	M	M	S	M	L
CO3	S	S	S	M	L	S	S	S	S	S
CO4	M	S	L	S	S	S	M	S	S	L
CO5	S	M	M	M	M	S	L	M	M	S

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Human Resource Management and Latest Trends in HR - Human Resource Management - introduction to Human Resource Management– Functions and Importance of HRM – Globalization and Challenges to HR Manager – Diversity Management– Strategic Human Resource Management–HR Audit and Accounting-HR Analytics

UNIT II **(12)**

HRP, Selection, Recruitment and Job Analysis - Human Resource Planning and Staffing - Human Resource Planning and Forecasting – Job Analysis –Recruitment – Employee Testing and Selection – Interviewing for selection – Employee Socialization – Employee termination and Exit interviews - Job analysis and Design – Process of Job

Analysis - Job description, Job specification, Job rotation, Job enrichment-Jobenlargement–Jobenhancement – Recruitmentandselection:Sourcesofrecruitment, Recruitment process – Process of selection - Induction and Placement.

UNIT III **(11)**

Training, Performance Management and Career Development - Training Needs - Designing Training Programs – Methods and Techniques of Training and Development – Techniques - Training evaluation –Talent Management –Management Development Programme- Techniques of Performance Appraisal – Orientation – Socialization – Process of Socialization – Strategies. Training – Training Process - Performance Appraisal- Process – Traditional and Modern Methods - 360^{o} - 720^{o} feedback - Ethics of Performance Appraisal - Challenges to Performance Appraisal – Career and Development Planning- Mentoring – Coaching – Succession Planning.

UNIT IV **(9)**

Compensation and Reward - Compensation and Reward Management - Factors Influencing pay rates - Components of Compensation – Types of Incentives and Rewards Employee Benefits and Services - Executive Compensation – Employee Social Security - Employee Engagement.

UNIT V **(9)**

Employee Relations - Employee Relations - Managing Employee Relations – Grievance Management - Organizational Discipline – Dispute Settlement – Collective Bargaining– Employee Health and Safety - IHRM and Managing Expatriates - Quality of Work life – Balance Score Cards - Concepts – Methods to improve quality of work Life.

SUGGESTED READINGS

1. Dessler, G. and BijjuVarkkey (2017). Human Resource Management,15th Edition, Pearson Education, New Delhi.
2. Aswathappa, K. (2017). Human Resource Management, 68th Edition, McGraw Hill Education, New Delhi.
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, New Delhi.
5. Scott Snell, George Bohlander, Veena Vohra (2010), Human Resources Management: A South Asian Perspective, 1st Edition, Cengage India, New Delhi.
6. https://swayam.gov.in/nd1_noc20_mg15/preview

23CMP104 ADVANCED CORPORATE ACCOUNTING SEMESTER – I
4H–4C

Instruction Hours / Week: L:3 T: 1 P: 0 **Marks:** Internal: **40** External: **60** Total: **100**
End Semester Exam: 3Hours

COURSE OBJECTIVES:

To make the students

1. To carry out accounting treatment for redemption of preference shares & design a plan for merger and acquisition of companies
2. To understand the procedures for internal reconstruction of companies
3. To develop a plan of proposal for liquidation of companies
4. To update with recent development in accounting
5. To grasp knowledge on accounting standards

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Carry out accounting treatment for redemption of preference shares & design a plan for merger and acquisition of companies	Apply
CO2	Understand the procedures for internal reconstruction of companies	Understand
CO3	Develop a plan of proposal for liquidation of companies	Apply
CO4	Update with recent development in accounting	Understand
CO5	Grasp knowledge on accounting standards	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	L	S	M	M	M	M	M
CO2	S	M	M	M	S	S	M	S	L	S
CO3	M	S	S	S	M	L	S	L	M	S
CO4	S	S	M	S	M	M	M	S	S	M
CO5	M	M	S	M	S	S	L	M	S	S

S-Strong; M-Medium; L-Low

UNIT I **(10)**

Redemption of Preference Shares - Meaning – legal provisions – treatment regarding premium on redemption – creation of Capital Redemption Reserve Account– Fresh issue of shares – Arranging for cash balance for the purpose of redemption–minimum number of shares to be issued for redemption– issue of bonus shares – preparation of Balance sheet (vertical forms) after redemption.

UNIT II **(10)**

Redemption of Preference Shares - Meaning – legal provisions – treatment regarding premium on redemption – creation of Capital Redemption Reserve Account– Fresh issue of shares – Arranging for cash balance for the purpose of redemption–minimum number of shares to be issued for redemption– issue of bonus shares – preparation of Balance sheet (vertical forms) after redemption

UNIT III **(10)**

Internal Reconstruction-Meaning–Objective–Procedure–Form of Reduction – Passing of Journal Entries – Preparation of Reconstruction accounts – Preparation of Balance Sheet after Reconstruction. (Vertical Format) Problems.

UNIT IV **(9)**

Liquidation of Companies - Meaning–Types of Liquidation – Order of Payment - Calculation of Liquidator's Remuneration – Preparation of Liquidators Final Statement of Account. National Company Law Tribunal – Features and Insolvency and Bankruptcy Code 2016 – Role – Liquidation process.

UNIT V **(9)**

Recent Developments in Accounting & Accounting Standards (Theory Only) - Human Resource Accounting – Environmental Accounting – Social Responsibility Accounting – Valuation of Brand. Indian Accounting Standards- Meaning - Need for accounting standardsin India – Accounting standards Board (ASB) process of setting accounting standards in India- A brief theoretical study of Indian accounting standards- International Accounting Standard (IAS) -IFRS.

Note: Theory:70 Marks and Problems: 30 Marks

SUGGESTED READINGS

1. S C Gupta (2019), Shukla & Grewal's Advanced Corporate Accounting, S.Chand, New Delhi.
2. KL Narang &SP Jain (2017), Advanced Accountancy Corporate Accounting Vol. 1 & 2, Kalyani Publishers, New Delhi.
3. M Hanif, A Mukherjee (2017), Corporate Accounting, 2nd Edition, McGraw Hill, New Delhi
4. M C Shukla (Author), T S Grewal (2016), Advanced Accounts - Volume I & II, 19th Edition, S. Chand, New Delhi.
5. G Sekar (2018),Padhuka's Students' Handbook on Advanced Accounting (For CA Inter-New Sly), Wolters Kluwer India Pvt. Ltd.
6. Ruqsana Anjum (2018), Advanced Corporate Accounting, 1st edition, McGraw Hill Education, New Delhi.
7. https://www.coursera.org/learn/advanced-financial-reporting

23CMP105 MARKETING MANAGEMENT SEMESTER – I
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To understand the concepts of marketing, market segmentation and price fixation
2. To choose appropriate distribution channel for product distribution
3. To know the concept of Integrated Marketing
4. To formulate marketing strategies for business sustainability
5. To update recent concept of mar

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the concepts of marketing, market segmentation and price fixation	Understand
CO2	Choose appropriate distribution channel for product distribution	Apply
CO3	Know the concept of Integrated Marketing	Understand
CO4	Formulate marketing strategies for business sustainability	Create
CO5	Update recent concept of marketing	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	L	M	S	S	M	M	M	M	S
CO2	M	M	S	M	L	M	S	L	S	L
CO3	L	M	S	M	M	S	M	S	M	S
CO4	S	S	M	L	L	M	M	S	M	S
CO5	M	M	L	S	S	M	M	L	S	L

S-Strong; M-Medium; L-Low

UNIT I **(10)**

Marketing Concepts and Tasks -Defining and Delivering Customer Value and Satisfaction - Value Chain - Delivery Network, Marketing Environment, Adapting Marketing to New Liberalized Economy - Digitalization, Customization, Changing Marketing Practices, e- business - Setting up Websites, Marketing Information System, Strategic Marketing Planning and Organization.

UNIT II **(10)**

Consumer Behavior- Market Segmentation and Targeting, Positioning and differentiation strategies, Product life cycle strategies, New product development, Product Mix and Product line decisions, Branding and Packaging, Price setting - objectives, factors and methods, Price adapting policies, Initiating and responding to price changes- Labeling and Packaging- Market research – Objectives – Research Process – Advantages.

UNIT III **(9)**

Marketing Channel System - Functions and Flows, Channel design, Channel management - Selection, Training, Motivation and evaluation of channel members – Channel dynamics-VMS, HMS – MMS - Market Logistics Decisions.

UNIT IV **(9)**

Integrated Marketing - Communication Process and Mix, Advertising, Sales Promotion and Public Relation Decisions. Direct Marketing-Growth, Benefits and Channels, Telemarketing, Salesforce Objectives, Structure, Size and Compensation – Consumer Protection Act 2019 – Consumer Rights- Responsibilities – Consumer Grievances – RTP UTP – Redressal Forum.

UNIT V **(10)**

Identifying and Analyzing Competitors - Designing Competitive Strategies for Leaders, Challengers - Followers and Niches - Customer Relationship Marketing - Customer Database.

Data Warehousing and Mining - Attracting and Retaining Customers –Consumerism in India, Controlling of Marketing Efforts - Global Target Market Selection- Standardization Vs Adaptation – Product- Pricing - Distribution and Promotional Policy. Recent Trends in Marketing – International Marketing – Strategic Marketing – Rural Marketing – Online Marketing – Green Marketing – Viral Marketing and Social Marketing.

SUGGESTED READINGS

1. Philip T. Kotler, Gary Armstrong, Prafulla Agnihotri (2018), Principles of Marketing, 17th Edition, Pearson Education, New Delhi
2. V. S. Ramaswamy , S. Ramkumar (2018), Marketing Management: Indian Context Global Perspective, 6th Edition, , Sage Publications India (P) Ltd. New Delhi
3. Philip Kotler, Kevin Lane Keller, (2017), Marketing Management, 15th Edition, Pearson Education, New Delhi
4. Rajan Saxena (2017), Marketing Management, 5th Edition, McGraw Hill Education, New Delhi.
5. Philip Kotler (2017), Marketing 4.0: Moving from Traditional to Digital, Wiley, New Delhi
6. https://www.coursera.org/learn/marketing-management

23CMP106A **ENVIRONMENTAL MANAGEMENT ACCOUNTING** **SEMESTER – I 4H–4C**

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

COURSE OBJECTIVES:

To make the students

1. To teach the basic concepts of environmental management accounting
2. To enable students to gain knowledge on valuation of environmental costs and benefits
3. To carryout knowledge on cost benefit analysis and cost effectiveness analysis
4. To know about the use of opportunity cost
5. To teach about total cost assessment

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge on the basic concepts of environmental management accounting	Understand
CO2	Gain knowledge on valuation of environmental costs and benefits	Understand
CO3	Carryout cost benefit analysis and cost effectiveness analysis	Analyze
CO4	Know about the use of opportunity cost	Understand
CO5	Describe about total cost assessment	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	L	M	S	S	M	M	M	M	S
CO2	M	M	S	M	L	M	S	L	S	L
CO3	L	M	S	M	M	S	M	S	M	S
CO4	S	S	M	L	L	M	M	S	M	S
CO5	M	M	L	S	S	M	M	L	S	L

S-Strong; M-Medium; L-Low

UNIT I **(10)**

Environmental Management Accounting:Definition- Need for environmental management accounting- Environmental cost categories – Environmental Management Principles- environmental performance evaluation: Indicators, benchmarking.

UNIT II **(10)**

Valuation of environmental costs and benefits- Types of Economic value - Environmental Benefits and Environmental Costs - Valuing the Environment- benefit transfer – economic valuation of ecosystem services- Assessment of Loss of Ecology - Valuation of Health impacts.

UNIT III **(10)**

Cost benefit analysis and Cost effectiveness analysis – Principles, methodology and Limitations – Discounting - Profitability of Pollution Prevention - Payback period – Present value estimation – Internal rate of return.

UNIT IV **(9)**

Opportunity costs –economically efficient pollution control programmes – Economics of Enforcement - Efficient allocation of pollution from mobile and stationery source.

UNIT V **(9)**

Total Cost Assessment - Life cycle costing-Green Accounting and Economic indicators.

SUGGESTED READINGS

1. Jasch Christine(2001), Environmental Management Accounting Metrics: Procedures and principles, , Springer Science & Business Media
2. Pall M. Rikhardsson, Martin Bennett, JanJaapBouma, Stefan Schaltegger (2009), Implementing Environmental Management Accounting: Status and Challenges, Springer Science & Business Media
3. Stefan Schalteggar, Martin Benne tt, Roger L, Burritt, Christine M Jasch (2010), Environmental Management Accounting for Cleaner Production, Spinger Science and Business Media
4. Bennett M D , Bouma J J , Wolters T J (2018), Environmental Management Accounting, Springer Science & Business Media

23CMP106B **FINANCIAL DERIVATIVES** **SEMESTER – I**
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To make the students understand about the concept of Derivatives and its types
2. To acquaint the knowledge of Options and Futures
3. To teach about hedging and the development position of derivatives in India
4. To gain an understanding about the financial derivatives market in India
5. To enable the students to know about stock futures

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain an understanding of the concept of Derivatives and its types	Understand
CO2	Get acquainted about Options and Futures	Understand
CO3	Describe about hedging and the development position of derivatives in India	Analyze
CO4	Gain mastery over the financial derivatives market in India	Analyze
CO5	Understand about stock futures	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	S	L	M	S	M	M	M	S
CO2	L	M	M	S	M	M	M	M	S	S
CO3	S	S	L	M	S	M	L	S	S	M
CO4	M	M	S	S	L	S	S	S	M	S
CO5	S	L	S	M	M	S	L	M	M	M

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Introduction to derivatives - Definition of Financial derivatives- Features – Types - History of Derivatives Markets - Uses of Derivatives - Forward Market:Forward Contract concept - Features - Classification of Forward Contracts - Forward Trading Mechanism - Forward Prices Vs Future Prices.

