COURSE OBJECTIVE
- To develop the Professional Ethics for Engineers
- To gain Knowledge on principles of management and managerial skills
- To understand the Entrepreneurial skills.
- To create awareness through Engineering Ethics.

COURSE OUTCOME
The leaner's should be able to
- Understand Organization and Management so, the students can use in Work Place.
- The students will understand the basic Perception of Profession, Professional Ethics, and Various Moral & Social Issues, Code of Ethics and Role of Professional Ethics in Engineering field.
- The students will aware of Professional Rights and Responsibilities of an Engineer.
- The capacity and willingness to develop, organize and manage a Business Venture along with any of its risks in order to Make a Profit.

UNIT I   MANAGEMENT, PLANNING, AND ORGANISING
Definition of Management – Management and Administration – Contribution of Taylor and Fayol – Functions of Management – Steps involved in Planning – Objectives – Setting Objectives – Process of Managing By Objectives – Forecasting – Decision–making – Formal and informal organization – Organization Chart.

UNIT II   DIRECTING AND CONTROLLING
Human Factors – Creativity and Innovation – Harmonizing Objectives – Leadership – Types of Leadership, Motivation – Hierarchy of needs – Motivation theories – Motivational Techniques – Job Enrichment –Process of Communication – System and process of Controlling – Requirements for effective control – Control of Overall Performance – Direct and Preventive Control .

UNIT III   ENGINEERING ETHICS
Senses of Engineering Ethics – variety of moral issues – types of inquiry – moral dilemmas – moral autonomy – Kohlberg's theory – Gilligan's theory – consensus and controversy – Models of Professional Roles – theories about right action – Self–interest – customs and religion – uses of ethical theories.

UNIT IV   FACTORS OF CHANGES
Forces that shape culture, social control – Meaning, Agencies, Institution, Customs, Values, Folkways, Norms and Laws. Social changes – Meaning and nature – Theories.

UNIT V ENTREPRENEURSHIP AND MOTIVATION

Entrepreneur – Types of Entrepreneurs – Difference between Entrepreneur and Intrapreneur – Entrepreneurship in Economic Growth– Major Motives Influencing an Entrepreneur – Achievement Motivation Training, self rating, Business Game, Thematic Apperception Test – Stress management, Entrepreneurship Development Programs – Need, Objectives.

TEXT BOOKS

S. No.	Author(s) Name	Title of the book	Publisher	Year of Publication
1	Harold Kooritz and Heinz Weihrich	Essentials of Management	Tata McGraw–Hill, New Delhi.	2012
2	Dr.N.P.Srinivasan Dr.C.B.Gupta	Entrepreneurial Development	S.Chand and Co. Ltd., NewDelhi	2014

REFERENCES

S. No.	Author(s) Name	Title of the book	Publisher	Year of Publication
1	Tripathy P.C and P.N.Reddy	Principles of Management	Tata McGraw–Hill, New Delhi.	2012
2	JAF Stomer, R. E Freeman and Daniel R Gilbert	Management	Pearson Education, New Delhi.	2011
3	Fraidoon Mazda	Engineering Management	Addison Wesley, New Delhi	2011
4	John R Boatright	Ethics and the Conduct of Business	Pearson Education, New Delhi	2013
5	Charles E Harris, Michael S. Protchard and Michael J Rabins	Engineering Ethic Concepts and Cases	Wadsworth Thompson Learning, New Delhi	2012

WEBSITES

1. ethics.tamu.edu/ – United States
2. management.about.com/cs/generalmanagement/a/PlanOrg010603.htm

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Established Under section 3 of the UGC Act, 1956)

Pollachi Main Road, Eachanari (Post),

Coimbatore – 641 021.

Subject   **:** Professional Ethics

Subject Code   **: 15BECS701**

S.No	LECTURE DURATION (Hours)	TOPICS TO BE COVERED	SUPPORT MATERIALS
Unit – I Management Planning, Organizing		
1	1	Definition of management	T1- 1.2
		Management and administration	R1 - 8
2	1	Contribution of Taylor & Fayol	R2-31
3	1	Functions of management	R2 – 7.9
4	1	Steps involved in planning	T1 – 3-10
5	1	Objectives, Setting objective	T1 – 4.1 - 4.7
6	1	Process of managing by objectives	T1 – 4.7
7	1	Focasting	R2 – 84 – 92
		Decision making	R2 – 59 -71
8	1	Formal and informal organization,	R2 – 119 -122
		Organization chart	R2 – 173 – 176
9	1	Tutorial	
		Total No. of Hours Planned for Unit – I	**9**

TEXT BOOKS

   T1   - Essentials of Management - Harold Kooritz & Heinz Weihrich

REFERENCE BOOK

R1   - Principles of Management - Tripathy P.C and P.N.Reddy

R2   - Essentials of management – T.Ramasamy

S.NO	LECTURE DURATION (Hours)	TOPICS TO BE COVERED	SUPPORT MATERIALS
Unit – II Directing and Controlling			
1	1	Human factors,	T1 – 14.2
		Creativity and innovation	T1 – 14.6
2	1	Harmonizing Objectives	T1 – 14.10
3	1	Leadership , Types of leadership	R2 – 230,237
4	1	Motivation ,Hierarchy of needs,	R2 – 238,221
5	1	Motivation theories, Techniques	R2 –228
6	1	Job enrichment ,	T1 – 15.6
			R2 – 257
		Process of communication,	T1 – 18.2
7	1	Requirements for effective control,	T1 – 18.9
		Control of overall performance	T1 – 21.1
8	1	Direct and preventive control, Reporting	T1 – 21.6
9	1	Tutorial	
		Total No. of Hours Planned for Unit – II	**9**

TEXT BOOKS

T1   - Essentials of Management - Harold Kooritz & Heinz Weihrich

REFERENCE BOOK

R2   - Essentials of management – T.Ramasamy

S.NO	LECTURE DURATION (Hours)	TOPICS TO BE COVERED	SUPPORT MATERIALS
Unit – III Engineering Ethics			
1	1	Senses of engineering ethics	R3 – 1.5
		Variety of moral issued	R3 – 1.6
2	1	Types of inquiry,	T3 – 11
		Moral dilemmas	R3 – 1.10
3	1	Moral autonomy,	T3 – 4.23

4	1	Gilligan's theory,	R3 – 1.16
5	1	Consensus and Controversy	T3 – 6.53
6	1	Models of professional roles,	R3 – 1.24
7	1	Self interest,	R3-1.44
8	1	Uses of ethical theories	R5 - 32
9	1	Tutorial	
		Total No. of Hours Planned for Unit – III	**9**

TEXT BOOKS:

T3 - Ethics in Engineering - Mike Martin and Roland Schinzinger

REFERENCE BOOK

R3 - Professional Ethics & Human Values – Dr.K.R.Govindhan
S.Senthilkumar

R4 - Engineering ethics concepts and cases – Michael J.Robbins

R5 - Ethics & conduct of business – John R.Boatrights

S.NO	LECTURE DURATION (Hours)	TOPICS TO BE COVERED	SUPPORT MATERIALS
		Unit – IV Factors of Changes	
1	1	Forces that shape culture	W1
2	1	Social control - Meaning	W1
3	1	Agencies,	W2
4	1	Institution, Customs	W2
5	1	Values, Folkways	W2s
6	1	Norms and Laws	W4
7	1	Social Changes - Meaning and Nature	W5
8	1	Social Changes Theories	W5
9	1	Tutorial	
		Total No. of Hours Planned for Unit – IV	**9**

WEBSITES

W1 - www.tradeonlytoday.com

W2 - www.preservation.com

W4 - www.wired.com

W5 - www.mindisorder.com

S.NO	LECTURE DURATION (Hours)	TOPICS TO BE COVERED	SUPPORT MATERIALS
		Unit – V Entrepreneurship and Motivation	
1	1	Entrepreneur, Types of entrepreneur	T2 – 1- 4
2	1	Difference between Entrepreneur and Intrapreneur	T2 - 5
3	1	Entrepreneurship in economic growth, Major motives influencing an entrepreneur	T2 – 6
4	1	Achievement motivation training	T2 - 36
5	1	Self rating, Business game	W5
6	1	Thematic apperception test, Stress management	W5,W6, T2 - 52
7	1	Stress management	T2 – 52-53
8	1	Entrepreneurship development programs Need, Objectives	T2 – 53-54
9	1	Tutorial	
10	1	Previous year ESE question paper discussion	
11	1	Previous year ESE question paper discussion	
12	1	Previous year ESE question paper discussion	
		Total No. of Hours Planned for Unit – V	**12**

TEXT BOOKS:

T2   **-** Entrepreneurial Development - S.S.Khanka

WEBSITES

W4   - **www.wired.com**

W5   - **www.mindisorder.com**

W6   - **www.developingingeyes.com**

UNIT I

MANAGEMENT PLANNING, ORGANISING

MANAGEMENT, PLANNING, ORGANISING

Definition of Management – Management and Administration – Contribution of Taylor and Fayol – Functions of Management – Steps involved in Planning – Objectives – Setting Objectives – Process of Managing by Objectives – Forecasting – Decision-making – Formal and informal organization – Organization Chart .

\

DEFINITION OF MANAGEMENT

Koontz and Weihrich, "Management is the process of designing and maintaining an environment in which individuals working together in groups efficiently accomplish selected aims."

Management is

- Management Practice is regarded as an art
- But, organized knowledge about management is a science
- Thus management is both an art and a science

Meaning of management

Management is the art of getting things done by a group of people with the effective utilization of available resources. An individual cannot be treated as a managing body running any organization. A minimum of two persons are essential to form a management. These persons perform the functions in order to achieve the objective of an organization.

MANAGEMENT AND ADMINISTRATION

Meaning of Administration:

Administration is the function in industry concerned with the determination of the corporate policy, the co-ordination finance, production and distribution, the settlement of compass (structure) of the organization under the ultimate control of the executive.

Definition of Administration:

According to *Theo Haimann*, "Administration means overall determination of policies, setting of major objectives, the identification of general purposes and laying down of broad programmes and

projects". It refers to the activities of higher level. It lays down basic principles of the enterprise. According to Newman, "Administration means guidance, leadership & control of the efforts of the groups towards some common goals".

Whereas, management involves conceiving, initiating and bringing together the various elements; coordinating, actuating, integrating the diverse organizational components while sustaining the viability of the organization towards some pre-determined goals. In other words, it is an art of getting things done through & with the people in formally organized groups.