UNIT II **(10)**

Options and Swaps – Concept – Types – 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 **(9)**

Futures - 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- Theories of Future prices - Future prices and Risk Aversion - Forward Contract Vs. Futures Contracts.

UNIT IV **(10)**

Hedging and Stock Index Futures – Concepts – Perfect Hedging Model – Basic Long and Short Hedges – Cross Hedging — 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 **(10)**

Financial Derivatives Market in India – Need for Derivatives - Evolution of Derivatives in India - Major Recommendations of Dr. L.C. Gupta Committee – Derivatives Trading at NSE/BSE – Eligibility of Stocks –Emerging Structure of Derivatives Markets in India.

SUGGESTED READINGS

1. Gupta S.L., (2008), Financial Derivatives – Theory, Concepts and Problems, Prentice Hall of India, Delhi
2. Kumar S.S.S (2007), Financial Derivatives, Prentice Hall of India, Delhi
3. Chance, Don M (2001), Derivatives and Risk Management Basics, Cen gage Learning, Delhi
4. Stulz M. Rene, (2009), Risk Management and Derivatives, Cen gage Learning, Delhi

23CMP106C **BUSINESS ENVIRONMENT** **SEMESTER – I**
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To understand concepts of business environment, environmental scanning & mode of privatization and globalization of business
2. To able to carry out industry analysis
3. To understand concept of corporate governance and corporate social responsibility
4. To learn impact of political, social and cultural environment on business
5. To understand rate of technology growth in India

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand concepts of business environment and environmental scanning & mode of privatization and globalization of business	Understand
CO2	Able to carry out industry analysis	Analyze
CO3	Understand concept of corporate governance and corporate social responsibility	Understand
CO4	Learn impact of political, social and cultural environment on business	Understand
CO5	Understand rate of technology growth in India	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	M	M	S	S	L	S	L	S
CO2	M	M	L	S	M	M	M	S	M	M
CO3	L	S	S	M	L	M	S	M	S	L
CO4	S	M	L	S	S	S	L	S	M	S
CO5	M	S	M	M	M	S	S	M	S	S

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Business and Its Environment - Concept of Business Environment - Characteristics of Business - Environment - Significance - Environmental Scanning – Process - Techniques of Environmental Scanning - Practices of Environmental Scanning

UNIT II **(10)**

Economic Environment - Economic Systems - Nature, Growth and Role of Public Sector - Privatization - Nature and Objectives - Privatisation Routes - Disinvestment - Globalization - Nature and Rationale - Multinational Corporations - India & WTO - Fiscal and Monetary Policy - Foreign Direct Investment - Mergers and Acquisitions - Business Process Outsourcing - Competition Policy – Foreign Institutional Investors.

UNIT III **(9)**

Industry Analysis - Industry Analysis - Economic Reforms and Competitive Environment Business Environment and Current Issues - Airlines Industry, Mobile Services, Software Industry, Steel Industry, Cement Industry, Passenger Cars, Two-wheelers, Pharmaceutical Industry, Organised Retailing, Express Services Industry

UNIT IV **(10)**

Political, Social and Cultural Environment - Political Institutions - Legislature, Executive, Judiciary and Judicial Activism - Culture and Business Ethics - Social Responsibility of Business - Nature, Models and Strategies - Corporate Governance & Corporate Social Responsibility - Social Audit - Ecology and Business - Nature of Physical Environment - Impact on Business - Geo Political Environment.

UNIT V **(10)**

Technological Environment - Features and Impact on Technology - Technology and Society Restraints on Technological Growth - Status of Technology in India - Technology Policy – Technology Transfer.

SUGGESTED READINGS

1. Francis Cherunilam (2019), Business Environment Text & Cases, 28th Edition, Himalaya Publishing House Pvt., Ltd., Mumbai
2. K. Aswathappa (2019), Essentials of Business Environment, 15th Edition, Himalaya Publishing House Pvt., Ltd., Mumbai
3. Dr. V. C. Sinha, Dr Ritika Sinha (2020), Business Environment, SBPD Publishing House, Uttar Pradesh
4. https://www.coursera.org/learn/global-business-environment

23CMP111 COMPUTERIZED ACCOUNTING SYSTEM (PRACTICAL) SEMESTER – I 4H–2C

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

COURSE OBJECTIVES:

To make the students

1. To understand method of company creation and alteration & managing multiple ledgers
2. To prepare various set of vouchers on Tally
3. To calculate GST calculation on Tally
4. To process purchase and sales order on Tally
5. To comprehend the mode of taking backup and restore of data

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand method of company creation and alteration & managing multiple ledgers	Understand
CO2	Prepare various set of vouchers on Tally	Analyze
CO3	Calculate GST calculation on Tally	Apply
CO4	Process purchase and sales order on Tally	Apply
CO5	Comprehend the mode of taking backup and restore of data	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	S	L	M	S	M	M	M	S
CO2	L	M	M	S	M	M	M	M	S	S
CO3	S	S	L	M	S	M	L	S	S	M
CO4	M	M	S	S	L	S	S	S	M	S
CO5	S	L	S	M	M	S	L	M	M	M

S-Strong; M-Medium; L-Low

EXERCISES

Ex 1 : User Interface and Company Management (3)

Introduction to Tally ERP9 - Installing Tally ERP9 License Server - Creating a Company Data Path for Tally ERP9 Companies - Altering and Deleting Company - Gateway of Tally and User Interface

Ex 2 : Masters – Ledgers (3)

Creating Ledgers - Creating Multiple Ledgers - Altering and Deleting Ledgers – Practical Example

Ex 3 : Masters – Bill wise Debtors and Creditors Ledgers (3)

Using Practice Files - Configuring Bill wise Details - Examples on Creating Bill wise Ledgers

Ex.4 : Payment Voucher , Receipt Voucher, Contra and Journal Voucher (3)

Default Vouchers - Payment in Single Entry Mode (Examples) - Payment in Double Entry Mode (Examples)
Receipt Vouchers - Practical Examples
Contra for Banking - Practical Examples on Contra Vouchers - Practical Examples on Journal Vouchers

Ex. 5 : Masters - Billwise Debtors and Creditors Ledgers **(3)**
Using Practice Files - Configuring Billwise Details - Examples on Creating Billwise Ledgers

Ex. 6 : Day Book **(3)**
Day Book Reports - Altering and Deleting Transactions, Pre-Allocation of Bills - Pre-Allocation of Bills - Practical Examples

Ex.7 : Cheque Printing **(3)**
CTS Cheque Printing System - Practical Examples

Ex.8 Inventory **(3)**
Integrating Accounts and Inventory - Practical on Stock Group - Practical on Godown and Locations - Practical on Stock Category - Practical on Units of Measure - Stock Items Manual Stock Valuation without Inventory

Ex.9 Sales Voucher with GST **(3)**
Practical on Sales Voucher - Tax Invoice - Practical on Tax Invoice - Printing Sales Invoice - E-Way Bill

Ex.10 Purchase Order Processing, Sales Order Processing **(4)**
Purchase Order Process - Purchase Order Voucher with Examples - Receipt Note (Inventory) with Examples - Rejection-Out Voucher with Examples - Sales Order Process - Sales Order Voucher with Examples - Delivery Note (Inventory) with Examples - Rejection- IN Voucher with Examples

Ex.11 Debit and Credit Notes, Bank Reconciliation **(3)**
Debit Note Returns with Examples - Credit Note Returns with Examples- Understandings Process- Practical Examples

Ex.12 Interest Calculations (Auto Mode) **(3)**
Activating Interest Calculations - Practical Examples

Ex.13 Party Ledger Analysis **(4)**
Customer and Supplier Balance Checking - Customer and Supplier Bill Wise Checking - Overdue Payables and Receivables - Outstanding Reports and Printing - Confirmation of Accounts - Negative Ledgers Report

Ex.14 Cash and Bank Reports **(3)**
Cash Book and Bank Book - Stock Transfer Report - Negative Stock Report

Ex.15 Financial Reports Export, Import, Backup and Restore (4)

Trial Balance - Profit and Loss Account - Balance Sheet - Working Capital - Cash Flow and Fund Flow Statements Export and Import Formats - Practical Examples - Data Backup and Restore

SUGGESTED READINGS

1. Tally Education, (2018), Official Guide to Financial Accounting Using Tally. ERP9 with GST (Release 6.4), 4th revised and updated edition, BPB Publications; New Delhi
2. Asok K. Nadhani (2018), Tally ERP Training Guide – 4th Edition, BPB Publications; New Delhi
3. Sajee Kurian, (2017) Learning Tally ERP 9 with GST, 1st Edition, Blessings Inc, Mumbai.
4. Ajay Maheshwari and Shubham Maheshwari (2017), Implementing GST in Tally ERP 9
5. Shraddha Singh (Author), Navneet Mehra (2014), Tally ERP 9 (Power of Simplicity): Software for Business and Accounts, V&S Publishers, New Delhi

23CMP201 **FINANCIAL MANAGEMENT** **SEMESTER – II**
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To calculate problems on capital budgeting & compute cost of capital
2. To gain knowledge on various capital structure theories
3. To understand corporate dividend behavior
4. To manage the working capital requirements
5. To apply principles and practice of financial management in real life situation

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Calculate problems on capital budgeting & cost of capital	Analyze
CO2	Gain knowledge on various capital structure theories	Understand
CO3	Understand corporate dividend behavior	Understand
CO4	Manage the working capital requirements	Analyze
CO5	Apply principles and practice of financial management in real life situation	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	S	S	M	M	S	S	S	L
CO2	S	M	M	L	S	S	M	L	M	S
CO3	M	L	S	M	S	S	M	S	L	M
CO4	M	M	M	S	S	L	M	M	M	M
CO5	S	S	M	S	M	M	S	S	S	L

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Financial Management: Meaning, nature and scope of finance; financial goal - profit Vs. Wealth Maximization; Finance functions – investment, financing and dividend decisions. Capital Budgeting : Nature of investment decisions; Investment evaluation criteria– net present value. Internal rate of return, Profitability index, payback period, accounting rate of return; NPV and IRR comparison; Capital rationing; Risk analysis in capital budgeting.

UNIT II **(8)**

Cost of Capital: Meaning and significance of cost of capital: Calculation of cost of debt, preference capital, equity capital and retained earnings; Combined cost of capital (weighted); Cost of equity and CAPM. Operating and Financial Leverage: Measurement of Leverages; Effects of operating and financial leverage on profit; Analysing alternate financial plans; Combined financial and operating leverage.

UNIT III **(7)**

Capital Structure Theories: Traditional and M.M. Hypotheses – without taxes and with taxes; Determining capital structure in practice.

UNIT IV **(8)**

Dividend Policies: Issues in dividend decisions, Walter's model, Gordon's model, MM Hypothesis, dividend and uncertainty, relevance of dividend; Dividend policy in practice; Forms of dividends; Stability in dividend policy; Corporate dividend behaviour.

UNIT V **(8)**

Management of Working Capital: Meaning, significance and types of working capital; Calculating of operating cycle period and estimation of working capital requirements; Financing of working capital; Sources of working capital; Factoring services; Dimensions of working capital management. Management of cash, receivables and inventory.

SUGGESTED READINGS

1. Pandey. I.M. (2016). Financial Management, 11thEdition, Vikas Publishing House, New Delhi.
2. Khan, M.K. and Jain, P.K.(2017). Financial Management, 7th Edition, McGrawHill,New Delhi
3. Chandra, P. (2017). Financial Management Theory and Practice, 9thEdition, McGraw Hill, New Delhi.
4. C.Paramasivan, T.Subramanian (2018), Financial Management, 1st Edition, New Age International Pvt. Limited, New Delhi.
5. Eugene F. BrighamMichael C. Ehrhardt (2017), Financial Management Theory and Practice, 15th Edition Cengage Publication, New Delhi.
6. Vanhorne, J. C and Wachowicz, J .M Jr (2015). Fundamentals of Financial Management. 13th Edition. Pearson Education, New Delhi.
7. Lawrence J. Gitman , Chad J. Zutter, (2017). Principles of Managerial Finance, 13th Edition, Pearson Education, New Delhi
8. https://swayam.gov.in/nd2_cec20_mg05/preview
9. https://swayam.gov.in/nd1_noc20_mg31/preview
10. https://swayam.gov.in/nd2_cec20_mg10/preview

23CMP202 **OPERATIONS RESEARCH** **SEMESTER – II**
4H–4C

Instruction Hours / Week: L:3 T:1P:0 **Marks:** Internal: **40** External: **60** Total: **100** **End Semester Exam:** 3Hours

Course Objectives

This course enables the students

1. To provide essential knowledge on Linear programming
2. To offer practical exposure to transportation and assignment problems
3. To gain the knowledge on Assignment and Queuing Theory Problems
4. To train students on Inventory Control
5. To helps to facilitates the learning of network analysis

Course Outcomes

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge on linear programming	Understand
CO2	Gain practical exposure to transportation and assignment problems	Understand
CO3	Gain the knowledge on Assignment and Queuing Theory Problems	Understand
CO4	Train students on Inventory Control	Apply
CO5	Help to facilitates the learning of network analysis	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	S	S	M	M	S	S	S	L
CO2	S	M	M	L	S	S	M	L	M	S
CO3	M	L	S	M	S	S	M	S	L	M
CO4	M	M	M	S	S	L	M	M	M	M
CO5	S	S	M	S	M	M	S	S	S	L

S-Strong; M-Medium; L-Low

UNIT – I **(8)**

Introduction to Operations Research – Application in Management Decision Making – Linear Programming: Formulation of LPP – Graphical Solution to LPP –Simplex Method (using slack variables only).

UNIT - II **(8)**

Transportation Model - Introduction – Mathematical Formulation –Finding Initial Basic Feasible Solutions – Optimum Solution for Nondegeneracy and Degeneracy Model - Unbalanced Transportation Problems and Maximization case in Transportation Problem.

UNIT- III **(8)**

The Assignment problem - Mathematical Formulation of the Problem – Hungarian Method –Unbalanced Assignment Problem- Maximization Case in Assignment Problem - Travelling Salesman Problem.

Queuing Theory - Introduction – Characteristics of Queuing System. Problems in (M/M/1):(∞/FIFO) and (M/M/1):(N/FIFO) models

UNIT - IV **(8)**

Inventory Control - Introduction – Costs involved in Inventory – Deterministic EOQ Models – Purchasing Model without and with Shortage, Manufacturing Model without and with Shortage -Price Break.

UNIT – V **(8)**

PERT and CPM - Network Representation – Calculation of Earliest expected time, latest allowable occurrence time. CPM - Various Floats for Activities – Critical Path- PERT –Time Estimates in PERT- Probability of Meeting scheduled date of Completion of Projects.

SUGGESTED READINGS

1. Kanthi Swarup, Gupta P.K., Man Mohan., (2011) Operations Research, Sultan Chand and Sons, New Delhi.
2. Sharma J.K., (2011), Operations Research Theory and Applications, Macmillan India Ltd, New Delhi.
3. Sundaresan V., Ganapathy Subramanian K.S., and Ganesan K., (2017), Resource Management Techniques, A. R. Publications, Nagapatinam.
4. Shanthi Sophia Bharathi D.,(1999),Operations Research/ Resource management techniques, Charulatha Publications.
5. HamdyA.Taha., Operations Research, (2011),Pearson Education, Prentice Hall.
6. https://youtu.be/vUMGvpsb8dc
7. https://youtu.be/ItOuvM2KmD4

23CMP203 APPLIED COST ACCOUNTING SEMESTER – II
4H–4C

Instruction Hours / Week: L:3 T:1P:0 **Marks:** Internal: **40** External: **60** Total: **100** **End Semester Exam:** 3Hours

COURSE OBJECTIVES:

To make the students

1. To understand the concept of cost control and cost reduction & apply inventory control techniques
2. To compute problems on process costing
3. To understand costing techniques on job and service costing
4. To reconcile financial and cost accounting
5. To apply cost accounting principles in real life business situations

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the concept of cost control and cost reduction & apply inventory control techniques	Understand
CO2	Compute problems on process costing	Analyze
CO3	Understand costing techniques on job and service costing	Understand
CO4	Reconcile financial and cost accounting	Analyze
CO5	Apply cost accounting principles in real life business situations	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	M	S	S	M	S	M	L	L
CO2	M	M	S	M	S	S	M	S	M	M
CO3	S	S	M	S	M	M	S	M	S	S
CO4	S	M	S	M	S	M	M	S	M	S
CO5	M	L	M	S	L	M	M	S	M	M

S-Strong; M-Medium; L-Low

UNIT I **(8)**

Introduction-Meaning,ObjectivesandAdvantagesofCostAccounting-Differencebetween Cost Accounting and Financial Accounting - Cost Concepts and Classifications - Elements of Cost - Installation of a Costing System - Role of a Cost Accountant in an Organization - **Cost Control and Cost Reduction**-Meaning, Elements, Scheme and techniques of Cost control, Essentials for success of cost control, meaning of cost reduction, areas of cost reduction, tools and techniques of cost reduction, distinction between cost control and Cost reduction - Preparation of Cost sheet.

UNIT II **(8)**

Material Costing - Materials: Material/inventory control techniques - Accounting and Control of Purchases - storage and issue of materials. Methods of Pricing of materials

issues – FIFO, LIFO, Weighted and Simple average - Weighted - Materials Issued at Various Stages

UNIT III **(8)**

Process Costing - Process Costing with Multiple Departments; Journal Entries for Process Costing; Impact of Flexible Manufacturing and JIT on Process Costing. Process Costing - Addition of Materials, Spoilage and Defective Units - Addition of Materials. Accounting for Spoilage; Abnormal Gain; Accounting for Rework; Reworked in a Separate Process; Accounting for Scrap Material and Waste.

UNIT IV **(8)**

Job, Batch and Service Costing - Nature, Purpose and Procedure of Job Costing, Recording and Controlling Costs in Job order Costing, Forms used in Job order Costing, Tenders and Quotations, Nature and use of Batch Costing, Determination of Economic batch quantity. .**Service Costing -** Meaning of Service Costing; Transport Costing; Power Costing; Canteen Costing; Hospital Costing; Educational Institute.

UNIT V **(8)**

Reconciliation and Integral Accounting-Need for reconciliation, reasons for disagreements in Profit, procedure for reconciliation. Integral Accounting – Meaning, Need, Method of Integrating Financial and Cost Accounting.

SUGGESTED READINGS

1. Khan, M. Y. & P.K. Jain (2017), Cost Accounting, 2nd Edition, McGraw Hill, New Delhi
2. Jain S. P, K.L. Narang and Simmi Agarawal (2016), Cost Accounting Principles and Practice, Kalyani Publishers
3. Tulsian P.C. Tulsian Bharat (2016), Cost Accounting for CA – IPC (Group-I) 9th Edition, S.Chand, New Delhi.
4. Banerjee H (2014), Cost Accounting Theory and Practice, 13th Edition, Prentice Hall India Learning Private Limited, New Delhi.
5. M N Arora (2012), Cost Accounting: Principles & Practice, Vikas Publishing, 12th Edition, New Delhi.
6. https://swayam.gov.in/nd1_noc20_mg53/preview

23CMP204 FINANCIAL REPORTING I SEMESTER – II

4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To Examine important role of accounting plays in society.
2. To Classify the business transactions and create financial statements according to generally accepted accounting principles.
3. To understand the important role of accounting plays in allowing individuals to make informed decisions.
4. To construct financial statements for individual entities for the use of shareholders.
5. To construct financial statements such as balance sheets, income statements, and cash flow statements from the underlying transactions

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the use and application of the IFRS (and Ind AS in India) & accounting for transactions	Understand
CO2	Construct the single entity financial statement.	Create
CO3	Examine & interpretation of accounting statements.	Analyze
CO4	Explain the main elements of financial accounting information – assets, liabilities, revenue and expenses.	Understand
CO5	Identify the main financial statements and their purposes	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	S	S	M	M	S	M	M	M	S
CO2	M	M	S	L	S	M	M	S	S	S
CO3	S	S	M	M	M	M	S	M	S	M
CO4	S	M	M	S	S	S	L	S	M	M
CO5	S	S	S	L	M	M	M	M	S	S

S-Strong; M-Medium; L-Low

UNIT I (8)

Use of IFRS and Ind AS-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 (8)

Application of IFRS (Ind AS) for transactions- 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 **(8)**

Revenue recognition- 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 **(8)**

Preparation & presentation of financial statements- 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 **(8)**

Preparation & presentation of financial statements- 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).

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, 2013,1st edition, Bloomsbury Professional India, New Delhi.

23CMP205 DIRECT TAXATION AND TAX PLANNING SEMESTER – II
4H–4C

Instruction Hours / Week: L:3 T:1P:0 **Marks:** Internal: **40** External: **60** Total: **100** **End Semester Exam:** 3Hours

COURSE OBJECTIVES:

To make the students

1. To gain fundamental knowledge on Income Tax Act & to compute income under salary and house property
2. To calculate profit and gains from business and profession
3. To estimate income from other sources
4. To understand various modes of collection and recovery of taxes
5. To construct a tax saving portfolio

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain fundamental knowledge on Income Tax Act & compute income under salary and house property	Understand
CO2	Calculate profit and gains from business and profession	Analyze
CO3	Estimate income from other sources	Evaluate
CO4	Understand various modes of collection and recovery of taxes	Understand
CO5	Construct a tax saving portfolio	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	M	L	M	L	M	S	L	M
CO2	S	S	L	S	S	S	M	M	M	M
CO3	S	S	S	S	M	M	S	S	M	S
CO4	M	M	S	M	M	S	M	S	S	M
CO5	S	M	M	S	S	M	S	M	M	M

S-Strong; M-Medium; L-Low

UNIT I (8)

Basic Concepts - An Overview of Income Tax Act, 1961 : Background, Important definitions- Income -Agricultural Income- Assessee – Previous year-Assessment year, Residential Status, Basis of Charge, Scope of Total Income, Tax Rates in accordance with the applicable Finance Act for the relevant assessment year. Exempted income u/s10.

UNIT II (8)

Computation of Income under the head of Salary and Computation of Income under the Head of House Property -Salary – Coverage, Employer and Employee Relationship, Allowances, fully taxable, partially taxable allowances and Monetary and Non-Monetary Perquisites –taxable for all employees, taxable for specified employees and exempted perquisites and profits in lieu of salary.

Computation of Income from House Property: Chargeability, Owner of house property, Determination of Annual Value, Deduction from Net Annual Value, Treatment of Unrealized Rent, Arrears of Rent, Exemptions, Computation of Income from a let out House Property, Self-Occupied Property.

UNIT III **(8)**

Computation of Income – Profits and Gains from Business and Profession - Profits and Gains from Business and Profession: Business and Profession – An overview, Chargeability, Profits and Losses of Speculation Business, Deductions Allowable, Expenses Disallowed, Deemed Profits u/s 41, Maintenance of Accounts, Tax Audit, Presumptive Base Taxation.

Chargeability, Capital Gains, Capital Assets & Transfer, Types of Capital Gains, Mode of Computation of Capital Gains, Exemptions and Deduction, Special Provision–Slump Sale, Compulsory Acquisition, Fair Market Value, Reference to valuation officer.

UNIT IV **(8)**

Computation of Income from Other Sources - Taxation of Dividend u/s 2(22)(a) to (e), Provisions relating to Gifts, Deductions, Other Miscellaneous Provisions. Exemptions/Deduction, Clubbing provisions, Set Off and/or Carry Forward of Losses, Rebate and Relief - Income's not included in Total Income, Tax holidays, Clubbing of Income, Aggregation of Income, Set off and/or Carry forward of losses, Deductions (General and Specific), Rebates and Reliefs. Computation of total income and tax liability

UNIT V **(8)**

Collection and Recovery of Taxes and Tax Planning - TDS/TCS, Returns, Refund & Recovery : Tax Deduction at Source 'TDS' & Tax Collection at Source 'TCS', Advance Tax &Self-Assessment Tax 'SAT',Returns, Signatures, E-Filing, Interest for default in furnishing return of Income, Collection, Recovery of Tax, & Refunds, Assessment, Appeals, Revisions, Settlement of Cases, Penalties etc., Assessment, Appeals & Revisions, Settlement of Cases, Penalties, Offences &Prosecution.

Tax Planning & Tax Management: Tax Planning, Tax Management and Tax avoidance though legitimate tax provisions, Various Avenues. GAAR - Double Taxation Avoidance Agreement 'DTAA' Controlled Foreign Corporation (CFC)- Tax Evasion. Difference between Tax Evasion and Tax Avoidance.

SUGGESTED READINGS

1. VP Gaur and Narang, Puja Ghai, Rajeev Puri, Income tax Law and Practice (2020), Kalyani Publishers, 46th Edition, New Delhi.
2. Dr.H.CMalhotra, Dr. SP. Goyal (2019), Income Tax Law and Practice, 60th Edition, Sathya Bawan Publication, New Delhi.
3. Dr. Girish Ahuja, Dr. Ravi Gupta (2018), Direct Taxes Law and Practices, 10th Edition Wolters Kluwer India Pvt. Ltd, New Delhi.
4. CA Atin Harbhajanka (Agarwal) (2018), Income Tax Law and Practice, 2nd Edition Bharat Law House Pvt. Ltd, New Delhi
5. Dr.Vinod K. Singhania, Dr Kapil Singhania (2018), Direct Taxes Law and Practice,

Taxman Publication Pvt. Limited, New Delhi.
6. Monica Singhania Vinod K Singhania (2019), Students Guide To Income Tax including GST, 61st Edition, Taxmann Publication Pvt. Limited, New Delhi.
7. Direct Tax Law and Practice (2018), The Institute of Company Secretaries of India, MP Printers.
8. https://www.coursera.org/learn/international-taxation

23CMP206A **SECURITY ANALYSIS AND PORTFOLIOMANAGEMENT** **SEMESTER – II 4H–4C**

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

COURSE OBJECTIVES:

To make the students

1. To carryout fundamental and technical analysis & acquire knowledge on portfolio theories
2. To carryout portfolio section and portfolio analysis
3. To evaluate portfolio performance
4. To choose a right investment avenue and carry out portfolio revision
5. To construct an optimal portfolio

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Carryout fundamental and technical analysis & gain knowledge on portfolio theories	Understand
CO2	Carryout portfolio section and portfolio analysis	Understand
CO3	Evaluate portfolio performance	Evaluate
CO4	Choose a right investment avenue and carry out portfolio revision	Apply
CO5	Construct an optimal portfolio	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	S	S	L	M	S	M	S	S
CO2	S	S	M	M	M	S	M	S	S	L
CO3	L	M	L	S	S	M	S	M	M	S
CO4	M	S	S	M	L	M	M	S	M	M
CO5	S	M	M	S	M	S	L	S	L	S

S-Strong; M-Medium; L-Low

UNIT I **(8)**

Investment - Nature and scope of Investment Management – Importance of Investment management – Factors influencing Investment Management – Fundamental and technical analysis – Economic analysis – Industry analysis – Company analysis – Efficient market hypothesis- Time Value of Money – Risk Return Analysis – Annualized Return, Compound Annual Growth – Qualified Investment Plan.