THE DIFFERENCE BETWEEN MANAGEMENT AND ADMINISTRATION CAN BE SUMMARIZED UNDER 2 CATEGORIES:

1. **Functions**
2. **Usage / Applicability**

On the Basis of Functions: -

Basis	Management	Administration
Meaning	Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals.	It is concerned with formulation of broad objectives, plans & policies.
Nature	Management is an executing function.	Administration is a decision-making function.
Process	Management decides who should as it & how should he dot it.	Administration decides what is to be done & when it is to be done.
Function	Management is a doing function because managers get work done under their supervision.	Administration is a thinking function because plans & policies are determined under it.

Skills	Technical and Human skills	Conceptual and Human skills
Level	Middle & lower level function	Top level function

On the Basis of Usage: -

Basis	Management	Administration
Applicability	It is applicable to business concerns i.e. profit-making organization.	It is applicable to non-business concerns i.e. clubs, schools, hospitals etc.
Influence	The management decisions are influenced by the values, opinions, beliefs & decisions of the managers.	The administration is influenced by public opinion, govt. policies, religious organizations, customs etc.
Status	Management constitutes the employees of the organization who are paid remuneration (in the form of salaries & wages).	Administration represents owners of the enterprise who earn return on their capital invested & profits in the form of dividend.

Practically, there is no difference between management & administration. Every manager is concerned with both - administrative management function and operative management function as shown in the figure. However, the managers who are higher up in the hierarchy denote more time on administrative function & the lower level denote more time on directing and controlling worker's performance i.e. management.
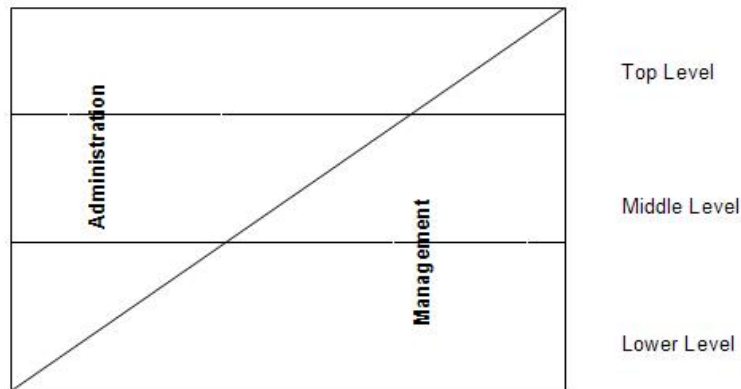
The Figure above clearly shows the degree of administration and management performed by the different levels of management.

DEVELOPMENT OF MANAGEMENT THOUGHT

The practice of management is as old as human civilization. The ancient civilizations of Egypt (the great pyramids), Greece (leadership and war tactics of Alexander the great) and Rome displayed the marvelous results of good management practices. The origin of management as a discipline was developed in the late 19th century. Overtime, management thinkers have sought Ways to organize and classify the voluminous information about management that has been collected and disseminated. These attempts at classification have resulted in the identification of management approaches. The approaches of management are theoretical frameworks for the study of management. Each of the approaches of management is based on somewhat different assumptions about human beings and the organizations for which they work.

The different approaches of management are

a) Classical approach,

b) Behavioral approach,

c) Quantitative approach,

d) Systems approach,

e) Contingency approach.

a) The classical approach:

The classical approach is the oldest formal approach of management thought. Its roots pre-date the twentieth century. The classical approach of thought generally concerns ways to manage work and organizations more efficiently. Three areas of study that can be grouped under the classical approach are scientific management, administrative management, and bureaucratic management.

(i) Scientific Management.

Frederick Winslow Taylor is known as the father of scientific management. Scientific management (also called Taylorism or the Taylor system) is a theory of management that analyzes and synthesizes workflows, with the objective of improving labor productivity. In other words, Traditional rules of thumb are replaced by precise procedures developed after careful study of an individual at work.

(ii) Administrative Management.

Administrative management focuses on the management process and principles of management. In contrast to scientific management, which deals largely with jobs and work at the individual level of analysis, administrative management provides a more general theory of management. Henri Fayol is the major contributor to this approach of management thought.

(iii) Bureaucratic Management.

Bureaucratic management focuses on the ideal form of organization. Max Weber was the major contributor to bureaucratic management. Based on observation, Weber concluded that many early organizations were inefficiently managed, with decisions based on personal relationships and loyalty. He proposed that a form of organization, called a bureaucracy, characterized by division of labor, hierarchy, formalized rules, impersonality, and the selection and promotion of employees based on ability, would lead to more efficient management. Weber also contended that managers' authority in an organization should be based not on tradition or charisma but on the position held by managers in the organizational hierarchy.

b) The behavioral approach:

The behavioral approach of management thought developed, in part, because of perceived weaknesses in the assumptions of the classical approach. The classical approach emphasized efficiency, process, and principles. Some felt that this emphasis disregarded important aspects of organizational life, particularly as it related to human behavior. Thus, the behavioral approach focused on trying to understand the factors that affect human behavior at work.

(i) Human Relations.

The Hawthorne Experiments began in 1924 and continued through the early 1930s. A variety of researchers participated in the studies, including Elton Mayo. One of the major conclusions of the Hawthorne studies was that workers' attitudes are associated with productivity. Another was that the workplace is a social system and informal group influence could exert a powerful effect on

individual behavior. A third was that the style of supervision is an important factor in increasing workers' job satisfaction.

(ii) Behavioral Science.

Behavioral science and the study of organizational behavior emerged in the 1950s and 1960s. The behavioral science approach was a natural progression of the human relations movement. It focused on applying conceptual and analytical tools to the problem of understanding and predicting behavior in the workplace. The behavioral science approach has contributed to the study of management through its focus on personality, attitudes, values, motivation, group behavior, leadership, communication, and conflict, among other issues.

c) The quantitative approach:

The quantitative approach focuses on improving decision making via the application of quantitative techniques. Its roots can be traced back to scientific management.

(i) Management Science (Operations Research)

Management science (also called operations research) uses mathematical and statistical approaches to solve management problems. It developed during World War II as strategists tried to apply scientific knowledge and methods to the complex problems of war. Industry began to apply management science after the war. The advent of the computer made many management science tools and concepts more practical for industry

(ii) Production and Operations Management.

This approach focuses on the operation and control of the production process that transforms resources into finished goods and services. It has its roots in scientific management but became an identifiable area of management study after World War II. It uses many of the tools of management science. Operations management emphasizes productivity and quality of both manufacturing and service organizations. W. Edwards Deming exerted a tremendous influence in shaping modern ideas about improving productivity and quality. Major areas of study within operations management include capacity planning, facilities location, facilities layout, materials requirement planning, scheduling, purchasing and inventory control, quality control, computer integrated manufacturing, just-in-time inventory systems, and flexible manufacturing systems.

d) Systems approach:

The simplified block diagram of the systems approach is given below.

The systems approach focuses on understanding the organization as an open system that transforms inputs into outputs. The systems approach began to have a strong impact on management thought in the 1960s as a way of thinking about managing techniques that would allow managers to relate different specialties and parts of the company to one another, as well as to external environmental factors. The systems approach focuses on the organization as a whole, its interaction with the environment, and its need to achieve equilibrium

e) Contingency approach:

The contingency approach focuses on applying management principles and processes as dictated by the unique characteristics of each situation. It emphasizes that there is no one best way to manage and that it depends on various situational factors, such as the external environment, technology, organizational characteristics, characteristics of the manager, and characteristics of the subordinates. Contingency theorists often implicitly or explicitly criticize the classical approach for its emphasis on the universality of management principles; however, most classical writers recognized the need to consider aspects of the situation when applying management principles.

CONTRIBUTION OF TAYLOR AND FAYOL

F.W. Taylor and Henry Fayol are generally regarded as the founders of scientific management and administrative management and both provided the bases for science and art of management.

Taylor's Scientific Management

Frederick Winslow Taylor well-known as the founder of scientific management was the first to recognize and emphasis the need for adopting a scientific approach to the task of managing an enterprise. He tried to diagnose the causes of low efficiency in industry and came to the conclusion that much of waste and inefficiency is due to the lack of order and system in the methods of management. He found that the management was usually ignorant of the amount of work that could be done by a worker in a day as also the best method of doing the job. As a result, it remained largely at the mercy of the workers who deliberately shirked work. He therefore, suggested that those responsible for management should adopt a scientific approach in their work, and make use of "scientific method" for achieving higher efficiency. The scientific method consists essentially of

(a) Observation

(b) Measurement

(c) Experimentation and

(d) Inference.

He advocated a thorough planning of the job by the management and emphasized the necessity of perfect understanding and co-operation between the management and the workers both for the enlargement of profits and the use of scientific investigation and knowledge in industrial work. He summed up his approach in these words:

• Science, not rule of thumb

• Harmony, not discord

• Co-operation, not individualism

• Maximum output, in place of restricted output

• The development of each man to his greatest efficiency and prosperity.

Elements of Scientific Management: The techniques which Taylor regarded as its essential elements or features may be classified as under:

1. Scientific Task and Rate-setting, work improvement, etc.

2. Planning the Task.

3. Vocational Selection and Training

4. Standardization (of working conditions, material equipment etc.)

5. Specialization

6. Mental Revolution.

1. **Scientific Task and Rate-Setting (work study):** Work study may be defined as the systematic, objective and critical examination of all the factors governing the operational efficiency of any specified activity in order to effect improvement. Work study includes.

*(a) Methods Study***:** The management should try to ensure that the plant is laid out in the best manner and is equipped with the best tools and machinery. The possibilities of eliminating or combining certain operations may be studied.

*(b) Motion Study***:** It is a study of the movement, of an operator (or even of a machine) in performing an operation with the purpose of eliminating useless motions.

*(c) Time Study (work measurement)***:** The basic purpose of time study is to determine the proper time for performing the operation. Such study may be conducted after the motion study.

Both time study and motion study help in determining the best method of doing a job and the Standard time allowed for it.

*(d) Fatigue Study***:** If, a standard task is set without providing for measures to eliminate fatigue, it may either be beyond the workers or the workers may over strain themselves to attain it. It is necessary, therefore, to regulate the working hours and provide for rest pauses at scientifically determined intervals.

*(e) Rate-setting***:** Taylor recommended the differential piece wage system, under which workers performing the standard task within prescribed time are paid a much higher rate per unit than inefficient workers who are not able to come up to the standard set.

2. **Planning the Task:** Having set the task which an average worker must strive to perform to get wages at the higher piece-rate, necessary steps have to be taken to plan the production thoroughly so that there is no bottleneck and the work goes on systematically.

3. **Selection and Training:** Scientific Management requires a radical change in the methods and procedures of selecting workers. It is therefore necessary to entrust the task of selection to a central personnel department. The procedure of selection will also have to be systematized. Proper attention has also to be devoted to the training of the workers in the correct methods of work.

4. **Standardization:** Standardization may be introduced in respect of the following.