UNIT II **(8)**

Concept of Portfolio Management – Objective of Portfolio Management- Alternative Investment Funds – Portfolio – Management process, targeting, designing, auditing and revising portfolios. Portfolio Theory: Capital Asset Pricing Model (CAPM). Arbitrage Pricing Theory (APT) – Reconciling CAPM and APT.

UNIT III **(8)**

Portfolio analysis: Evaluation of Securities - Choice of Securities for Inclusion in the Portfolio – Measuring return and risk – Attainable set of Portfolio. Portfolio Selection - Ascertaining Efficient Portfolio – Locating Efficient Frontier – Markowitz Approach. Single Index Model – Portfolio Choice - Utility Theory and Indifference Curve.

UNIT IV **(8)**

Portfolio Performance Evaluation: Dimensions of Evaluation – Sharpe Measure – Treynore Measure – Jenson Measure – Comparison of the Three Measure of Portfolio Performance – Portfolio Insurance.

UNIT V **(8)**

Portfolio revision: Needs and Problems – Methods of Revision Formula Plan for Revision Constant value, Constant Ratio and Variables plans- Private Equity.

SUGGESTED READINGS

1. Zvi Bodie, Alex Kane, Alan Marcus, Pitabas Mohanty, (2017), Investments, 10th Edition, Mc Graw-Hill, New Delhi
2. Prasanna Chandra, (2017), Investment Analysis and Portfolio Management, 5th Edition, Mc Graw Hill, New Delhi
3. S. Kevin (2015), Security Analysis and Portfolio Management, 2nd Edition, Prentice Hall of India, New Delhi.
4. Dhanesh Kumar Khatri, (2010), Investment Management and Security Analysis – Text and Cases, 2nd Edition, Laxmi Publications,New Delhi.
5. M. Ranganathan, R. Madhumathi, (2011), Security Analysis and Portfolio Management, 2nd Edition, Pearson Education, New Delhi
6. https://www.coursera.org/learn/portfolio-management

23CMP206B INTERNATIONAL TRADE AND PRACTICE SEMESTER – II
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To provide an overview of functioning of global business and foreign transactions
2. To provide exposure to the students on various issues concerned with import and export
3. To learn about international tendering and subcontracting
4. To know international trade policies of India
5. To enable students to know the trends in international trade

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Get an overview of functioning of global business and foreign transactions	Understand
CO2	Get an exposure to the students on various issues concerned with import and export	Understand
CO3	Learn about international tendering and subcontracting	Understand
CO4	Know international trade policies of India	Understand
CO5	Know the trends in international trade	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	S	S	M	M	L	S	M	S
CO2	S	M	M	M	S	M	S	S	S	L
CO3	M	L	S	M	L	S	S	M	M	M
CO4	S	S	M	S	M	M	L	M	L	S
CO5	M	M	L	M	M	S	M	S	S	M

S-Strong; M-Medium; L-Low

UNIT I **(8)**

World Economy -Global Interdependence -Multinational Banks &Insurance –Policies & Nationalism, International Marketing &Law -Balance of Trade -Balance of Payments Globalization and market effects of Tariffs and Quotas.

UNIT II **(8)**

Identification of export markets - Organizing for Exports - entry conditions - Pricing Export Promotion councils – commodity boards – Registration procedures – types of exporters Export cargo insurance.

UNIT III **(8)**

International tendering & subcontracting -product development &on export pricing sale and payment terms in a trade contract -settlement of trade disputes -protection against

risk in foreign trade -role of ECGC -various guarantee schemes of ECGC -Financing foreign trade.

UNIT IV **(8)**

India's Trade Policies -Trade policies in the context of WTO -Export-Import Procedures Documentation.

UNIT V **(8)**

India's Trade Policies -Trade policies in the context of WTO -Export-Import Procedures Documentation.

SUGGESTED READINGS

1. Kripalani, VH (2010), International Marketing, New Delhi, Prentice Hall.
2. Varshney R.L, &Bhattacharya B (2001), International Marketing Management, New Delhi, Sultan Chand
3. VergheseS.K (2008), Foreign Exchange &Financing of Foreign Trade, New Delhi, Vikas.

23CMP206C **BUSINESS ANALYTICS** **SEMESTER – II**
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To enable students to learn the basics of business data analytics platforms
2. To teach quantitative analysis including sampling etc.
3. To learn advanced statistical techniques such as multivariate analysis etc.
4. To gain an understanding of the nuances of data mining
5. To teach the techniques of regression analysis

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain an understanding of the basics of business data analytics platforms	Understand
CO2	Gain knowledge of quantitative analysis including sampling etc.	Understand
CO3	Learn advanced statistical techniques such as multivariate analysis etc.	Apply
CO4	Describe the nuances of data mining	Understand
CO5	Gain knowledge of techniques of regression analysis	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	M	S	M	L	S	S	M	S
CO2	S	M	L	M	S	S	S	L	S	L
CO3	L	S	M	M	M	M	M	S	M	S
CO4	M	M	S	S	L	S	S	M	S	L
CO5	M	S	S	M	S	M	M	L	M	M

S-Strong; M-Medium; L-Low

UNIT I **(8)**

Introduction to Data Analytics Platform - Visualizing Data - Describing and Summarizing Data - Challenges of Conventional Systems - Intelligent Data Analysis - Analytic Methodologies or Techniques Used in Logical Analysis.

UNIT II **(8)**

Quantitative Analysis - Sampling Methods and Estimation – Probability Distributions - Descriptive Statistics - Inferential Statistics - Hypothesis Testing, Explanatory and Predictive Models, and Fact-Based Management to Drive Decisions and Actions - Tools - Analysis vs Reporting.

UNIT III **(8)**

One-Sample Tests - Two Independent Samples Tests - K Related Samples Tests - Measures of Correlation and Association - Multivariate Nonparametric Test for Interdependence - Probability and Decision Making Under Uncertainty - Normal, Binomial, Poisson, and Exponential Distributions

UNIT IV **(8)**

Data Mining - Importing Data into Excel - SQL - Analysis of Variance and Experimental Design - Statistical Process Control - Statistical Reporting - Foundations, Methods, Interpretations in Excel – R – STATA – PSPP – EVIEWS – Machine Learning.

UNIT V **(8)**

Regression Analysis - Estimating Relationships - Linear versus Nonlinear Relationships - Statistical Inference - Time Series Forecasting - Introduction to Optimization and Simulation Modeling – Optimization and Simulation Model - Decision Support System

SUGGESTED READINGS

1. Bowerman, B. (2016). Business Statistics in Practice: Using Data, Modeling, and Analytics. McGraw-Hill Higher Education
2. Christian Albright, Wayne L. Winston (2015). Business Analytics:Data Analysis and Decision Making 5th Edition, CENGAGE
3. Cliff, T. (2014). Exploratory Data Analysis in Business and Economics: An Introduction Using SPSS. Stata, and Excel: Springer, New York, New York, 215
4. Gert H. N. Laursen, JesperThorlund (2018). Business Analytics for Managers, 2ed: Taking Business Intelligence Beyond Reporting, Wiley

23CMP211 DATA ANALYSIS USING EXCEL (PRACTICAL) SEMESTER – II
4H–2C

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

COURSE OBJECTIVES:

To make the students

1. To understand analysis of financial statements and to forecast revenues & compute time value of money
2. To calculate cost of capital on various sources of finance
3. To ascertain value of shares and its expected rate of return
4. To determine value of bonds and its expected rate of return
5. To familiarize to employ excel functions for decision making

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand analysis of financial statements and to forecast revenues & compute time value of money	Understand
CO2	Calculate cost of capital on various sources of finance	Analyze
CO3	Ascertain value of shares and its expected rate of return	Evaluate
CO4	Determine value of bonds and its expected rate of return	Evaluate
CO5	Familiarize to employ excel functions for decision making	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	S	M	L	M	L	S	S	M
CO2	M	M	S	M	M	M	M	M	L	S
CO3	S	S	M	S	S	M	M	M	L	M
CO4	M	S	M	M	M	S	S	M	M	M
CO5	S	L	S	S	M	S	S	M	S	S

S-Strong; M-Medium; L-Low

EXERCISES

Corporate Financial Statements-Organizing .and. creating spreadsheets; entering and formatting data values; entering expressions for calculating values; linking worksheets; splitting screens to facilitate working between several worksheets (4)

Analysis of Financial Statements - Using logical IF statements; using conditional formatting to call attention to conditions that need correcting; pasting an Excel documentinto a Word document (4)

Forecasting Annual Revenues - Creating, validating, and using linear, quadratic, cubic,and exponential regression models to fit the trends of historical data; creating various types of charts (e.g. scatter diagrams, forecast charts, error patterns and downside risk curves);estimating the accuracy of forecasts; expressing forecast accuracy in terms of confidence limits and downside risk curves. (3)

Forecasting Financial Statements - Using forecasts of revenues to forecast financial statements; using Excel's Scenario Manager to do sensitivity analysis (3)

Forecasting Seasonal Revenues-Creating a seasonally-adjusted forecasting model by joining seasonal adjustments to an annual trend line or a moving average trend line; using error feedback to correct a model so that the average error is zero; using period values to update annual forecasts and revise the model (3)

Time Value of Money - Using Excel's financial functions for calculating the present value of a future amount, the future value of a present amount, the net present value of a series of cash flows periodic payments for mortgages and loans, etc. ;linking an Excel work sheet to a Word document. **CashBudgeting**-Organizingaspreadsheetintomodulesfordifferentpartsofacompanyand linking results; using a one-variable input table for sensitivity analysis to evaluatealternate operating tactics

(4)

Cost of Capital - Calculating the weighted average cost of capital (WACC); using Excel's Goal Seek and Solver tools to find the value of an independent variable (e.g.Return on equity) to satisfy a related goal (e.g. a specified WACC); evaluating the WACC for different amounts of capital raised and creating charts to display the results. (3)

Profit, Break Even, and Leverage - Calculating profits from a firm's cash flows; using Excel's Solver tool to determine the sales volume needed to break even; evaluating a firm's operating, financial, and combined leverages (3)

Capital Budgeting: - Organizing spreadsheets to move from sales revenues to after-tax cash flows; using Excel's financial functions to calculate depreciation schedules; calculating financial measures of success,such as net present value and internal rate of return;using nested IFstatements to determine the discounted years to break even; creating two-variable input tables for sensitivity analysis; using Excel's Solver tool to determine changes that must be made to achieve specified goals, such as a specified net present value or discounted years to break even (4)

Applications of Capital Budgeting - Creating spreadsheets that evaluate the financial payments from various types of capital investments; using one- and two-variable input tables to analyze the sensitivity of financial payoffs to changes in conditions (3)

Capital Budgeting: Risk Analysis with Scenarios - Using Excel's Scenario Manager to analyze the effects of various combinations of conditions (e.g. best-on- best, most probable, and worst-on- worst) on future payoffs. (3)

Capital Budgeting: Risk Analysis with Monte Carlo Simulation - Using Excel's tools for Monte Carlo simulation; using Excel's random number generator to generate and om numbers that follow different probability distributions (e.g., uniform, normal, and triangular distributions) and use the results. (3)

Valuation of Common Stocks-Determining the value of shares of common stocks from their expected future cash flows and an investor's expected rate of return - performing sensitivity and risk analysis related to the value of stocks. (3)

Valuation of Bonds - Determining the value of bonds from their fixed future cash flows and an investor's expected rate of return. (3)

SUGGESTED READINGS

1. Wayne L. Winston, (2017), Microsoft Excel (2016), Data Analysis and Business Modeling, Prentice Hall India Learning Private Limited, New Delhi
2. JohnWalkenbach (2015), Microsoft Excel (2016), Bible:The Comprehensive Tutorial Resource, Wiley India, New Delhi.
3. Manohar Hansa Lysander (2016), Data Analysis and Business Modeling Using Microsoft Excel, Prentice Hall of India, NewDelhi.
4. K. Scott Proctor (2010), Building Financial Models with Microsoft Excel: A Guide for Business Professionals, 2nd Edition, Wiley, New Delhi.
5. https://www.coursera.org/learn/excel-data-analysis

23CMP301 FINANCIAL REPORTING II SEMESTER III
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To understand overview of investment company & apply the funding strategies
2. To analyze and interpret the financial statements Operations.
3. To evaluate the results of tools applied in Investment Companies
4. To create the Capital Accounts and methods of computing Income of Investment Companies.
5. To Create the quality report of financial statements

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand overview of investment company & apply the funding strategies	Understand
CO2	Analyze and interpret the financial statements Operations.	Analyze
CO3	Evaluate the results of tools applied and interpret the result.	Evaluate
CO4	Create the Capital Accounts and methods of computing Income of Investment Companies.	Create
CO5	Creation of quality report of financial statement	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	S	S	M	M	S	M	L	S
CO2	S	S	M	M	S	S	M	S	L	S
CO3	S	M	S	M	M	M	S	M	M	S
CO4	M	S	M	S	S	M	M	S	S	S
CO5	M	S	M	S	M	M	S	S	M	M

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Overview of Investment Company Industry - 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 **(10)**

Investment companies and Fund - 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: United states of America.

UNIT III **(10)**

Investment Accounts and Financial Instruments - 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 - US Government Securities: Treasury Bills - Notes and Bonds. Securities: Mortgage-Backed Securities - High Yield Securities.

UNIT IV **(9)**

Capital Accounts - 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 Unrealized Gains/Losses - Methods of Computing Income Distributions per shares. Taxes: Introduction - Taxation of Regulated Investment Companies.

UNIT V **(10)**

Financial Statement of Investment Companies - 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”, 10th 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.

23CMP302 RESEARCH METHODOLOGY SEMESTER III
4H–3C

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

COURSE OBJECTIVES:

To make the students

1. To understand the basic framework of research and research process and its important in business decision & research designs and sampling techniques and its application
2. To identify appropriate sources of information and methods of data collection for solving a business issue
3. To understand the selection of appropriate tools to analyse the quantitative and qualitative data
4. 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
5. To apply principles and practice of research in real life business situations

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the research process, research design and sampling techniques and its application	Understand
CO2	Identify appropriate methods of data collection	Apply
CO3	Apply appropriate tools to analyse the quantitative and qualitative data	Apply
CO4	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	Understand
CO5	Apply principles and practice of research in real life business situations	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	M	S	M	L	S	S	M	S
CO2	S	M	L	M	S	S	S	L	S	L
CO3	L	S	M	M	M	M	M	S	M	S
CO4	M	M	S	S	L	S	S	M	S	L
CO5	M	S	S	M	S	M	M	L	M	M

S-Strong; M-Medium; L-Low

UNIT I (9)

Research - Introduction to Research: Meaning – Purpose – Types of Research – Significance – Qualities of a good research – Steps in Research - Identification, Selection and Formulation of Research Problem – Sources. Research Design: Components of Research Design – Methods of Research Design - Ethics in Research

UNIT II **(10)**

Sampling Design – Census and Sample Survey–Characteristics of a Good Sample Plan–Steps in Sampling – Types of Sampling – Advantages and Limitations of Sampling. Data Collection: Primary Data - Meaning – Significance – Methods of Collecting Data:

Observation – Interview Schedule – Questionnaire. Secondary Data – Meaning - Sources of Secondary Data – Precautions while using Secondary Data.

UNIT III **(9)**

Hypothesis: Characteristics of a good Hypothesis – Formulation of Hypothesis – Procedure for Testing of Hypothesis – T test, F test and Chi Square Test, Analysis of Variance - Business Forecasting – Exponential Smoothing

UNIT IV **(10)**

Scaling Techniques and Descriptive Statistics : Meaning of Scale–Measurement of Scale – Important Scaling Techniques – Processing of Data – Editing – Purpose–Analysis and Interpretation of Data - Meaning–Need for Interpretation – Techniques of Interpretation - **Descriptive Statistics** - Measures of Central Tendency: - Mean, Median and Mode - Standard deviation – Karl Pearson Correlation – Spearman Rank Correlation - Regression Analysis – Inferential Statistics – Multivariate Analysis - Factor Analysis – Kruskal Wallis Test.

UNIT V **(10)**

Report Writing: Types of Research Reports - Layout of the Report – Steps in Writing the Report – Contents of Research Reports – Ethics in Publication – Plagiarism check – Publication Misconduct.

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. Mar KN.K.Saunders,PhilipLewis,AdrianThornhill (2015), Research Methods for Business Students, 7th Edition, Pearson Education, New Delhi.
6. https://swayam.gov.in/nd2_arp19_ap72/preview
7. https://swayam.gov.in/nd2_cec20_hs17/preview

23CMP303 INDIRECT TAXATION SEMESTER III
3H–3C

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

COURSE OBJECTIVES:

To make the students

1. To understand the Indirect Administration practices in India and to understand the concept of Goods and Services Taxes
2. To gain knowledge on concept of Time and Place of supply
3. To understand the concept and method of computing input tax credit
4. To comprehend the procedural compliance under GST
5. To understand the fundamental principles and practices of customs act

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand the Indirect Administration practices in India and understand the concept of Goods and Services Taxes	Understand
CO2	Gain knowledge on concept of Time and Place of supply	Understand
CO3	Understand the concept and method of computing input tax credit	Apply
CO4	Comprehend the procedural compliance under GST	Understand
CO5	Understand the fundamental principles and practices of customs act	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	M	M	S	S	S	L	M	M
CO2	S	M	L	S	S	S	M	M	M	S
CO3	L	S	S	M	M	L	S	M	L	M
CO4	M	M	S	S	L	M	S	S	S	L
CO5	S	S	M	M	S	S	L	M	M	S

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Concept of Indirect Taxes - Concept of indirect Taxes at a glance – Types of Indirect Taxes – Constitutional powers of taxation; Indirect taxes in India – An overview; Pre-GST tax structure and deficiencies; Administration of Indirect Taxation in India; Existing tax structure.

UNIT II **(7)**

Basics of Goods and Services Tax 'GST' - Basics concept and overview of GST – Objectives – GST Council – GST Rates on Commodities and Services - Constitutional Framework of GST; GST Model – CGST / IGST / SGST / UTGST; Taxable Event;

Concept of supply including composite and mixed supply; Levy and collection of CGST and IGST; Composition scheme & Reverse Charge; Exemptions under GST

UNIT III **(7)**

Concept of Time, Value & Place of Taxable Supply - Basic concepts of Time and Value of Taxable Supply – Basics concept to Place of Taxable Supply. Input Tax Credit & Computation of GST Liability- Overview.

UNIT IV **(7)**

Procedural Compliance under GST - Registration; Tax Invoice, Debit & Credit Note, Account and Record, Electronic way Bill; Return, Payment of Tax, Refund Procedures; Audit – Statutory forms used in GST.

Basic overview on Integrated Goods and Service Tax (IGST), Union Territory Goods and Service tax (UTGST), and GST Compensation to State - GST Practioneer.

UNIT V **(8)**

Overview of Customs Act-Overview of Customs Law – Levy and collection of customs duties -Types of Custom duties - Classification and valuation of Import and Export Goods – Exemption - Officers of customs - Administration of Customs Law - Import and Export Procedures - Transportation, and Warehousing - Duty Drawback - Demand and Recovery - Confiscation of Goods and Conveyances- Refund.

Note: Distribution of marks - 30% theory and 70% problems

SUGGESTED READINGS

1. Balachandran, V (2021), Text Book of GST and Custom Laws, Sultan Chand and Sons, New Delhi
2. VS Datey, Indirect Taxes Law and Practice (2019), 42nd Edition, Taxmann Publication, New Delhi
3. Dr. H.C. Mehrotra, Prof. V.P. Agarwal (2017), Indirect Taxes, 18th Revised Edition, Sahitya Bhawan Publications, New Delhi.
4. Dr Girish Ahuja , Dr Ravi Gupta (2018), Practical Approach to Direct and Indirect Taxes: Containing Income Tax and GST, 37th Edition, Wolters Kluwer India Private Limited, New Delhi
5. Pawan Dhiman (2018), Direct and Indirect Tax Manual, 1st Edition, KSK Publisher and Distributors, New Delhi
6. The Institute of Cost Accountants of India (2018), Indirect Taxation, Directorate ofStudies,
7. https://icmai.in/TaxationPortal/GST/index.php
8. https://www.coursera.org/learn/taxation-business-entities-part-1

23CMP304 INTERNATIONAL FINANCE SEMESTER III
3H–3C

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

COURSE OBJECTIVES:

To make the students

1. To gain fundamental knowledge on international finance and exchange rate mechanism and determination
2. To comprehend the role and function of international monetary fund and world bank
3. To grasp knowledge on regulatory and supervisory framework of Internationalfinancial markets
4. To understand on foreign exchange dealings and risk management
5. To keep updated on recent trends in international financial markets

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain fundamental knowledge on international finance and exchange rate mechanism and determination	Understand
CO2	Comprehend the role and function of international monetary fund and world bank	Understand
CO3	Grasp knowledge on regulatory and supervisory framework of International financial markets	Understand
CO4	Understand on foreign exchange dealings and risk management	Understand
CO5	Keep updated on recent trends in international financial markets	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	S	S	M	M	L	S	M	S
CO2	S	M	M	M	S	M	S	S	S	L
CO3	M	L	S	M	L	S	S	M	M	M
CO4	S	S	M	S	M	M	L	M	L	S
CO5	M	M	L	M	M	S	M	S	S	M

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Fundamentals of foreign exchange - Need for foreign exchange - Definitions - International trade and foreign exchange - Gains from international trade - International finance - Gains from international capital flow - Globalization of markets.

UNIT II **(7)**

Exchange rate mechanism - Types of exchange rates- Factors affecting exchange rates and forward rates - Types of quotation - Rules for quoting exchange rate regime in India -

Evolution, Development and Present status - Theories of exchange rate determination - Exchange rate forecasting

UNIT III **(8)**

International Monetary System - Gold Standard - Bretton Wood System and Subsequent International Monetary Developments - Floating Rate Regime - Role and Functions of International Monetary Fund and World Bank - European Monetary system and Euro Balance of Payment - India's Balance of Payment position - Elements of open Economy. Capital and Current Account Convertibility - Fundamental parity relations - purchasing power parity covered and uncovered - Interest Rate parity - International Fisher Effect.

UNIT IV **(7)**

International Financial Markets - Segments, Participants and Dealing Procedures - Classification of Markets - Borrowing and Investing in International Financial Markets. Instruments and Institutions - Foreign Exchange Market in India - Evolution and Development - Major Centres - Classification - Interbank and Customer Markets - Regulatory and Supervisory Framework - Role of RBI and FEDAI - FEMA and Exchange Control Regulations.

UNIT V **(7)**

Foreign Exchange Risk Management - Defining and Measuring Risk and Exposure - Types of Exposures - Accounting of Foreign Exchange Transactions - Hedging, arbitrage and Cover Operations - Hedging with Foreign Exchange Contracts - Booking, Early Delivery, Extension and Cancellation of Forward Contracts - Inter Bank Dealings - Swaps and Cover Operations - Forex and Money Market Operations - Currency and Funds Position - Foreign Exchange Dealings and Risk Management - Risk Control and Risk Management System - Hedging with Derivatives - FRAs Swaps Futures and Options.

SUGGESTED READINGS

1. Apte (2020), International Financial Management, 8th Edition, Mc Graw Hill, New Delhi Bhalla V.K. (2014), International Financial Management – Text and Cases, S.Chand, New Delhi
2. Steve Suranovic (2010), International Finance: Theory and Policy, Saylor Foundation, Washington
3. Rajiv Srivastava(2014), International Finance, Oxford University Press, New Delhi Somanath, V.S (2011), International Financial Management, I.K. International Publishing House Pvt. Ltd., New Delhi

23CMP305 INSURANCE AND RISK MANAGEMENT SEMESTER III
3H–3C

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

COURSE OBJECTIVES:

To make the students

1. To understand various type of business and personal risks and learn insurance pricing and marketing mechanism
2. To understand the concepts on life and non-life insurance
3. To know about method of product design, underwriting and claims settlement
4. To understand reforms at Indian Insurance Industry
5. To understand the principles of insurance pricing and marketing

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand various type of business and personal risks and learn insurance pricing and marketing mechanism	Understand
CO2	Understand the concepts on life and non-life insurance	Understand
CO3	Know about method of product design, underwriting and claims settlement	Understand
CO4	Understand reforms at Indian Insurance Industry	Understand
CO5	Understand the principles of insurance pricing and marketing	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	M	M	L	M	S	M	M	L
CO2	M	L	M	M	S	S	M	S	L	M
CO3	L	S	S	M	M	M	L	M	S	S
CO4	S	M	L	S	S	M	M	S	M	M
CO5	M	S	M	M	L	S	S	M	S	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Risk : Introduction, interpretations of the term ‘risk’, types of business and personal risks, significance of risk management function within business organizations Insurance and Risk - significance of insurance and risk, general structure of the insurance market, significant aspects of this industry

UNIT II **(7)**

Insurance Pricing and Marketing: Principles of insurance pricing and marketing, tools and techniques used in pricing individual life and health insurance - Financial Management in Insurance Companies and Insurance a Ombudsman: importance of financial management in insurance companies, tools of managing expenses in the

insurance companies, modes used by the insurance companies in channelizing their funds.

Reinsurance: reinsurance in the insurance sector. Areas of the application of reinsurance. Information Technology in Insurance - application of information technology in the insurance sector, role of insurance companies in insurance security, contours of the future of insurance in rural areas.