*(a) Tools and equipment***:** By standardization is meant the process of bringing about uniformity. The management must select and store standard tools and implements which will be nearly the best or the best of their kind.

*(b) Speed***:** There is usually an optimum speed for every machine. If it is exceeded, it is likely to result in damage to machinery.

*(c) Conditions of Work***:** To attain standard performance, the maintenance of standard conditions of ventilation, heating, cooling, humidity, floor space, safety etc., is very essential.

*(d) Materials***:** The efficiency of a worker depends on the quality of materials and the method of handling materials.

5. **Specialization:** Scientific management will not be complete without the introduction of specialization. Under this plan, the two functions of 'planning' and 'doing' are separated in the organization of the plant. The `functional foremen' are specialists who join their heads to give thought to the planning of the performance of operations in the workshop. Taylor suggested eight functional foremen under his scheme of functional foremanship.

*(a) The Route Clerk***:** To lay down the sequence of operations and instruct the workers concerned about it.

(b) ***The Instruction Card Clerk*****:** To prepare detailed instructions regarding different aspects of work.

(c) ***The Time and Cost Clerk*****:** To send all information relating to their pay to the workers and to secure proper returns of work from them.

(d) **The Shop Disciplinarian**: To deal with cases of breach of discipline and absenteeism.

(e) ***The Gang Boss*****:** To assemble and set up tools and machines and to teach the workers to make all their personal motions in the quickest and best way.

(f) ***The Speed Boss*****:** To ensure that machines are run at their best speeds and proper tools are used by the workers.

(g) ***The Repair Boss*****:** To ensure that each worker keeps his machine in good order and maintains cleanliness around him and his machines.

(h) ***The Inspector*****:** To show to the worker how to do the work.

6. **Mental Revolution:** At present, industry is divided into two groups – management and labour. The major problem between these two groups is the division of surplus. The management wants the maximum possible share of the surplus as profit; the workers want, as large share in the form of wages. Taylor has in mind the enormous gain that arises from higher productivity. Such gains can be shared both by the management and workers in the form of increased profits and increased wages.

CONTRIBUTION OF HENRY FAYOL'S 14 PRINCIPLES OF MANAGEMENT

The principles of management are given below:

1. **Division of work:** Division of work or specialization alone can give maximum productivity and efficiency. Both technical and managerial activities can be performed in the best manner only through division of labour and specialization.

2. **Authority and Responsibility:** The right to give order is called authority. The obligation to accomplish is called responsibility. Authority and Responsibility are the two sides of the management coin. They exist together. They are complementary and mutually interdependent.

3. **Discipline:** The objectives, rules and regulations, the policies and procedures must be honored by each member of an organization. There must be clear and fair agreement on the rules and objectives, on the policies and procedures. There must be penalties (punishment) for non-obedience or indiscipline. No organization can work smoothly without discipline – preferably voluntary discipline.

4. **Unity of Command:** In order to avoid any possible confusion and conflict, each member of an organization must received orders and instructions only from one superior (boss).

5. **Unity of Direction:** All members of an organization must work together to accomplish common objectives.

6. **Emphasis on Subordination of Personal Interest to General or Common Interest:** This is also called principle of co-operation. Each shall work for all and all for each. General or common interest must be supreme in any joint enterprise.

7. **Remuneration:** Fair pay with non-financial rewards can act as the best incentive or motivator for good performance. Exploitation of employees in any manner must be eliminated. Sound scheme of remuneration includes adequate financial and nonfinancial incentives.

8. **Centralization:** There must be a good balance between centralization and decentralization of authority and power. Extreme centralization and decentralization must be avoided.

9. **Scalar Chain:** The unity of command brings about a chain or hierarchy of command linking all members of the organization from the top to the bottom. Scalar denotes steps.

10. **Order:** Fayol suggested that there is a place for everything. Order or system alone can create a sound organization and efficient management.

11. **Equity:** An organization consists of a group of people involved in joint effort. Hence, equity (i.e., justice) must be there. Without equity, we cannot have sustained and adequate joint collaboration.

12. **Stability of Tenure:** A person needs time to adjust himself with the new work and demonstrate efficiency in due course. Hence, employees and managers must have job security. Security of income and employment is a pre-requisite of sound organization and management.

13. **Esprit of Co-operation:** Esprit de corps is the foundation of a sound organization. Union is strength. But unity demands co-operation. Pride, loyalty and sense of belonging are responsible for good performance.

14. **Initiative:** Creative thinking and capacity to take initiative can give us sound managerial planning and execution of predetermined plans.

FUNCTIONS OF MANAGEMENT

Management has been described as a social process involving responsibility for economical and effective planning & regulation of operation of an enterprise in the fulfillment of given purposes. It

is a dynamic process consisting of various elements and activities. These activities are different from operative functions like marketing, finance, purchase etc.

1. Planning

Planning is the primary function of management. Nothing can be performed without planning. Writing a book starts with planning. In short, planning refers to deciding in advance that which will be done in the near future. In the business world the organization should achieve the objective. In order to achieve objectives, the organization plans what is to be done, when it is to be done, how it is to be done, and by whom it is to be done.

Planning is necessary to ensure proper utilization of human & nonhuman resources. It is all pervasive, it is an intellectual activity and it also helps in avoiding confusion, uncertainties, risks, wastages etc.

2. Organizing

Organizing is the distribution of work in GroupWise or section wise for effective performance. Organization provides all facilities which are necessary to perform the work. The organization divides the total work and co-ordinates all the activities by authority relationship. Organizing as a process involves,

• Identification of activities.

• Classification of grouping of activities.

• Assignment of duties.

• Delegation of authority and creation of responsibility.

• Coordinating authority and responsibility relationships.

3. Staffing

Staffing function comprises the activities of selection and placement of competent personnel. In other words, staffing refers to placement of right persons in the right jobs. Staffing involves:

• Manpower Planning (estimating man power in terms of searching, choose the person and giving the right place).

• Recruitment, selection & placement.

• Training & development.

• Remuneration.

• Performance appraisal.

4. Directing

The actual performance of a work starts with the function of direction. Planning, organizing and staffing functions are concerned with the preliminary work for the achievement of organizational objectives. But the direction deals with making the workers learn techniques to perform the jobs assigned to them. Direction includes guidance, supervision and motivation of employees. Direction has following elements,

• Supervision

• Motivation

• Leadership

• Communication

(i) Supervision- implies overseeing the work of subordinates by their superiors. It is the act of watching & directing work & workers.

(ii) Motivation- means inspiring, stimulating or encouraging the sub-ordinates with zeal to work. Positive, negative, monetary, non-monetary incentives may be used for this purpose.

(iii) Leadership- may be defined as a process by which manager guides and influences the work of subordinates in desired direction.

(iv) Communications- is the process of passing information, experience, opinion etc from one person to another. It is a bridge of understanding.

5. Co-ordinating

All the activities are divided group wise or section wise under organizing function. Now, such grouped are co-ordinate towards the accomplishment of objectives of an organization. The difficulty of co-ordination depends upon the size of the organization.

6. Motivating or actuating

The goals are achieved with the help of motivation. Motivation includes increasing the speed of performance of a work and developing willingness on the part of workers. This is done by a resourceful leader. The workers expect favorable climate condition of work, favor treatment, monetary or non-monetary incentive, eff3ective communication and gentleman approach.

7. Controlling

Controlling function ensures that the achieved objectives conform to pre-planned objectives. It implies measurement of accomplishment against the standards and correction of deviation if any to

ensure achievement of organizational goals. The purpose of controlling is to ensure that everything occurs in conformities with the standards. An efficient system of control helps to predict deviations before they actually occur.

Therefore controlling has following steps:

(i) Establishment of standard performance.

(ii) Measurement of actual performance.

(iii) Comparison of actual performance with the standards and finding out deviation if any.

(iv)Corrective action.

8. Innovation

Innovation refers to the preparation of personnel and organization to face the changes made in the business world. Continuous changes are being made in the business. Consumers are satisfied through innovation. Innovation includes developing new materials, new products, and new techniques in production, new package, and new design of a product and cost reduction.

9. Representation

A manager has to act a representative of a company. He has dealings with customers, suppliers, government officials, banks, financial institutions, trade unions and the like. It is the duty of every manager to have good relations with others.

10. Decision –making

Every employee of an organization has to take a number of decisions every day. Deceion making helps in the smooth functioning of an organization.

11. Communication

Communication is the transmission of human thoughts, views or opinions from one person to another person. Workers are informed about what should be done, where it is to be done, how it is to be done and when it is to be done. Communication helps the regulation of job and co-ordinate the activities.

Planning, organizing, staffing, directing, co-ordinating, motivating or activating and controlling are the main functions of management. Innovation, representation, decision making and communication are the subsidiary functions of managements.

PLANNING

DEFINITION

According to Koontz O'Donnel - "Planning is an intellectual process, the conscious determination of courses of action, the basing of decisions on purpose, acts and considered estimates".

STEPS INVOLVED IN PLANNING
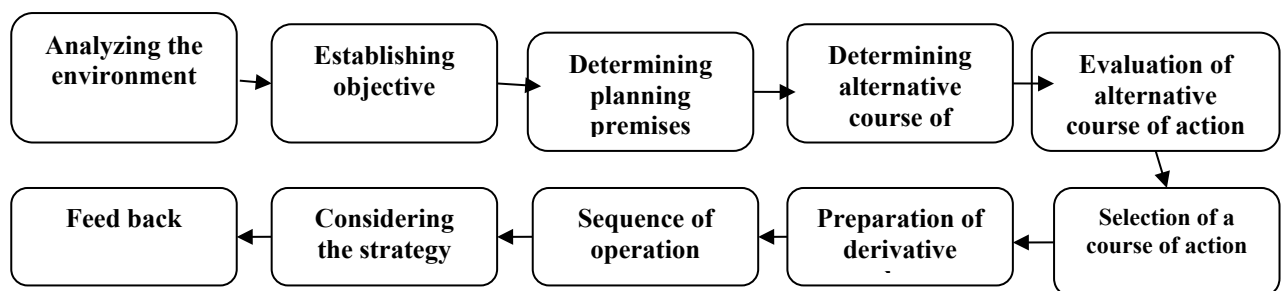
1. Analysis the environment

External environment is necessary to consider the external environment of an organization. The term external environment includes socio-economic conditions and political conditions prevailing in a

country. The internal environment can be otherwise called as Resource audit. Resource audit means an analysis of the strength and weakness of an organization.

2. Establishing objectives

The first step of the management planning process is to identify specific company goals. This portion of the planning process should include a detailed overview of each goal, including the reason for its selection and the anticipated outcomes of goal-related projects. Where possible, objectives should be described in quantitative or qualitative terms. An example of a goal is to raise profits by 25 percent over a 12-month period.