UNIT III **(7)**

Life Insurance & Non-life Insurance: Factors influencing the key functioning of insurance organizations insurable interest, role of riders in insurance policies - Non-life Insurance - elements of fire insurance contract and its ancillary features. Significance of marine insurance and its various policies, the role of rural insurance in making people's lives better in rural India -Non-life Insurance - II - types of motor insurance policies, critical aspects of aviation industry in the country, significance of liability insurance in India – Nomination – Assignment .Functions and Organization of Insurers - components of the distribution system of life insurance companies in the country, role of agents in the life insurance sector in India, important activities carried out in a life insurance organization

UNIT IV **(7)**

Product Design and Development: Product development in the life and non-life insurance sectors in India, role of risk evaluation in the process of insurance product formation, future trends in the domain of insurance product design and development - **Insurance Underwriting** - need for insurance underwriting, factors that affect the activities performed by the underwriter, steps involved in the process of insurance underwriting - **Claims Management:** factors affecting the insurance claim management system, types of documents needed in various types of claims, meaning of 'Causa Proxima' in insurance claim settlement. Human Life Values – Embedded Value – Actuarial valuation.

UNIT V **(8)**

Reforms in Indian Insurance Industry: Importance of the privatization of insurance industry, problems associated with public insurance enterprises, relation between insurance and economic growth. Regulations Relating to Insurance Accounting and Management - framework for IRDA rules and regulations regarding general insurance investment in the country, role of financial reporting in managing insurance operations, significance of determining solvency margins- Recent Guidelines of IRDA.

SUGGESTED READINGS

1. George E. Rejda , Michael McNamara (2017), Principles of Risk Management and Insurance, 13th Edition, Pearson Education, New Delhi.
2. Scott Harrington and Gregory Niehaus (2017), Risk Management and Insurance, 2nd Edition, McGraw Hill, New Delhi
3. Dorfman (2013), Introduction to Risk Management and Insurance, Prentice Hall, New Delhi
4. Indian Institute of Banking and Finance (2017), Risk Analysis, Insurance and Retirement Planning, Taxman Publications Pvt. Ltd.

23CMP306A ORGANIZATIONAL BEHAVIOR SEMESTER III
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To enable the student's basic aspects of organizational behaviour in current scenario
2. To helps students' attitude and approaches of the organization
3. To furnish personality and motivation
4. To study organizational structure and change
5. To improve the ability of students in leadership and communication

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge on basic aspects of organizational behaviour in current scenario	Understand
CO2	Learn approaches of the organization	Understand
CO3	Understand personality and motivation	Understand
CO4	Gain an understanding of organizational structure and change	Understand
CO5	Improve their ability in leadership and communication	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	M	S	M	S	L	M	S	M
CO2	M	L	S	S	M	M	M	S	M	L
CO3	S	S	S	M	L	S	S	S	S	S
CO4	M	S	L	S	S	S	M	S	S	L
CO5	S	M	M	M	M	S	L	M	M	S

S-Strong; M-Medium; L-Low

UNIT I (9)

Introduction: Definition, nature and importance of Organizational behaviour, historical backround of organizational behaviour, relationship between Organizational behaviour and the individual, theoretical framework (Cognitive, behaviouristic and cognitive) limitations of Organizational behavior

UNIT II (9)

Perception, attitudes and values: Perception - importance and factors influencing perception, interpersonal perception - Learning – classical, operant & social cognitive approaches, managerial implications - Emotions – emotional intelligence – Attitudes – values and attitudes, behaviour relationship – sources, importance, components of attitude,relationship between behaviour and attitude, job attitude, barriers to change attitude

UNIT III **(10)**

Personality and motivation theories: Personality – types-factors influencing personality theories – trait theories – the big five personality model, significant personality traits suitable to the workplace (personality & job fit theory) personality test & their practical applications - Motivation – definition & concept of motive & motivation, the content theories of motivation (Maslow & Hierarchy and Herzerg's two factor model theory), the process theories (Vrooms expectancy and porter and lawler model) contemporary theories – equity theory of work motivation.

UNIT IV **(10)**

Organizational structure: Organizational structure formation – groups in organizations - influence group dynamics - Organizational change – meaning and definition and nature of organizational change, types of organizational change forces that act as stimulants to change, how to overcome the resistance to change, approaches to organizational change, Kurt Lewins three step model, Kottlers 8 steps plan for implementing change.

UNIT V **(10)**

Leadership approaches: Leadership – concept of leadership, styles and trait approach, contingency approach, contemporary leadership, meaning and significance of contemporary leadership -Communication – communication, function, process, barriers, forms-Stress management – stressors in work place, individual differences an experiencing stress – managing workplace stress.

SUGGESTED READINGS

1. Aswathappa, Organizational Behaviour, Himalaya Publishing House, Mumbai
2. Ghanekar,Anjali, Organizational Behaviour, Everest Publication
3. Mishra, Organizational Behaviour, Vikas Publishing House Pvt Ltd., New Delhi
4. Pardeshi.P.C . Organizational Behaviour, Everest Publication
5. Prasad, Organizational Behaviour, Sultan Chand & Sons, New Delhi
6. Robbins&Stephen, Organizational Behaviour, Pearson Publication
7. Sekaran, Organizational Behaviour, Text & Cases Tata McGraw Hill
8. Uma Sekaran, Organizational Behaviour, Tata McGraw Hill

23CMP306B **CORPORATE GOVERNANCE AND SOCIAL RESPONSIBILITY** **SEMESTER III 4H–4C**

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

COURSE OBJECTIVES:

To make the students

1. To gain knowledge on ethical practices followed at business & professional ethics and ethical values of different cultures
2. To comprehend social responsibilities of business
3. To understand vital concepts of Corporate Governance
4. To gain knowledge on Corporate Social Responsibility and Accountability
5. To apply and follow ethical principles in real life and business

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge on ethical practices followed at business & professional ethics and ethical values of different cultures	Understand
CO2	Comprehend social responsibilities of business	Understand
CO3	Understand vital concepts of Corporate Governance	Understand
CO4	Gain knowledge on Corporate Social Responsibility and Accountability	Understand
CO5	Apply and follow ethical principles in real life and business	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	S	M	S	M	M	S	M	S	L
CO2	M	M	L	S	S	S	M	S	M	L
CO3	S	S	M	M	S	S	S	M	S	M
CO4	M	S	S	S	M	M	M	S	M	S
CO5	M	M	M	S	M	S	M	S	S	M

S-Strong; M-Medium; L-Low

UNIT I **(9)**

Values – Importance, Sources of Value Systems, Types, Values, Loyalty and Ethical Behaviour, Values across Cultures; Business Ethics – Nature, Characteristics and Needs, Ethical Practices in Management.

UNIT II **(9)**

Law and Ethics – Relationship between Law and Ethics, Other Bodies in enforcing Ethical Business Behavior, Impact of Laws on Business Ethics; Social Responsibilities of Business – Environmental Protection, Fair Trade Practices, Fulfilling all National obligations under various Laws, Safeguarding Health and well being of Customers.

UNIT III **(10)**

Law and Ethics – Relationship between Law and Ethics, Other Bodies in enforcing Ethical Business Behavior, Impact of Laws on Business Ethics; Social Responsibilities of Business – Environmental Protection, Fair Trade Practices, Fulfilling all National obligations under various Laws, Safeguarding Health and well being ofCustomers.

UNIT IV **(10)**

Corporate Governance: Issues, need, corporate governance code, transparency & disclosure, role of auditors, board of directors and share holders; Global issues of governance, accounting and regulatory frame work, corporate scams, committees in India and abroad, corporate social responsibility.

UNIT V **(10)**

Corporate Social Responsibility – Introduction – System Concept of Business Society – Business and Society Relationship – Business Environment – Business in a Social World Social Responsibility – Corporate Social Responsibility – Corporate Social Accountability – Social Responsibility Tools

SUGGESTED READINGS

1. Balachandran (2011). Corporate Governance, Ethics and Social Responsibility. Prentice Hall of India, Bangaluru
2. Kitson Alan- Ethical Organisation, Palgrave, L. T. Hosmer: The Ethics of Management, Universal Book.
3. D. Murray : Ethics in Organizational, Kogan Page.
4. S. K. Chakraborty : Values and Ethics in Organisation, OUP
5. https://swayam.gov.in/nd2_ntr19_ge06/preview

23CMP306C **RETAIL MARKETING** **SEMESTER III**
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To help explore the students to know the of retailing and other basic thing
2. To help the students to understand the layout and positioning of retail store
3. To reveal the entire strategies related with retail marketing.
4. To evaluate the customer relationship management
5. To highlight the retail channel management

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Gain knowledge of retailing and other basic thing	Understand
CO2	Understand the layout and positioning of retail store	Understand
CO3	Reveal their understanding of the entire strategies related with retail marketing.	Understand
CO4	Evaluate the customer relationship management	Evaluate
CO5	Highlight the retail channel management	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	L	M	S	S	M	M	M	M	S
CO2	M	M	S	M	L	M	S	L	S	L
CO3	L	M	S	M	M	S	M	S	M	S
CO4	S	S	M	L	L	M	M	S	M	S
CO5	M	M	L	S	S	M	M	L	S	L

S-Strong; M-Medium; L-Low

UNIT I **(10)**

Retailing and retail environment: Introduction, meaning, definition and significance of retailing – Characteristics of retailing-Product retailing Vs service retailing Indian Vs Global scenario-Future prospective of retailing in India- Micro ad Macro environmental influences on retail environment –Retail consumer buying process –Buying behaviour – Segmentation – Positioning.

UNIT II **(9)**

Retail Formats and their Location: Different types of retail store– ownership based – store based, non-store based, web based – franchising in retailing – retail location – factors affecting retail location decision – layout and design -interior & exterior – positioning of retail shops.

UNIT III **(9)**

Retail Strategies: Retail strategies, Differentiation strategies, growth strategy, expansion strategy, pricing strategy

UNIT IV **(10)**

Integrated Marketing Communication in Retail: Integrated marketing process, tools of IMC, upcoming tools of IMC, customer relationship management in retailing – introduction, benefits of retail marketing, management of retail, principle of Customer Relationship management strategies, components of customer relationship management – customer relationship management & royalty programme-customers service in retailing.

UNIT V **(10)**

Rural Retailing and Retail Channel Management: Rural retailing – an overview of the India rural market, challenges in Indian rural market, periodic markets, rural retail players in India, Rural relating strategies - Retail channel management, Retail sales promotion techniques – e retailing in India –role of information technology in retailing- electronic data exchange – bar coding – electronic payment system.

SUGGESTED READINGS

1. Andrew J.Navman and Peter Cullon, Retailing Environment, Thomson & Organization
2. Berman, Retail Management 8th Edn., Prentice Hall of India
3. David Gilbert (2003), Retail Marketing Management, Dorling Kindersley (India) Pvt.Ltd., New Delhi.
4. Hustafa, Retail Marketing, Himalaya Publishing House, Mumbai
5. Malcolm Sullivan, Retail Marketing,Sultanchand,New Delhi.
6. Sivakumar (1997), Retail Management, Excel Books, New Delhi
7. Swapna Pradhan (2009), Retailing Management, Tata McGraw-Hill, New Delhi.

23CMP311 SPSS (PRACTICAL) SEMESTER III
4H–2C

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

COURSE OBJECTIVES:

To make the students

1. To compute descriptive statistics & parametric and non-parametric tests
2. To carryout reliability and normality tests
3. To comprehend the application of Bivariate and multivariate analysis
4. To compute bivariate and multivariate analysis
5. To apply statistical techniques on decision making

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Compute descriptive statistics & parametric and non-parametric tests	Analyze
CO2	Carryout reliability and normality tests	Analyze
CO3	Comprehend the application of Bivariate and multivariate analysis	Understand
CO4	Compute bivariate and multivariate analysis	Analyze
CO5	Apply statistical techniques on decision making	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	M	S	M	S	L	S	M	S
CO2	S	M	L	M	S	M	M	M	S	L
CO3	L	S	M	S	S	L	S	M	M	M
CO4	S	M	L	M	S	M	S	S	S	L
CO5	M	S	S	S	M	S	L	M	M	S

S-Strong; M-Medium; L-Low

EXERCISES

1. Simple Frequency (3)
2. Descriptive Statistics (3)
3. Test of Reliability (3)
4. Test of Normality (3)
5. Independent ‘t’Test (3)
6. Analysis of Variance (ANOVA) (3)
7. Paired ‘t’ Test (3)
8. Chi-square (3)
9. Mann Whitney U Test (3)
10. Kruskal Wallis H Test (3)
11. Wilcoxon Test (3)

12. Correlation (3)
13. Regression (4)
14. Factor Analysis (4)
15. Garrett Ranking (4)

SUGGESTED READINGS

1. Darren George, Paul Mallery (2016), IBM SPSS Statistics 23 Step by Step, Routledge, New Delhi.
2. Asthana and Braj Bhushan (2017), Statistics for Social Sciences (With SPSS Applications), Prentice Hall of India, New Delhi
3. Keith Mccormick, Jesus Salcedo, Aaron Poh, SPSS Statistics for Dummies, 3rd Edition, Wiley, New Delhi.
4. Keith McCormick, Jesus Salcedo, Jon Peck, Andrew Wheeler, Jason Verlen (2017), SPSS Statistics for Data Analysis and Visualization, Wiley, New Delhi.
5. Brian C. Cronk (2016), How to Use SPSS®: A Step-By-Step Guide to Analysis and Interpretation, 9th Edition, Routledge, New Delhi

M.A. English **ENGLISH FOR COMPETITIVE EXAMINATIONS** **SEMESTER III**
23EGPOE301 **3H–2C**

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

COURSE OBJECTIVES:

To make the students

- To train learners to crack competitive exams
- To know of various tools that is essential for Competitive Exams
- To enhance their ability to speak in English and face an interview.
- To make the student apply, prepare and clear the competitive exams.
- To prepare the student to concentrate, stay positive and confident.

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

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	S	S	S	S	S	S	S	M	S
CO2	S	M	M	M	S	S	S	S	S	S
CO3	M	S	S	L	S	S	S	M	M	M
CO4	M	S	S	M	M	S	S	M	L	L
CO5	L	M	L	S	M	S	M	M	L	M

S-Strong; M-Medium; L-Low

UNIT I

Grammar - Number-Subject, Verb and Agreement-Articles-Sequences of Tenses-Common Errors.

UNIT II

Word Power - Idioms and Phrases-One word substitution-Synonyms-Antonyms-Words often confused

UNIT III

Paragraph – Expansion of an Idea

UNIT IV

Writing - Essay- Letters-Memos-Agenda-Resume writing

UNIT V

Speaking - Public Speaking-Group discussion-Interview-Spoken English

SUGGESTED READING

1. V. Saraswathi, Maya K. Mudbhatkal (2014). English for Competitive Examinations.Emerald: Chennai.

M.Com. PERSONAL FINANCE AND PLANNING SEMESTER III
23CMPOE301 3H–2C

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

COURSE OBJECTIVES:

To make the students

1. To familiarize with regard to the concept of 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 in to 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

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1										
CO2										
CO3										
CO4										
CO5										

S-Strong; M-Medium; L-Low

UNIT I (7)

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, Net banking and UPI, digital wallets, security and precautions against Ponzi schemes and online frauds such as phishing, credit card cloning, skimming.

UNIT II (7)

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 brownfield Projects; Investment in fixed income instruments- financial derivatives & Commodity market in India. Mutual fund schemes including SIP; International investment avenues.

UNIT III **(7)**

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)**

Insurance Planning - Need for Protection planning. Risk of mortality, health, disability and property. Importance of Insurance: life and non-life insurance schemes. Deductions availableunder the Income-tax Act for premium paid for different policies.

UNIT V **(8)**

Retirement Benefits Planning - Retirement Planning Goals, Process of retirement planning, Pension plans available in India, Reverse mortgage, New Pension Scheme. Exemption availableunder 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:0P:0 **Marks:** Internal: **40** External: **60** Total: **100**
End Semester Exam: 3Hours

Course Objectives

This course enables the students to learn

1. To understand the basic concepts of organizational behavior.
2. To analyze the individual behavior traits required for performing as an individual orgroup.
3. To obtain the perceiving skills to judge the situation and communicate the thoughts andideas.
4. To understand how to perform in group and team and how to manage the power, politicsand conflict.
5. To recognize the importance of organizational culture and organizational change.

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Analyse organizational behavior issues in the context of the organizational behaviortheories and concepts.	Understand
CO2	Assess the behavior of the individuals and groups in organization and manage the stress.	Evaluate
CO3	Manage team, power, politics and conflict arising between the members.	Analyze
CO4	Explain how organizational change and culture affect the working relationship withinorganizations.	Understand
CO5	Understand and exhibit the communication skills to convey the thoughts and ideas of caseanalysis to the individuals and group.	Remember

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	M	M	S	M	S	L	M	S	M
CO2	M	L	S	S	M	M	M	S	M	L
CO3	S	S	S	M	L	S	S	S	S	S
CO4	M	S	L	S	S	S	M	S	S	L
CO5	S	M	M	M	M	S	L	M	M	S

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Organization Behaviour: Introduction - 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 **(7)**

Behaviour and Personality - 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 **(7)**

Perception - 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 **(7)**

Group and Stress Management - 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 **(8)**

Organization Culture and Change - 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, 12th Edition,Mc Graw Hill Education, New Delhi.
2. Steven Mcshane and Mary Ann VonGlinow (2017), Organizational Behavior, 6th edition, Mc Graw Hill Education, New Delhi.
3. Robbins, S. P., and Judge, T.A. (2016). Organizational Behaviour. (16thedition). Prentice Hall of India, New Delhi
4. Laurie J. Mullins (2016), Management and Organisational Behaviour, 10th Edition, Pearson Education, New Delhi
5. Robbins, S. P., and Judge, T.A. (2016). Essentials of Organizational Behavior.13th Edition, Pearson Education, New Delhi

MCA **ROBOTICS PROCESS AUTOMATION** **SEMESTER III**
23CAPOE301 **3H–2C**

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

Course Objectives

This course enables the students to learn

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

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Learn conjugate and conjugate classes.	Understand
CO2	Recognize some advances of the theory of groups.	Evaluate
CO3	Formulate some special types of rings and their properties.	Analyze
CO4	Understand the fundamental theorem of Galois theory.	Understand
CO5	Know about the concept of finite field.	Remember

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Introduction - 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 forimplementing RPA - Centre of Excellence – Types and their applications - Building an RPA team - Approach for implementing RPA initiatives.

UNIT II **(7)**

Automation - 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 **(7)**

Automation Implementation - 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 **(7)**

Robot - 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 **(8)**

Robot Skill - 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/uipath/uipath_robotic_process_automation_introduction.htm
2. https://www.javatpoint.com/rpa
3. https://onlinecourses.nptel.ac.in/noc19_me74/preview

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

Course Objectives

This course enables the students to learn

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:

Learners should 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
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Computer Forensics and Investigations - 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 **(7)**

Data Acquisition - Data acquisition – Storage formats for digital evidence – Validating data acquisitions – Processing crime and incident scenes–Identifying digital evidence– Collecting evidence in privatesector incident scenes – Preparing for search-seizing digital evidence at the scene-storing digital evidence –Reviewing a case.

UNIT III **(7)**

Computer Forensics Tools - Current computer forensics tools–Software tools– Hardware tools–The Macintosh file structure and boot process – Computer forensics analysis and validation – Addressing data –Hidingtechniques.

UNIT IV **(7)**

Network Forensics - 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 **(8)**

Mobile Device Forensics - 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 andInvestigations, Cengage Learning, 5th Edition.
2. Eoghan Casey. (2017). "Handbook of Digital Forensics and Investigation", AcademicPress, 1st Edition,
3. John R Vacca,.(2016)."Computer Forensics", Cengage Learning, 2nd Edition.

WEBSITES

1. www.cps.brockport.edu/~shen/cps301/figures/figure1.pdf
2. www.forensicsguru.com/devicedataextractionsimcell.php
3. www.nptel.ac.in/courses/106101060
4. www.samsclass.info/121/ppt/ch11.ppt
5. www.garykessler.net/library/role_of_computer_forensics.html

M.Sc., Physics **MATERIALS CHARACTERIZATION** **SEMESTER III**
23PHPOE301 **3H–2C**

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

Course Objectives

This course enables the students to learn

1. To Study materials is always important, for any application, including fabrication of satellites.
2. To introduce various methods available for characterizing the materials.
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

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Handle with X-ray, thermal, microscopic, and electrical methods of characterization.	Understand
CO2	Understand and describe the fundamental principles behind the methods of characterization which are included in the curriculum	Evaluate
CO3	Analyze, interpret and present observations from the different methods.	Analyze
CO4	Evaluate the uncertainty of observations and results from the different methods.	Understand
CO5	Understand the history of materials science with basic understanding of metals, binary alloys, magnetic materials, dielectric materials and polymers	Remember

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

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)**

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)**

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)**

Thermoanalytical Methods Principle, instrumentation and applications of Thermogravimetric Analysis (TGA), Differential Temperature Analysis (DTA) and Differential Scanning Calorometry (DSC). Factors affecting the TGA/DTA/DSC results and their interpretations. Hand on experience of operation of TG/DSC and data analysis.

UNIT V **(8)**

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.

M.Sc., Physics NUMERICAL METHODS AND PROGRAMMING SEMESTER III
23PHPOE302 3H–2C

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

Course Objectives

This course enables the students to learn

1. Computational physics may be broadly defined as 'the science of using computers to assist in the solution of physical problems, and to further physics research.
2. To equip the students of M.Sc. Physics with knowledge of programming in C, roots of equation, interpolation, curve fitting, numerical differentiation, numerical integration, solution of ordinary differential equations
3. To introduce students to computational methods for simulating physical systems and solving problems arising in physics and astronomy, as well as in other related fields
4. Computers now play a role in almost every branch of physics like large scale quantum mechanical calculations in nuclear, atomic, molecular and condensed matter physics, large scale calculations in such fields as hydrodynamics, astrophysics, plasma physics, meteorology and geophysics etc.
5. The huge increase in the power of computers in recent years has made an impact on the role of computational physics

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Programme numerical methods and their implementation like applying to problem in physics, including modeling of classical physics to quantum system as well as data analysis (Linear and non linear).	Understand
CO2	Analysis techniques for propagating error, representing data graphically.	Analyze
CO3	Create, solve and interpret basic mathematical tool.	Analyze
CO4	Program independently computers using leading-edge tools, formulate and computationally solve a selection of problems in physics	Understand
CO5	Use the tools, methodologies, language and conventions of physics to test and Communicate ideas and explanations.	Remember

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Errors, different type of errors. Representation of numbers in computer, computer arithmetic, zero in floating point number.

UNIT II **(7)**

Operators –finite differences, average, differential, etc., their inter-relations. Difference of polynomials. Difference equation. Interpolation. Lagrange's methods, error terms. Uniqueness of interpolating polynomial.

UNIT III **(7)**

Newton's fundamental interpolation. Forward, backward and central difference interpolations. Interpolation by iteration. Spline interpolation, comparison with Newton's interpolation. Hermite's interpolation. Bivariate interpolation, Lagrange and Newton's methods. Inverse interpolation.

UNIT IV **(7)**

Approximation of function. Least square method. Use of orthogonal polynomials. Approximation by Chebyshev polynomials, Max-min principle. Economization of power series.

UNIT V **(8)**

Python Programming –Loops- Conditional statements- Functions- Object-oriented programming- Array computing- 2d and 3d visualizations.

SUGGESTED READINGS

1. E. Balagurusamy, "Numerical Methods", Tata McGraw-Hill Publishing Company Ltd.,New Delhi, 1999
2. W.H. Press, B.P. Flannery et al., "Numerical Recipes: Art of Scientific Computing", 3rd Edition, Cambridge Press, 2007.
3. J. M. Mathews and K. Fink, "Numerical Methods using MATLAB ", 4rd Edition, Prentice Hall Publication, 2004
4. Dr. B.S. Grewal, "Numerical Methods in Engineering and Science ", Khanna Publication.
5. Robert J schilling, Sandra l harries , " Applied Numerical Methods for Engineers using MATLAB and C.", Thomson Brooks/cole.
6. Richard L. Burden, J. Douglas Faires, "Numerical Analysis", Thomson / Brooks/cole
7. John. H. Mathews, Kurtis Fink ,"Numerical Methods Using MATLAB" ,Prentice Hall publication
8. Jaan Kiusalaas , "Numerical Methods in Engineering with MATLAB", Cambridge Publication
9. https://archive.nptel.ac.in/content/

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

Course Objectives

This course enables the students to learn

1. To 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. To know about the chemistry of soaps, detergents and textiles.
5. To learn about the chemistry behind the polymers, fuel and agriculture

COURSE OUTCOMES:

Learners should 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	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(8)**

Importance of Chemistry in Food - 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 **(8)**

Chemistry in Medicines and Cosmetics - 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 **(8)**

Chemistry in Energy - 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 **(6)**

Importance of Chemisry in Soaps, Detergents and Textiles - 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 **(6)**

Chemistry of Polymers, Fuel and Agriculture - 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.

M.Sc., Microbiology **FERMENTATION TECHNOLOGY** **SEMESTER III**
23MBPOE302 **3H–2C**

Instruction Hours / Week: L:3 T:0 P:0

Marks: Internal: **40** External: **60** Total: **100**
End Semester Exam: 3Hours

Course Objectives

This course enables the students to learn

1. To encompass the use of microorganisms in the manufacture of food or industrial products on the basis of employment.
2. To get equipped with a theoretical and practical understanding of industrial microbiology
3. To appreciate how microbiology is applied in the manufacture of industrial products
4. To know how to source microorganisms of industrial importance from the environment
5. To know about the design of bioreactors, factors affecting growth and production, heat transfer, oxygen transfer

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
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

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

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 **(7)**

Basics of Fermentation Process - Definition, scope, history, and chronological development of the fermentation industry. Component parts of the fermentation process. Component parts of fermentation process. Microbial growth kinetics, batch and continuous, direct, dual or multiple fermentations; scaleup of fermentation, comparison of batch and continuous culture as investigative tools, examples of the use of fed batch culture.

UNIT II **(7)**

Screening and Inoculum Development - 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 III **(7)**

Chemistry in Energy - 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 **(7)**

Microbial Production - 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 **(8)**

Alcohols and Beverages - 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 READINGS

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 House.