3. Determining planning premises

Before plans are prepared, the assumptions and conditions underlying them must be clearly defined these assumptions are called planning premises and they can be identified through accurate forecasting of likely future events. They are forecast data of a factual nature. Assessment of environment helps to reveal opportunities and constraints. Analysis of internal (controllable and external (uncontrollable) forces is essential for sound planning premises are the critical factors which lay down the bounder for planning.

4. Determining alternative course of action

After managers are clear of goals to be attained, they think of ways to achieve them. They should make alternative plans of action since there can be no best way of doing things. All possible alternatives to achieve the objectives should be considered by managers. In order to identify all possible alternatives, it is necessary to collect and analyze all relevant information.

5. Evaluation of alternative course of action

Every alternative course of action has to be evaluated, and the relative importance of each one of them should be ascertained. Every alternative will have some strong and weak points, which are to be understood in the right perspective. The planner should study all the alternatives and then a final selection should be made. Managers should carry out a cost-benefit analysis and the plan which gives maximum return should be accepted by them.

6. Selection of a course of action

After analyzing and evaluating the available alternatives, the manager has to select the best course of action. In fact, it is the real point of decision making. When the best course of action is

determined, it should be finally selected by managers. Each plan should be supported by sub-plans, known as derivative plans.

7. Preparation of derivative plans

There are sub-plans or departmental plans. The basic plan prepared for the whole enterprise cannot be effectively operated in the absence of such plans. Middle and lower level managers must draw up the appropriate plans, programs and budgets for their sub-units. These are described as derivative plans.

8. Sequence of operation

Timing is an essential consideration in planning. After developing the plans and sub-plans, the starting and finishing times should be fixed for each plan. Scheduling is very useful not only in sales and production areas but in other functional areas also. It is better to associate all the managers in the planning process so that they develop a sense of participation in the management.

9. Considering the strategy

Strategy has significant contribution towards the execution of a plan. So, consideration of different strategies becomes an integral part of the planning process. A suitable strategy should be planned and followed for the successful implementation of the planned course.

10. Feed back

Feedback means response. When plans are selected and implemented, managers receive information about the success or failure of plans. If there are deviations in actual performance against planned performance, managers remove these deviations or make fresh plans. Planning is complete if its implementation is effective.

OBJECTIVES

Objectives may be defined as the goals which an organization tries to achieve. Objectives are described as the end- points of planning. According to Koontz and O'Donnell, "an objective is a term commonly used to indicate the end point of a management programme."Objectives constitute the purpose of the enterprise and without them any intelligent planning can take place. Objectives are, therefore, the ends towards which the activities of the enterprise are aimed. They are present not only the end-point of planning but also the end towards which organizing, directing and controlling are aimed. Objectives provide direction to various activities. They also serve as the benchmark of

measuring the efficiency and effectiveness of the enterprise. Objectives make every human activity purposeful. Planning has no meaning if it is not related to certain objectives.

Features of Objectives

• The objectives must be predetermined.

• A clearly defined objective provides the clear direction for managerial effort.

• Objectives must be realistic.

• Objectives must be measurable.

• Objectives must have social sanction.

• All objectives are interconnected and mutually supportive.

• Objectives may be short-range, medium-range and long-range.

• Objectives may be constructed into a hierarchy.

SETTING OBJECTIVES

Objectives are the keystone of management planning. It is the most important task of management. Objectives are required to be set in every area which directly and vitally effects the survival and prosperity of the business. In the setting of objectives, the following points should be borne in mind.
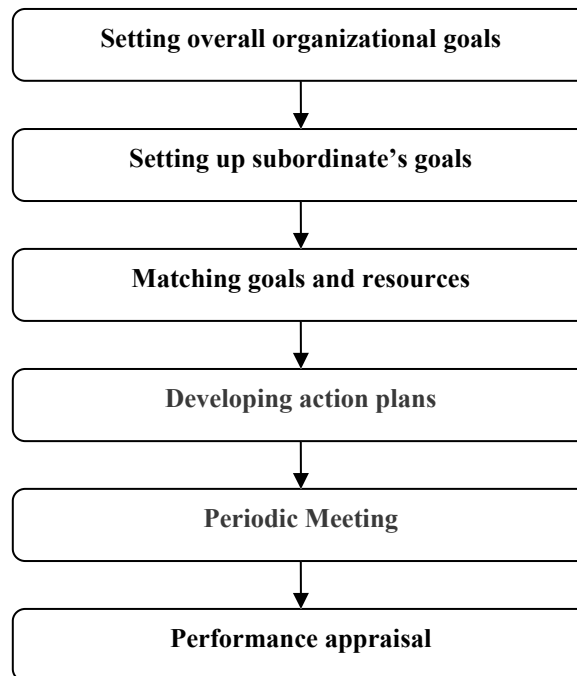
• Objectives are required to be set by management in every area which directly and vitally affects the survival and prosperity of the business.

• The objectives to be set in various areas have to be identified.

• While setting the objectives, the past performance must be reviewed, since past performance indicates what the organization will be able to accomplish in future.

• The objectives should be set in realistic terms i.e., the objectives to be set should be reasonable and capable of attainment.

• Objectives must be consistent with one and other.

• Objectives must be set in clear-cut terms.

• For the successful accomplishment of the objectives, there should be effective communication.

PROCESS OF MANAGEMENT BY OBJECTIVES (MBO)
Definition

Management by Objectives (MBO) is a personnel management technique where managers and employees work together to set, record and monitor goals for a specific period of time. Organizational goals and planning flow top-down through the organization and are translated into personal goals for organizational members. The technique was first championed by management expert Peter Drucker and became commonly used in the 1960s.

Process of management objectives (MBO)

```
┌─────────────────────────────────────────┐
│   Setting overall organizational goals   │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│      Setting up subordinate's goals      │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│        Matching goals and resources      │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│         Developing action plans          │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│             Periodic Meeting             │
└─────────────────────────────────────────┘
                    │
                    ▼
┌─────────────────────────────────────────┐
│          Performance appraisal           │
└─────────────────────────────────────────┘
```

1) Setting overall organizational goals:

For Management by Objectives (MBO) to be effective, individual managers must understand the specific objectives of their job and how those objectives fit in with the overall company objectives set by the board of directors. The managers of the various units or sub-units, or sections of an organization should know not only the objectives of their unit but should also actively participate in setting these objectives and make responsibility for them. Management by Objective (MBO) systems, objectives are written down for each level of the organization, and individuals are given specific aims and targets. Managers need to identify and set objectives both for themselves, their units, and their organizations.

2) Setting up subordinate's goals:

The process of objective setting begins with superior's proposed recommendations for his subordinate's objectives. In turn, the subordinate states his own objectives as perceived by him. Thereafter, the final objectives for the subordinate are set by the mutual negotiation between superior and subordinate. The goal setting process is complete when agreement is reached between superior and subordinates as to what is to be accomplished. The subordinate goals are set a departmental level, section level and individual level, etc.

3. Matching goals and resources:

The establishment of objectives can not be fruitful unless the resources and means required to achieve these objectives are provided. Therefore the subordinates should be provided required tools and materials which enable them to achieve the objectives efficiently and effectively. Resource requirements can be measured precisely if the goals are set precisely. This makes the process of resource allocation relatively easy. Resource allocation should be made after consulting the subordinates.

4. Developing action plans:

Specific key areas are determined which require more attention than others in terms of allocation of resources. These areas are (1)profitability (2) Market standing (3) Innovation (4) Productivity (5) Worker performance (6) Manager performance (7)public responsibility, etc. these plans are usually formulated at lower levels in consultation with their superiors.

5. Periodic Meeting

At frequent intervals actual performance is reviewed jointly by the superior and the subordinates. The top level management will be able to know the views and difficulties faced by the staff in achieving the targets. If necessary, the goals and modified. Problems, if any, are identified and solutions are sort out. The success of plans is ensured through periodic review of performance.

6. Performance appraisal:

Performance appraisals communicate to employees how they are performing their jobs, and they establish a plan for improvement. Performance appraisals are extremely important to both employee and employer, as they are often used to provide predictive information related to possible promotion. Appraisals can also provide input for determining both individual and organizational training and development needs. Performance appraisals encourage performance improvement. Feedback on behavior, attitude, skill or knowledge clarifies for employees the job expectations their

managers hold for them. In order to be effective, performance appraisals must be supported by documentation and management commitment.

Advantages

• Motivation – Involving employees in the whole process of goal setting and increasing employee empowerment. This increases employee job satisfaction and commitment.

• Better communication and Coordination – Frequent reviews and interactions between superiors and subordinates help to maintain harmonious relationships within the organization and also to solve many problems.

• Clarity of goals

• Subordinates have a higher commitment to objectives they set themselves than those imposed on them by another person.

• Managers can ensure that objectives of the subordinates are linked to the organization's objectives.

STRATEGIES

Meaning

The term 'Strategy' has been adapted from war and is being increasingly used in business to reflect broad overall objectives and policies of an enterprise. Literally speaking, the term 'Strategy' stands for the war-art of the military general, compelling the enemy to fight as per out chosen terms and conditions.

Definition

According to Koontz and O' Donnell, "Strategies must often denote a general programme of action and deployment of emphasis and resources to attain comprehensive objectives".

Business Strategy

There are six criteria for evaluating an appropriate strategy.

1. *Internal Consistency*: The strategy of an organization must be consistent with its other strategies, goals, policies and plans.

2. *Consistency with the Environment*: The strategy must be consistent with the external environment. The strategy selected should enhance the confidence and capability of the enterprise to manage and adapt with or give command over the environmental forces.

3. **Realistic Assessment**: Strategy needs a realistic assessment of the resources of the enterprise – men, money and materials – both existing resources as also the resources the enterprise can command.

4. **Acceptable Degree of Risk**: Any major strategy carries with it certain elements of risk and uncertainty. The amount of risk inherent in a strategy should be within the bearable capacity of the enterprise.

5. **Appropriate Time**: Time is the essence of any strategy. A good strategy not only provides the objectives to be achieved but also indicates when those objectives could be achieved.

6. **Workability**: Strategy must be feasible and should produce the desired results.

Characteristics of Strategy

• It is the right combination of different factors.

• It relates the business organization to the environment.

• It is an action to meet a particular challenge, to solve particular problems or to attain desired objectives.

• Strategy is a means to an end and not an end in itself.

• It is formulated at the top management level.

• It involves assumption of certain calculated risks.

POLICIES

Policies are general statements or understandings that guide managers' thinking in decision making. They usually do not require action but are intended to guide managers in their commitment to the decision they ultimately make.

Policy-making is an important part of the process of planning. Policies may be described as plans which are meant to serve as broad guides to decision making in a firm. Policies exist at various levels of the enterprise – corporate level, divisional level and departmental level. Policies are valuable because they allow lower levels of management to handle problems without going to top management for a decision each time.

Essentials of Policy Formulation

The essentials of policy formation may be listed as below:

• A policy should be definite, positive and clear. It should be understood by everyone in the organization.

• A policy should be translatable into the practices.

• A policy should be flexible and at the same time have a high degree of permanency.

• A policy should be formulated to cover all reasonable anticipatable conditions.

• A policy should be founded upon facts and sound judgment.

• A policy should conform to economic principles, statutes and regulations.

• A policy should be a general statement of the established rule.

Importance of Policies

Policies are useful for the following reasons:

• They provide guides to thinking and action and provide support to the subordinates.

• They delimit the area within which a decision is to be made.

• They save time and effort by pre-deciding problems and

• They permit delegation of authority to mangers at the lower levels.

PLANNING PREMISES

According to H. weihrich and H.koontz, "Planning premises are identified as the anticipated environment in which plans are expected to operate."

Requirements of Effective Premising:

1. Selection of the premises which bear materially on the programs.
2. Development of alternative premises for contingency planning.
3. Verification of the consistency of premises.
4. Communication of the premises

Types of Planning Premises

1. Internal and External Premises

1. **Internal Premises** come from the business itself. It includes skills of the workers, capital investment policies, philosophy of management, sales forecasts, etc.

2. **External Premises** come from the external environment. That is, economic, social, political, cultural and technological environment. External premises cannot be controlled by the business.

2. Controllable, Semi-controllable and Uncontrollable Premises

1. **Controllable Premises** are those which are fully controlled by the management. They include factors like materials, machines and money.

2. **Semi-controllable Premises** are partly controllable. They include marketing strategy.

3. **Uncontrollable Premises** are those over which the management has absolutely no control. They include weather conditions, consumers' behavior, government policy, natural calamities, wars, etc.

3. Tangible and Intangible Premises

1. **Tangible Premises** can be measured in quantitative terms. They include units of production and sale, money, time, hours of work, etc.

2. **Intangible Premises** cannot be measured in quantitative terms. They include goodwill of the business, employee's morale, employee's attitude and public relations.

4. Constant and Variable Premises

1. **Constant Premises** do not change. They remain the same, even if there is a change in the course of action. They include men, money and machines.

2. **Variable Premises** are subject to change. They change according to the course of action. They include union-management relations.

FORECASTING

Meaning

Forecasting is a process of predicting or estimating the future based on past and present data. Forecasting provides information about the potential future events and their consequences for the organization. It may not reduce the complications and uncertainty of the future.

Definition

"Forecasting is a systematic attempt to probe the future by inference from facts. The purpose is to provide management with information on which it came base planning decisions". – Louis A. Allen

Features of Forecasting

Peculiarities, characteristics or features of forecasting are as follows:-

1. Forecasting in concerned with future events.

2. It shows the probability of happening of future events.

3. It analysis past and present data.

4. It uses statistical tools and techniques.

5. It uses personal observations.

Process of Forecasting

1. **Analyzing and understanding the problem**: The manager must first identify the real problem for which the forecast is to be made. It may be regarding the technological conditions, location site or mobilizing finance. This will help the manager to fix the scope of forecasting.

2. **Developing sound foundation**: The management can develop a sound foundation, for the future after considering available information, experience, type of business, and the rate of development.

3. **Collecting and analyzing data**: Data collection is time consuming. Only relevant data must be kept. Many statistical tools can be used to analyze the data.

4. **Estimating future events**: The future events are estimated by using trend analysis. Trend analysis makes provision for some errors.

5. **Comparing actual with estimated results**: The actual results are compared with the estimated results. If the actual results tally with the estimated results, there is nothing to worry. In case of any major difference between the actual and the estimates, it is necessary to find out the reasons for poor performance.

6. **Refining the Forecasts**: forecasting is not an exact science. It is simply an estimate. so the management should always review the forecasts periodically and future trend values should be revised according to the experience gained in the immediate past.

Importance of Forecasting

Merits, significance or importance of forecasting involves following points:-

1. Forecasting provides relevant and reliable information about the past and present events and the likely future events. This is necessary for sound planning.

2. It gives confidence to the managers for making important decisions.

3. It is the basis for making planning premises.

4. It keeps managers active and alert to face the challenges of future events and the changes in the environment.

Limitations of Forecasting

Demerits, criticism or limitations of forecasting involves following points:-

1. Assumptions

All forecasts are based on certain assumptions which may not always be true. That is, the assumptions mat not hold good in all cases. As a result forecasts may became unreliable.

2. Not fully true

Forecasting merely indicate the trend of future events. They may not be fully true. Techniques of forecasting simply project the future trend. None can give guarantee that a particular trend will occur in future.

3. Expensive

Time and money are involved in the process of collection, analysis and interpretation of data for the purpose of forecasting. When forecasts are based on certain assumptions, we cannot expect hundred per cent accuracy.

Forecasting Vs Planning

Forecasting	Planning
1.It is a tool of planning	1. It is not a tool for forecasting
2.It is a basis for planning	2.Planning is the basis for future
3.Few members are involved in the process	3. Large number of persons are involved in the process
4. Forecasting is done by experts	
5.Forecasting is done at the middle and lower level of management	4. Planning can be done by anyone
	5. Planning is done at top level management

FORECASTING TECHNIQUES

I. Quantitative Techniques

The various quantitative techniques involve the use of various statiscal tools for predicting future trends.

(i)Time Series Analysis

In this method a historical series of data is decomposed into various components, viz., trend seasonal variation, cyclical variation and random variation. After the original data are adjusted for seasonal and cyclical variation,, a trend line can be fitted by using the methods of least squares. When the various components of a time series are separated, the trend for the variable under study can be known.

(ii)Extrapolation

Extrapolation is also based on time series because it relies on the behaviors of a series in the past and projects the same trend in future. This method does not isolate the effects of various factors influencing a problem under study but takes into account the totality of their effects and assume that the effect of these factors is of a constant and stable pattern and would continue as such in future.

(iii) Regression Analysis

If two variables are functionally related, an understanding of one such variable will help in estimating the other. Such relationships between two variables are analyzed through regression analysis. For example, it it is known that there is a correlation between advertising expenditure and sales volume, future sales can be estimated on the basis of changes in advertising expenditure.

(iv) Input - Output Analysis

Under this method, a forecast of output is based on given input if relationship between input and output is known. Similarly input requirement can be known on the basis of final output with a given input –output relationship. It is because of this mechanism that the technique is known as input output analysis or end use technique.

II. Qualitative Techniques

This group of techniques uses qualitative data and may or may not take the past into consideration. Such types of techniques are used when data are scarce, for instance, when a product is first introduced into market. The qualitative forecasting techniques are described below:

(i)Delphi Method

This is a simple method of selecting a panel of experts to which questionnaries are given to obtain accurate and complete information. The specially of this method is that the information obtained from one questionnaire, so that ultimately all the experts will have comprehensive information through such a series of questionnaires.

(ii)Market Research Method

Personal interviews, sending questionnaires, etc. are the methods to conduct market research. When a new product has to be released and sales forecast have to be made, this method is more useful.

(iii) Historical Analysis

Here forecast is based on some analogous conditions elsewhere in the past. According to Rostow, an economy passes through certain stages in its development. Therefore, the economic situation of a country can be forecasted by making comparison with another country which has already gone through that stage.

(iv)Panel Consensus

This method is based on the assumption that several experts can arrive at a better forecast then one person. There is no secrecy and communication is encouraged. The information from one panel of experts may be presented openly in a group discussion to arrive at a consensus forecast.

DECISION MAKING

The word decision has been derived from the Latin word "decidere" which means "cutting off". Thus, decision involves cutting off of alternatives between those that are desirable and those that are

not desirable. In the words of George R. Terry, "Decision-making is the selection based on some criteria from two or more possible alternatives".

Characteristics of Decision Making

• Decision making implies that there are various alternatives and the most desirable alternative is chosen to solve the problem or to arrive at expected results.

• The decision-maker has freedom to choose an alternative.

• Decision-making may not be completely rational but may be judgemental and emotional.

• Decision-making is goal-oriented.

• Decision-making is a mental or intellectual process because the final decision is made by the decision-maker.

A decision may be expressed in words or may be implied from behaviour.

• Choosing from among the alternative courses of operation implies uncertainty about the final result of each possible course of operation.

TYPES OF DECISIONS

a) Programmed and Non-Programmed Decisions: Herbert Simon has grouped organizational decisions into two categories based on the procedure followed. They are:

i) Programmed decisions: Programmed decisions are routine and repetitive and are made within the framework of organizational policies and rules. These policies and rules are established well in advance to solve recurring problems in the organization. Programmed decisions have short-run impact. They are, generally, taken at the lower level of management.

ii) Non-Programmed Decisions: Non-programmed decisions are decisions taken to meet non-repetitive problems. Non-programmed decisions are relevant for solving unique/ unusual problems in which various alternatives cannot be decided in advance. A common feature of non-programmed decisions is that they are novel and non-recurring and therefore, readymade solutions are not available. Since these decisions are of high importance and have long-term consequences, they are made by top level management.

b) Strategic and Tactical Decisions: Organizational decisions may also be classified as strategic or tactical.

i) Strategic Decisions: Basic decisions or strategic decisions are decisions which are of crucial importance. Strategic decisions a major choice of actions concerning allocation of resources and contribution to the achievement of organizational objectives. Decisions like plant location, product diversification, entering into new markets, selection of channels of distribution, capital expenditure etc are examples of basic or strategic decisions.

ii) Tactical Decisions: Routine decisions or tactical decisions are decisions which are routine and repetitive. They are derived out of strategic decisions. The various features of a tactical decision are as follows:

• Tactical decision relates to day-to-day operation of the organization and has to be taken very frequently.

• Tactical decision is mostly a programmed one. Therefore, the decision can be made within the context of these variables

c) Major and Minor Decisions:

(i) Major decisions: It is relates to the purchase of fixed assets with more value. The purchase of land and building is an example of major decisions. This decision is taken by the top management.

(ii)Minor Decisions: It is relates to the purchase of current assets with more value. Purchase of pencil, pen, ink, etc., are some of the examples of minor decisions. This decision is taken by lower level management people.