M.Sc., Biochemistry **NUTRITION AND DIETETICS** **SEMESTER III**
23BCPOE301 **3H–2C**

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

Course Objectives

This course enables the students to learn

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 mineraldeficiency/excess ofvitamin
4. Respect to the nutrition in adult age
5. Nutrition deficiency diseases and their consequence

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand fundamentals of nutrition and their relationship to health	Understand
CO2	Derive maximum benefits from available food resources	Understand
CO3	Ascertain consequences of vitamin and mineral deficiency / excess ofvitamin	Understand
CO4	Measure nutrition in adult age	Understand
CO5	Ascertain deficiency diseases and their consequences	Understand

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	L	L	L	L	L	L	L	L	L
CO2	M	L	L	L	L	L	L	L	L	M
CO3	L	M	L	L	L	L	L	L	M	L
CO4	L	L	L	M	L	M	L	M	L	L
CO5	L	L	L	L	L	L	L	L	L	L

S-Strong; M-Medium; L-Low

UNIT I **(7)**

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)**

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 **(7)**

Adult nutrition - Physiological changes, RDA, nutritional guidelines, nutritional concerns and healthy food choices -Adult, Pregnant woman, Lactating mother, Elderly. Nutrition during childhood -Growth and development, nutritional guidelines, nutritional concerns and healthy food choices -Infants, Preschool children, School children, Adolescents. Nutritional needs of nursing mothers and infants, determinants of birth weight and consequences of low birth weight, Breastfeeding biology, Breastfeeding support and Counselling, 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)**

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 **(8)**

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. Mc Graw 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. 6th 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: **40** External: **60** Total: **100**
End Semester Exam: 3Hours

Course Objectives

This course enables the students to learn

1. To apply knowledge and skills of seri biotechnology for development new mulberryvariety and silkworm breeds suitable for varied agro-climatic zones.
2. To apply tools and techniques of biostatics for critical analysis and interpretation ofdata accrued.
3. To use bioinformatics tools and techniques for the analysis and interpretation of bimolecular 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

COURSE OUTCOMES:

Learners should be 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	Demonstrating the 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

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1										
CO2										
CO3										
CO4										
CO5										

S-Strong; M-Medium; L-Low

UNIT I **(7)**

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 Bombyxmori.

UNIT II **(7)**

Mulberry Cultivation: Mulberry Varieties – Methods of Irrigation –Nutrient Management and Weed control. Pruning and Harvesting – Crop improvement – Me chanism in Moriculture – Pest and Disease, deficiencies and symptoms in Mulberry.

UNIT III **(7)**

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)**

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 **(8)**

Diseases of silkworm –Pebrine Protozoan, Flacheriebacterial,Nuclear Polyhedrosisviral and Muscardine fungal diseases. Pests of Silkworm.

SUGGESTED READINGS

1. Krisnamoorthy S., Improved Method of Rearing Young Age Silk Worms: Reprinted byCSB, 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. HisaoAruga, Principles of sericulture, Oxford and IBH Publishing Company, 1994.
5. Hrccrama Reddy, G. 1998. Silkworm Breeding, Oxford & IBH Publishing Co. Pvt. Ltd,New Delhi.
6. Otsuki el.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 SilkReeling 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

M.Sc., Mathematics **CODING THEORY** **SEMESTER III**
23BCPOE301 **3H–2C**

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

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:

Learners should 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	PO8	PO9	PO10
CO1										
CO2										
CO3										
CO4										
CO5										

S-Strong; M-Medium; L-Low

UNIT I **(7)**

Error Detection, Correction and Decoding - Communication channels – Maximum likelihood decoding – Hamming distance – Nearest neighbourhood minimum distance decoding – Distance of a code.

UNIT II **(7)**

Linear Codes - Linear codes – Self orthogonal codes – Self dual codes – Bases for linear codes – Generator matrix and parity check matrix – Enconding with a linear code – Decoding of linear codes – Syndrome decoding.

UNIT III **(7)**

Bounds in Coding Theory - 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 **(7)**

Cyclic Codes - Definitions – Generator polynomials – Generator matrix and parity check matrix – Decoding of Cyclic codes.

UNIT V **(8)**

Special Cyclic Codes - BCH codes – Parameters of BCH codes – Decoding of BCH codes – Reed Solomon codes.

SUGGESTED READINGS

1. San Ling and Chaoping Xing (2004). Coding Theory: A first course, Cambridge UniversityPress.
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). Algebriac Coding Theory, Mc Graw-Hill.
5. H. Hill (1986). A First Course in Coding Theory, OUP

WEBSITES

1. https://www.youtube.com/watch?v=XepXtl9YKwc
2. https://www.youtube.com/watch?v=oeQWxhlnCHM
3. https://www.youtube.com/watch?v=Z-QGtxlQWak

23CMP391 **INTERNSHIP** **SEMESTER III**
0H–2C

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

COURSE OBJECTIVES:

To make the students

1. To explore career alternatives prior to graduation & integrate theory and practice
2. To assess interest and abilities in their field of study
3. To develop work habits and attitudes necessary for job success
4. To develop communication, interpersonal and other critical skills in the job interviewprocess
5. To build a record of work experience

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Explore career alternatives prior to graduation & integrate theory and Practice	Understand
CO2	Assess interest and abilities in their field of study	Evaluate
CO3	Develop work habits and attitudes necessary for job success	Apply
CO4	Develop communication, interpersonal and other critical skills in the job interview process	Apply
CO5	Build a record of work experience	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	S	S	M	M	S	S	M	M	S
CO2	M	M	M	L	S	S	S	S	M	M
CO3	L	M	M	M	S	S	M	M	S	L
CO4	M	M	S	L	M	M	S	M	S	L
CO5	M	M	S	S	S	M	M	L	M	S

S-Strong; M-Medium; L-Low

23CMP401 ENTREPRENEURSHIP DEVELOPMENT SEMESTER IV
4H–4C

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

COURSE OBJECTIVES:

To make the students

1. To understand recent concepts of entrepreneurship & kinds of business entities
2. To comprehend the role of business incubators on business sustainability
3. To formulate business ideas and conduct feasibility studies
4. To acquire knowledge on source of finance for promotion of entrepreneurs
5. To apply principles and practice methodology of entrepreneurship for business sustainability

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand recent concepts of entrepreneurship & kinds of business entities	Understand
CO2	Comprehend the role of business incubators on business sustainability	Understand
CO3	Formulate business ideas and conduct feasibility studies	Create
CO4	Acquire knowledge on source of finance for promotion of entrepreneurs	Understand
CO5	Apply principles and practice methodology of entrepreneurship for businesssustainability	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	S	M	M	S	L	M	S	M	M	S
CO2	S	L	S	S	M	M	S	M	M	L
CO3	M	M	S	M	S	L	M	S	S	S
CO4	M	S	L	S	M	S	L	M	M	M
CO5	S	M	M	M	M	S	S	M	L	S

S-Strong; M-Medium; L-Low

UNIT I (8)

Entrepreneurship - Meaning, scope and importance of Entrepreneurship –Evolution of entrepreneurial thought - Entrepreneurship as a career option - Functions of Entrepreneurs - Entrepreneurial Characteristics and Skills - Entrepreneur vs. Manager - Creativity & Creative Process - Types of Entrepreneurs (Clarence Danhoff's Classification) - Intrapreneurship – Concept and Types (Hans Schollhammer's Classification) - Entrepreneurship in different contexts: technopreneurship, cultural entrepreneurship, international entrepreneurship, netpreneurship, ecopreneurship, and social entrepreneurship

UNIT II **(8)**

Types of Business Entities - Micro, Small and Medium Enterprises. Concept of business groups and role of business houses and family business in India. Values, business philosophy and behavioral orientations of important family business in India. Managerial roles and functions in a small business. Entrepreneur as the manager of his business-MSMEs.

UNIT III **(8)**

Public and Private System of Stimulation, **Support and Sustainability of Entrepreneurship -** 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, angel investors, venture capital and private equity funds

UNIT IV **(8)**

Sources of Business ideas and Feasibility Studies - Sources of business ideas and tests of feasibility. Significance of writing the business plan /project proposal. Contents of business plan / project proposal. Designing business processes, location, layout, operation, planning & control; preparation of project report. Project submission/ presentation and appraisal thereof by external agencies, such as financial/non-financial institutions.

UNIT V **(8)**

Mobilizing Resources for START-UP - Mobilizing resources for start-up. Accommodation and utilities. Preliminary contracts with the vendors, suppliers, bankers, principal customers; Contract management: Basic start-up problems. Funding opportunities for start-ups- Mudra - ASPIRE. Marketing and organizational plans-an overview. Nature of planning in small business. Organizational structure suitable for small business. Financial: preparation of budgets, integrated ratio analysis, assessing business risks (leverage analysis). Marketing: product planning & development, creating and protecting market niche, sales promotion, advertising and product costing and pricing policies. HR issues in small business.

SUGGESTED READINGS

1. Robert Hisrich and Michael Peters and Dean Shepherd (2018), Entrepreneurship, 10th Edition, McGraw Hill, New Delhi.
2. David H. Holt (2016), Entrepreneurship, 1st Edition, Pearson Education, New Delhi.
3. Sangeetha Sharma (2017), Entrepreneurship Development, Prentice Hall of India 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.
6. https://www.coursera.org/specializations/wharton-entrepreneurship

23CMP402 **DIGITAL MARKETING** **SEMESTER IV**
4H–3C

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

COURSE OBJECTIVES:

To make the students

1. To understand various digital marketing platforms and strategies & developing and hosting a website
2. To comprehend fundamental principles on e mail marketing and search engine optimization
3. To acquire knowledge on online reputation management
4. To gain knowledge on digital marketing data analytics
5. To gain knowledge on various online marketing tools

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Understand various digital marketing platforms and strategies & developing and hosting a website	Understand
CO2	Comprehend fundamental principles on e mail marketing and search engine optimization	Understand
CO3	Acquire knowledge on online reputation management	Understand
CO4	Gain knowledge on digital marketing data analytics	Analyze
CO5	Gain knowledge on various online marketing tools	Apply

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	L	S	M	S	M	S	M	L	S	S
CO2	S	M	L	M	S	L	S	M	S	S
CO3	M	S	S	S	M	M	S	S	L	M
CO4	S	L	M	S	L	S	M	M	M	L
CO5	M	S	S	M	S	M	S	L	S	S

S-Strong; M-Medium; L-Low

UNIT I **(8)**

Introduction of the digital marketing - Meaning - 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.

UNIT II **(8)**

Website: Website -Domain name - Types of domain - Register a Domain Name. Webhosting concepts - Types of Websites – HTML, CSS and Java Script. Popular CMS. Website designing with WordPress: WordPress - 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 **(12)**

Online Marketing Tools - Creating a Facebook page - Visual identity of a Facebook page - Types of publications - Facebook Ads -Creating Facebook 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 Control- Google AdWords- creating accounts - Google AdWords- Types.

Introduction to Search Engine Optimization: How the search engine works - SEO Optimization - Writing the SEO content. Mobile marketing - Growth in mobile industry - Benefits of mobile marketing and its goals. Creating a Mobile Website. 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 **(6)**

Online Reputation Management: ORM - Need ORM - Examples of ORM. Areas to analyze in ORM. Generate ORM report. Things to do in ORM – Monitor search results, complaint sites, reviews, sites and blogs, and social media.

UNIT V **(6)**

Merging Digital Marketing and Data Analytics: 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, New Delhi

5. Vandana Ahuja (2015), Digital Marketing, Oxford University Press, New Delhi.
6. Sarah McHarry(2013), Word press To Go, Create space Independent Pub.
7. Karol Krol(2017),Word Press Complete - Sixth Edition, Packt Publishing Limited, United Kingdom

Instruction Hours / Week: L:0 T:0P:20 **Marks:** Internal: **80** External: **120** Total: **200**
End Semester Exam: 3Hours

COURSE OBJECTIVES:

To make the students

1. To choose the right problem of the study & adopt right sampling technique
2. To construct instrument for data collection
3. To carry out their statistical analysis
4. To write the interpretation for statistical analysis
5. To draft their project report

COURSE OUTCOMES:

Learners should be able to

COs	Course Outcomes	Blooms Level
CO1	Choose the right problem of the study & adopt right sampling technique	Understand
CO2	Construct instrument for data collection	Create
CO3	Carry out their statistical analysis	Analyze
CO4	Write the interpretation for statistical analysis	Evaluate
CO5	Draft their project report	Create

Mapping with Programme Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	M	M	S	S	L	M	S	M	S	S
CO2	S	S	M	M	M	S	M	S	S	L
CO3	L	M	L	S	S	M	S	M	M	S
CO4	M	S	S	M	L	M	M	S	M	M
CO5	S	M	M	S	M	S	L	S	L	S

S-Strong; M-Medium; L-Low

The students should select a problem in Accounting, Finance, Marketing or any other areas related to commerce

Report should contain

- Introduction
  - Introduction about the industry
  - Introduction about the Company
  - Review of literature–Minimum10 papers from referred journal
  - Need for the Study
  - Objectives
- Research Methodology
  - Research Design

- Sampling Design
- Sources of Data Collection
- Tools used for Analysis
- Limitations

- Data Analysis and Interpretation
- Findings and Suggestions
- Conclusion
- Bibliography (APA Format)

LIST OF VALUE ADDED COURSES

1. Business Analytics
2. Business Process Services in Insurance
3. Business Process Services in Banking
4. Business Process Services in Finance and Accounting
5. Retail Environment and Market Research
6. Strategic Management
7. Office 360
8. Capital Markets and Financial Instruments
9. E Commerce
10. Six Sigma
11. Life Skills and Communication
12. EXIM Procedures and Documentation
13. Intellectual Property Rights
14. Personal Finance and Planning
15. Project Management
16. Global Financial Reporting
17. Cyber Security
18. Human Resources Analytics