DECISION MAKING PROCESS
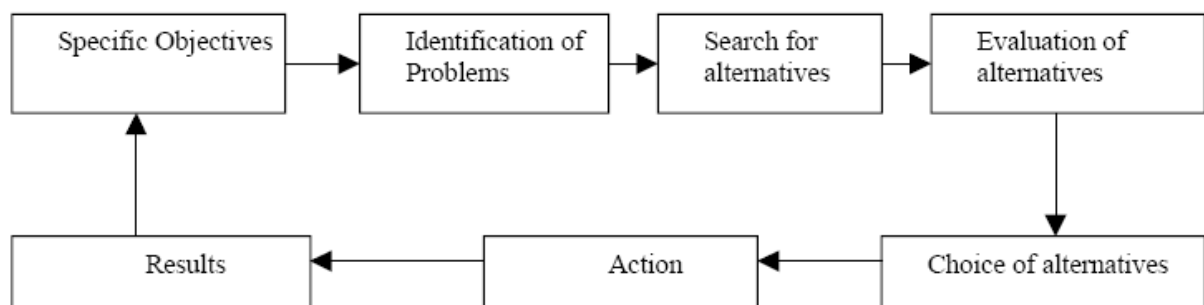
1. Specific Objective: The need for decision making arises in order to achieve certain specific objectives. The starting point in any analysis of decision making involves the determination of whether a decision needs to be made.

2. Problem Identification: A problem is a felt need, a question which needs a solution. In the words of Joseph L Massie "A good decision is dependent upon the recognition of the right problem". The objective of problem identification is that if the problem is precisely and specifically identifies, it will provide a clue in finding a possible solution. A problem can be identified clearly, if managers go through diagnosis and analysis of the problem.

Diagnosis: Diagnosis is the process of identifying a problem from its signs and symptoms. A symptom is a condition or set of conditions that indicates the existence of a problem. Diagnosing the real problem implies knowing the gap between what is and what ought to be, identifying the reasons for the gap and understanding the problem in relation to higher objectives of the organization.

Analysis: Diagnosis gives rise to analysis. Analysis of a problem requires:

• Who would make decision?

• What information would be needed?

• From where the information is available?

Analysis helps managers to gain an insight into the problem.

3. Search for Alternatives: A problem can be solved in several ways; however, all the ways cannot be equally satisfying. Therefore, the decision maker must try to find out the various alternatives available in order to get the most satisfactory result of a decision. A decision maker can use several sources for identifying alternatives:

• His own past experiences

• Practices followed by others and

• Using creative techniques.

4. Evaluation of Alternatives: After the various alternatives are identified, the next step is to evaluate them and select the one that will meet the choice criteria. /the decision maker must check proposed alternatives against limits, and if an alternative does not meet them, he can discard it. Having narrowed down the alternatives which require serious consideration, the decision maker will go for evaluating how each alternative may contribute towards the objective supposed to be achieved by implementing the decision.

5. Choice of Alternative: The evaluation of various alternatives presents a clear picture as to how each one of them contribute to the objectives under question. A comparison is made among the likely outcomes of various alternatives and the best one is chosen.

6. Action: Once the alternative is selected, it is put into action. The actual process of decision making ends with the choice of an alternative through which the objectives can be achieved.

7. Results: When the decision is put into action, it brings certain results. These results must correspond with objectives, the starting point of decision process, if good decision has been

made and implemented properly. Thus, results provide indication whether decision making and its implementation is proper.

ORGANISATION

Organization is the process of integrating, co-coordinating and mobilizing the activities of members of a group for seeking common goals. It implies establishment of working relationships which is done by assigning activities and delegating authority.

Definition

Mooney and Reily," Organization is the form of every human association for the attainment of a common purpose".

FORMAL AND INFORMAL ORGANIZATION

The formal organization refers to the structure of jobs and positions with clearly defined functions and relationships as prescribed by the top management. This type of organization is built by the management to realize objectives of an enterprise and is bound by rules, systems and procedures. Everybody is assigned a certain responsibility for the performance of the given task and given the required amount of authority for carrying it out. Informal organization, which does not appear on the organization chart, supplements the formal organization in achieving organizational goals effectively and efficiently. The working of informal groups and leaders is not as simple as it may appear to be. Therefore, it is obligatory for every manager to study thoroughly the working pattern of informal relationships in the organization and to use them for

Achieving organizational objectives.

Formal organization

Chester I Bernard defines formal organization as -"a system of consciously coordinated activities or forces of two or more persons. It refers to the structure of well-defined jobs, each bearing a definite measure of authority, responsibility and accountability." The essence of formal organization is conscious common purpose and comes into being when persons–

(i) Are able to communicate with each other

(ii) Are willing to act and

(iii) Share a purpose.

The formal organization is built around four key pillars. They are:

• Division of labor

• Scalar and functional processes

• Structure and

• Span of control

Thus, a formal organization is one resulting from planning where the pattern of structure has already been determined by the top management.

Characteristic Features of formal organization

• Formal organization structure is laid down by the top management to achieve organizational goals.

• Formal organization prescribes the relationships amongst the people working in the organization.

• The organization structures is consciously designed to enable the people of the organization to work together for accomplishing the common objectives of the enterprise

• Organization structure concentrates on the jobs to be performed and not the individuals who are to perform jobs.

• In a formal organization, individuals are fitted into jobs and positions and work as per the managerial decisions. Thus, the formal relations in the organization arise from the pattern of responsibilities that are created by the management.

• A formal organization is bound by rules, regulations and procedures.

• In a formal organization, the position, authority, responsibility and accountability of each level are clearly defined.

• Organization structure is based on division of labor and specialization to achieve efficiency in operations.

A formal organization is deliberately impersonal. The organization does not take into consideration the sentiments of organizational members.

• The authority and responsibility relationships created by the organization structure are to be honored by everyone.

• In a formal organization, coordination proceeds according to the prescribed pattern.

Advantages of formal organization

• The formal organization structure concentrates on the jobs to be performed. It, therefore, makes everybody responsible for a given task.

• A formal organization is bound by rules, regulations and procedures. It thus ensures law and order in the organization.

• The organization structure enables the people of the organization to work together for accomplishing the common objectives of the enterprise

Disadvantages or criticisms of formal organization

• The formal organization does not take into consideration the sentiments of organizational members.

• The formal organization does not consider the goals of the individuals. It is designed to achieve the goals of the organization only.

• The formal organization is bound by rigid rules, regulations and procedures. This makes the achievement of goals difficult.

INFORMAL ORGANIZATION

Informal organization refers to the relationship between people in the organization based on personal attitudes, emotions, prejudices, likes, dislikes etc. an informal organization is an organization which is not established by any formal authority, but arises from the personal and social relations of the people. These relations are not developed according to procedures and regulations laid down in the formal organization structure; generally large formal groups give rise to small informal or social groups. These groups may be based on same taste, language, culture or some other factor. These groups are not pre-planned, but they develop automatically within the organization according to its environment.

Characteristics features of informal organization

• Informal organization is not established by any formal authority. It is unplanned and arises spontaneously.

• Informal organizations reflect human relationships. It arises from the personal and social relations amongst the people working in the organization.

• Formation of informal organizations is a natural process. It is not based on rules, regulations and procedures.

• The inter-relations amongst the people in an informal organization cannot be shown in an organization chart.

• In the case of informal organization, the people cut across formal channels of communications and communicate amongst themselves.

• The membership of informal organizations is voluntary. It arises spontaneously and not by deliberate or conscious efforts.

• Membership of informal groups can be overlapping as a person may be member of a number of informal groups.

• Informal organizations are based on common taste, problem, language, religion, culture, etc. it is influenced by the personal attitudes, emotions, whims, likes and dislikes etc. of the people in the organization.

Benefits of Informal organization

• It blends with the formal organization to make it more effective.

• Many things which cannot be achieved through formal organization can be achieved through informal organization.

• The presence of informal organization in an enterprise makes the managers plan and act more carefully.

• Informal organization acts as a means by which the workers achieve a sense of security and belonging. It provides social satisfaction to group members.

• An informal organization has a powerful influence on productivity and job satisfaction.

• The informal leader lightens the burden of the formal manager and tries to fill in the gaps in the manager's ability.

• Informal organization helps the group members to attain specific personal objectives.

• Informal organization is the best means of employee communication. It is very fast.

THEORIES OF ORGANISATION

1) Classical Theory

Scientific Management: Taylor analyzed how to maximize the amount of output with the least amount of input. This was Taylor's attempt to rationalize the individual worker.

1. Divide work between managers and workers

2. Provide incentive system (based on performance)

3. Scientifically trained workers

4. Create a science for each individual's responsibilities

5. Make sure work is done on time/efficiently

There are problems that arose out of scientific management. One is that the standardization leads workers to rebel against mundane. Another is that workers may reject the incentive system because they are required to constantly work at their optimum level, an expectation that may be unrealistic.

2. Neo – Classical Theory

The Neoclassical perspective began with the Hawthorne studies in the 1920s. This approach gave emphasis to "affective and socio-psychological aspects of human behavior in organizations." The human relations movement was a movement which had the primary concerns of concentrating on topics such as morale, leadership.

Contributions of Neo – Classical Theory

• The satisfactory interrelationships between the coworkers

• It classifies personnel as social beings and proposes that sense of belonging in the workplace is important to increase productivity levels in the workforce.

• An effective management understood the way people interacted and behaved within the group.

• The management attempts to improve the interpersonal skills through motivations, leading, communication and counseling.

- This study encourages managers to acquire minimal knowledge of behavioral sciences to be able to understand and improve the interactions between employees.

3. Modern Theory

The other name of modern theory is modern organization theory. According to one authority, it was organized in the early 1950s this theory composed of the ideas of different approaches to management development.

Like the general system theory, modern organization theory studies:

1. The parts (individuals) in aggregates and the movement of individuals and out of the system.

2. The interaction of individual with the environment found in the system.

4. Motivation Theory

It is concerned with the study or work motivation of employees of the organization. the works are performed effectively if proper motivation is given to the employees. The motivation may be monetary and non-monetary terms. Maslow's hierarchy of needs theory and Honberg's two factor theory are so of the examples of motivation theory.

5. Decision Theory

The other name of decision theory is decision making theory. This theory was given by Herbert. A. Simon. He was awarded Nobel Prize in the year of 1978 for this theory. Simon suggested that the organizational structure be designed through an examination of the points at which decisions must be made and the persons from whom information is required if decision should be satisfactory**.**

DIFFERENCE BETWEEN FORMAL AND INFORMAL ORGANIZATION

Nature	Formal Organization	Informal Organization
1.Power	It is attached to position	It is attached to person
2. Chain of command	The Chain is respected and authority is delegated by the top management	Authority comes from personal knowledge and skills of group leaders and is given by the group itself.
3. Goals	Organizational goals are considered important	Individual goals may clash with organizational goals.
4. Flexibility	Not flexible	Highly Flexible
5. Formation	They are deliberately created by managers.	They are created by members to achieve their personal goal.
6. Purpose	They are formed to achieve formal organizational goals.	Their objective is to achieve social satisfaction.
7. Flow of authority	Authority vests with managers. It flows from top to bottom.	Authority vests with the elected leaders.
8.Behaviour of members	Behaviour of members is governed by norms and standards framed by managers.	Behaviour of members is governed by norms and standards framed by group and members.
9. Governance	Its working is governed by rules and regulations.	There are no fixed rules.
10. Winding up	It winds up according to legal procedures.	It winds up at the will of members.
11. Size	Large size	Small size

ORGANISATIONAL CHART

It is important tool for portraying net work of an organization structure. It shows

1.   The main portion, nature of relationship between

2.   Levels of management.

"It is diagrammatic form which shows important aspects of an organization, including the major function and their respective relationship, the channels of supervision and the relative authority of each employee who is in charge of each respective functions."

-FEORGE TERRY

Types of charts

1.   Vertical chart

2.   Horizontal chart

3.   Circular chart

4.   Tree chart

Merits of Organizational Chart:

1.   Clarity in relationship

2.   Easy to understand at a glance

3.   Familiarizing new employees

4.   Helps in formulating training programme

5.   Helps to organizational change

6.   It serves as a better method of visualizing the tone and character of an organization.

Limitations

1.   Likely to be outdated

2.   Rigidity

3.   It shows only relationships

4.   Shifting of responsibility to somebody else

5.   Does not show extents of authority or responsibility.

6.   It may go against team sprit

7.   It ignores the informal aspects of organization

POSSIBLE QUESTIONS

1. Enumerate Henry Fayol's Contribution for management.

2. Describe in detail about forecasting techniques.

3. Define planning. Explain the steps involved in planning.

4. Define forecasting. Explain forecasting process in detail.

5. Explain decision making process in detail.

6. Distinguish between formal and informal organization in detail

7. Elucidate in detail about decision making and its types.

8. What is organization chart .Explain the various types of organization chart?

9. Define the term management .Explain the functions of management in detail.

10. Describe in detail about the process of management by   objectives (MBO)

11. Describe the functions of Management.

12. Explain the Guidelines for objective setting.

13. Explain in detail about Henry Fayol's contribution towards classical approach towards management.

14. Define planning. Explain the steps involved in planning process

15. Describe the Taylor contribution to management.

16. Explain the Types of decisions.

17. Difference between management and administration.

18. Explain about the classical approaches of management.

19. Describe the features of forecasting in management.

20. Difference between planning and forecasting.

21. Explain about the development of management thought.

22. What are the elements followed by system approach?

23. Explain about the decision making process.

24. Describe in detail about the forecasting techniques.

25. Explain about the objectives setting and procedures.

UNIT II

DIRECTING AND CONTROLLING

Human Factors – Creativity and Innovation – Harmonizing Objectives – Leadership – Types of Leadership Motivation – Hierarchy of needs – Motivation theories – Motivational Techniques – Job Enrichment –Process of Communication – System and process of Controlling – Requirements for effective control – Control of Overall Performance – Direct and Preventive Control .

HUMAN FACTORS

Human factor is a physical or cognitive property of an individual or social behavior which is specific to humans and influences functioning of technological systems as well as human-environment equilibriums. In social interactions, the use of the term human factor stresses the social properties unique to or characteristic of humans. Human factors involves the study of all aspects of the way humans relate to the world around them, with the aim of improving operational performance, safety, through life costs and/or adoption through improvement in the experience of the end user.

The Cycle of Human Factors

Human Factors involves the study of factors and development of tools that facilitate the achievement of these goals. In the most general sense, the three goals of human factors are accomplished through several procedures in the human factors cycle,which depicts the human operator (brain and body) and the system with which he or she is interacting. First it is necessary to diagnose or identify the problems and deficiencies in the human-system interaction of an existing system. After defining the problems there are five different approaches that can be used in order to implement the solution. These are as follows:

- *Equipment Design*: changes the nature of the physical equipment with which humans work.
- *Task Design*: focuses more on changing what operators do than on changing the devices they use. This may involve assigning part or all of tasks to other workers or to automated components.
- *Environmental Design*: implements changes, such as improved lighting, temperature control and reduced noise in the physical environment where the task is carried out.

- *Training the individuals*: better preparing the worker for the conditions that he or she will encounter in the job environment by teaching and practicing the necessary physical or mental skills.

- *Selection of individuals*: is a technique that recognizes the individual differences across humans in every physical and mental dimension that is relevant for good system performance. Such a performance can be optimized by selecting operators who possess the best profile of characteristics for the job.

CREATIVITY & INNOVATION

Creativity

- Creativity is defined as the production of new and useful ideas concerning products, services, processes and procedures by individuals or small groups of persons working together.

- Creativity in entrepreneurship include being independent and spontaneous and processing a problem solving attitude.

The Creative Process has six phases…

- **Inspiration:** In which you research and generate many ideas

- **Clarification:** In which you focus on your goals

- **Evaluation:** In which you review your work and learn from it

- **Distillation:** In which you decide which of your ideas to work on

- **Incubation:** In which you leave the work alone

- **Perspiration:** In which you work deter mindedly on your best ideas

DO IT is a process for creativity

- D - Define problem

- O - Open mind and apply creative techniques

- I - Identify best solution

- T – Transform

Creative People in Organization

- This creative group is divided to two different groups namely initiators and problem solvers.

- A person who initiates a course of action

- A person who start working when problem arises

- Creative people can be said to have :

    - A particular Style

    - Originality

    - Experience

    - Determination Flexibility

    - Positive outlook

INNOVATION

- Innovation is introduction of a new idea into the marketplace in the form of a new product or service or new market or an improvement in organization or process.

- Ideas have little value unless they are converted into useful product and services

Characteristics of innovation

- Innovation leads to changes

- Result of a thoughtful plan

- Can bring complete revolution or an extension to existing products

- Provide unique identity to a business

- Innovation are action oriented and result oriented

- Help in making products and processes simple to understand

- Innovation involves continuous experimentation and testing.

-

Two types of innovation

Incremental Innovation:

- Incremental innovation is generally exploiting existing ideas , like Pentium Dual Core shows and incremental on Pentium IV.

Radical Innovation:

- Radical Innovation is like finding a commodity , something new to world like the transistors , these generally require R&D and take a lot of time.

HARMONIZING OBJECTIVES

It simply means bring a common agreement or say combining the organizational objectives with the individual objectives if we create such a system where employees' as well as organization both are having the common goals and objectives, synergy will be achieved. Thus harmonization in objectives will ensure the welfare and benefits for both organization and individuals.

LEADERSHIP

Definition

Leadership is defined as influence, the art or process of influencing people so that they will strive willingly and enthusiastically toward the achievement of group goals.

- Leaders act to help a group attain objectives through the maximum application of its capabilities.

- Leaders must instill values – whether it be concern for quality, honesty and calculated risk taking or for employees and customers.

Importance of Leadership

1. Aid to authority

2. Motive power to group efforts

3. Basis for co operation

4. Integration of Formal and Informal Organization.

Functions of Leadership

1. **Defining the task**, (by setting clear objectives through SMART goals)
2. **Planning**, (by looking at alternative ways to achieve the task and having contingency plans in case of problems)
3. **Briefing the team**, (by creating the right team climate, fostering synergy, and making the most of each individual through knowing them well)
4. **Controlling what happens**, (by being efficient in terms of getting maximum results from minimum resources)
5. **Evaluating results**, (by assessing consequences and identifying how to improve performance)
6. **Motivating individuals**, (by using both external motivators such as rewards and incentives as well as eliciting internal motivators on the part of each team player)
7. **Organizing people**, (by organizing self and others through good time management, personal development, and delegation)

8. **Setting an example**, (by the recognition that people observe their leaders and copy what they do.

TYPES OF LEADERSHIP

The leadership types we will discuss here are:

a) Autocratic leader

b) Democratic leader

c) Laissez Faire leader

d) Paternalistic Leader

e) Intellectual leader

f) Institutional leader

g) Inducing leader

h) Creative leader

a) Autocratic style

Manager retains as much power and decision-making authority as possible. The manager does not do not consult employees, nor are they allowed to give any input. Employees are expected to obey orders without receiving any explanations. The motivation environment is produced by creating a structured set of rewards and punishments. Autocratic leadership is a classical leadership style with the following characteristics:

• Manager seeks to make as many decisions as possible

• Manager seeks to have the most authority and control in decision making

• Manager seeks to retain responsibility rather than utilize complete delegation

Consultation with other colleagues in minimal and decision making becomes a solitary process

• Managers are less concerned with investing their own leadership development, and prefer to simply work on the task at hand.

Advantages

_ Reduced stress due to increased control

_ A more productive group 'while the leader is watching'

_ Improved logistics of operations

_ Faster decision making

Disadvantages

_ Short-termite approach to management.

_ Manager perceived as having poor leadership skills

_ Increased workload for the manager

_ People dislike being ordered around

b) Democratic Style

Democratic Leadership is the leadership style that promotes the sharing of responsibility, the exercise of delegation and continual consultation.

The style has the following characteristics:

• Manager seeks consultation on all major issues and decisions.

• Manager effectively delegate tasks to subordinates and give them full control and responsibility for those tasks.

• Manager welcomes feedback on the results of intiatives and the work environment.

• Manager encourages others to become leaders and be involved in leadership development.

Advantages

_ Positive work environment

_ Successful initiatives

_Creative thinking

_ Reduction of friction and office politics

_ Reduced employee turnover

Disadvantages

_ Takes long time to take decisions

_ Danger of pseudo participation

_ Like the other styles, the democratic style is not always appropriate. It is most successful when used with highly skilled or experienced employees or when implementing operational changes or resolving individual or group problems.

c) Laissez-Faire leader

This French phrase means "leave it be" and is used to describe a leader who leaves his/her colleagues to get on with their work. The style is largely a "hands off" view that tends to minimize the amount of direction and face time required.

Advantages

• No work for the leader

• Frustration may force others into leadership roles

• Allows the visionary worker the opportunity to do what they want, free from interference

• Empowers the group

Disadvantages

_ It makes employees feel insecure at the unavailability of a manager.

_ The manager cannot provide regular feedback to let employees know how well they are doing.

_ Managers are unable to thank employees for their good work.

_The manager doesn't understand his or her responsibilities and is hoping the employees can cover for him or her.

d) Paternalistic Leader:

Under this type of leadership, the leader assumes that his function is fatherly. He treat his relationship with his subordinates as that of a family and the leader as the head of the family. The leader helps guides and protects his followers and keeps them happy as members of family. He provides good working conditions, fringe benefits and employee series. It is said that employees under such leadership will work harder out of gratitude.

e) Intellectual leader

A leader wins the confidence of his followers by his intelligence. Generally, the advice of a leader is sought in big business concerns. He gives advice on the matter in which he is expert. He may be a specialist in sales, personnel management, and the like. He gets results through others. He excels as a leader because he uses his superior knowledge.

f) Institutional leader

Leaders exercise his power over his followers because of his position held in the organizational hierarchy. He exercises authority with which his post is invested. The leader may or may not be an expert in his field. If he is an expert, he will have relationship Behaviour with his followers.

g) Inducing leader

The leader is one who influences his followers with his personality and persuaders them to join him in doing a work. The leader gets things done by others through speaking nice words. The whole gang responds to the words of the leader.

h) Creative leader

The leader is one who encourages his followers to suggest new ideas, thoughts or ways. Some, the leader himself puts forward new ideas. More than one new idea flows from the group, the leader will select the best one among them without personal bias.

MOTIVATION

Motivation may be defined as the state of an individual's perspective, which represents the strength of his or her propensity to exert effort towards some particular behavior. Generally speaking, when employees enjoy their task enthusiastically. In other words, they are motivated to produce an optimal output.

Traditional approach to motivation:

Many People argue that the traditional "**carrot and stick**"method of motivation still works, the carrot being money and the stick being physical ,financial or social punishment. The assumption has been that people will work harder and produce more if substantial financial rewards are placed before them or if they are threatened with dismissal or peer embarrassment or physical punishment.

HIERARCHY OF NEEDS (MASLOWS HIERARCHY OF NEEDS)

Level 1: the first level of physiological needs Includes food, air, water, sleep, shelter, sex and other necessities to sustain and preserve life.

Level 2: the safety needs consist of the need for clothing, shelter and an environment with a predictable patterns such a job security, pension and insurance.

Level 3: love or social needs include the need to be liked by others, to be wanted number, and to belong to a group other than just a family. developing meaningful relationships on the job , becoming a member in good standing of the informal organization and receiving the grapevine communication are means of fulfilling this need in a person's work life.

Level 4: Esteem needs include the need for self respect , sense of achievement , and recognition from others" satisfaction of the self esteem need leads to feelings of self confidence , worth, strength, capability, adequacy and being useful and necessary in the world.

Level 5: Self actualization is the concept of fulfilling once potential and becoming everything one is capable of becoming.

MOTIVATION THEORIES

Some of the motivation theories are discussed below

a) Carrot and Stick Approaches of Motivation

The 'carrot' is the reward for working and 'stick' is the punishment for not working. Under this approaches, employees who perform the task well are given rewards in the form of bonus, pay raise,

promotion etc. while employees avoid work and punishment are given, such as demotion, termination from work, transfer to an unpleasant job, etc.

b) McGregor's Theory X and Theory Y:

McGregor states that people inside the organization can be managed in two ways. The first is basically negative, which falls under the category X and the other is basically positive, which falls under the category Y. After viewing the way in which the manager dealt with employees, McGregor concluded that a manager's view of the nature of human beings is based on a certain grouping of assumptions and that he or she tends to mold his or her behavior towards subordinates according to these assumptions.

Under the assumptions of theory X :

• Employees inherently do not like work and whenever possible, will attempt to avoid it.

• Because employees dislike work, they have to be forced, coerced or threatened with punishment to achieve goals.

• Employees avoid responsibilities and do not work fill formal directions are issued.

• Most workers place a greater importance on security over all other factors and display little ambition.

The assumptions of theory Y :

• Physical and mental effort at work is as natural as rest or play. People do exercise self-control and self-direction and if they are committed to those goals.

• Average human beings are willing to take responsibility and exercise imagination, ingenuity and creativity in solving the problems of the organization.

• That the way the things are organized, the average human being's brainpower is only partly used.

On analysis of the assumptions it can be detected that theory X assumes that lower-order needs dominate individuals and theory Y assumes that higher-order needs dominate individuals. An organization that is run on Theory X lines tends to be authoritarian in nature, the word "authoritarian" suggests such ideas as the "power to enforce obedience" and the "right to command." In contrast Theory Y organizations can be described as "participative", where the aims of the organization and of the individuals in it are integrated; individuals can achieve their own goals best by directing their efforts towards the success of the organization.

c) Abraham Maslow's "Need Hierarchy Theory":

One of the most widely mentioned theories of motivation is the hierarchy of needs theory put forth by psychologist Abraham Maslow. Maslow saw human needs in the form of a hierarchy, ascending

from the lowest to the highest, and he concluded that when one set of needs is satisfied, this kind of need ceases to be a motivator.

As per his theory these needs are:

(i) Physiological needs:

These are important needs for sustaining the human life. Food, water, warmth, shelter, sleep, medicine and education are the basic physiological needs which fall in the primary list of need satisfaction. Maslow was of an opinion that until these needs were satisfied to a degree to maintain life, no other motivating factors can work.

(ii) Security or Safety needs:

These are the needs to be free of physical danger and of the fear of losing a job, property, foodor shelter. It also includes protection against any emotional harm.

(iii) Social needs:

Since people are social beings, they need to belong and be accepted by others. People try to satisfy their need for affection, acceptance and friendship.

(iv) Esteem needs: According to Maslow, once people begin to satisfy their need to belong, they tend to want to be held in esteem both by themselves and by others. This kind of need produces such satisfaction as power, prestige status and self-confidence. It includes both internal esteem factors like self respect, autonomy and achievements and external esteem factors such as states, recognition and attention.

(v) Need for self-actualization:

Maslow regards this as the highest need in his hierarchy. It is the drive to become what one is capable of becoming; it includes growth, achieving one's potential and self-fulfillment. It is to Maximize one's potential and to accomplish something.
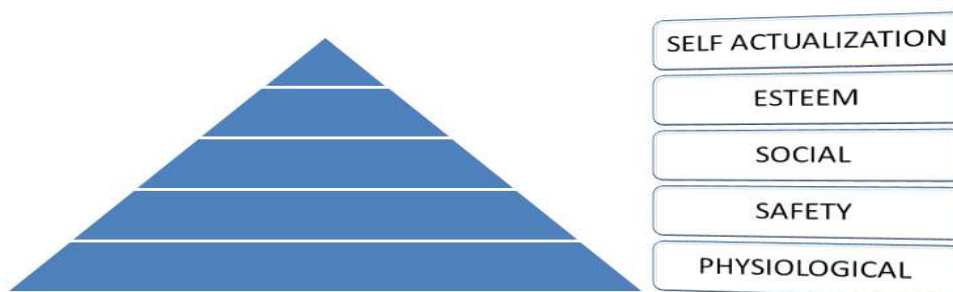
d) Frederick Herzberg's motivation-hygiene theory: Frederick has tried to modify Maslow's need Hierarchy theory. His theory is also known as two-factor theory or Hygiene theory. He stated

that there are certain satisfiers and dissatisfies for employees at work. Intrinsic factors are related to job satisfaction, while extrinsic factors are associated with dissatisfaction. He devised his theory on the question: "What do people want from their jobs?" He asked people to describe in detail, such situations when they felt exceptionally good or exceptionally bad.

From the responses that he received, he concluded that opposite of satisfaction is not dissatisfaction. Removing dissatisfying characteristics from a job does not necessarily make the job satisfying. He states that presence of certain factors in the organization is natural and the presence of the same does not lead to motivation. However, their non-presence leads to de-motivation. In similar manner there are certain factors, the absence of which causes no dissatisfaction, but their presence has motivational impact.

Examples of Hygiene factors are:

Security, status, relationship with subordinates, personal life, salary, work conditions, relationship with supervisor and company policy and administration. Examples of Motivational factors are: Growth prospectus job advancement, responsibility, challenges, recognition and achievements.

e) Victor Vroom's Expectancy theory:

The Expectancy Theory of Motivation explains the behavioral process of why individuals choose one behavioral option over another. The theory explains that individuals can be motivated towards goals if they believe that: there is a positive correlation between efforts and performance, the outcome of a favorable performance will result in a desirable reward, a reward from a performance will satisfy an important need, and/or the outcome satisfies their need enough to make the effort worthwhile. Vroom introduces three variables within the expectancy theory which are valence (V), expectancy (E) and instrumentality

1. Expectancy: Effort $\rightarrow$ Performance (E$\rightarrow$P)

2. Instrumentality: Performance $\rightarrow$ Outcome (P$\rightarrow$O)

3. Valence: V(R) Outcome $\rightarrow$ Reward

Expectancy:

Expectancy is the belief that one's effort (E) will result in attainment of desired performance (P) goals.

a. Self efficacy- the person's belief about their ability to successfully perform a particular behavior. The individual will assess whether they have the required skills or knowledge desired to achieve their goals.

b. Goal difficulty- when goals are set too high or performance expectations that are made too difficult. This will most likely lead to low expectancy. This occurs when the individual believes that their desired results are unattainable.

c. Perceived control - Individuals must believe that they have some degree of control over the expected outcome. When individuals perceive that the outcome is beyond their ability to influence, expectancy, and thus motivation, is low.

Instrumentality:

Instrumentality is the belief that a person will receive a reward if the performance expectation is met. This reward may present itself in the form of a pay increase, promotion, recognition or sense of accomplishment. Instrumentality is low when the reward is the same for all performances given.

Valence:

Valence is characterized by the extent to which a person values a given outcome or reward. This is not an actual level of satisfaction rather the expected satisfaction of a particular outcome.

The valence refers to the value the individual personally places on the rewards.

Motivational Force (MF) = Expectancy x Instrumentality x Valence

f) Clayton Alderfer's ERG Theory: Alderfer has tried to rebuild the hierarchy of needs of Maslow into another model named ERG i.e. Existence – Relatedness – Growth. According to him there are 3 groups of core needs as mentioned above. The existence group is concerned mainly with providing basic material existence. The second group is the individuals need to maintain interpersonal relationship with other members in the group. The final group is the intrinsic desire to grow and develop personally. The major conclusions of this theory are :

• In an individual, more than one need may be operative at the same time.

• If a higher need goes unsatisfied than the desire to satisfy a lower need intensifies.

• It also contains the frustration-regression dimension.

g) McClelland's Theory of Needs:

David McClelland pioneered workplace motivational thinking, developing achievement-based motivational theory and models, and promoted improvements in employee assessment methods, advocating competency-based assessments and tests, arguing them to be better than traditional IQ and personality-based tests.

David McClelland has developed a theory on three types of motivating needs:

(i) Need for Power

(ii) Need for Affiliation

(iii) Need for Achievement

The need for authority and power:

The need power person is 'authority motivated'. This driver produces a need to be influential, effective and to make an impact. There is a strong need to lead and for their ideas to prevail. There is also motivation and need towards increasing personal status and prestige.

The need for affiliation:

The n-affil person is 'affiliation motivated', and has a need for friendly relationships and is motivated towards interaction with other people. The affiliation driver produces motivation and need to be liked and held in popular regard. These people are team players.

The need for achievement:

The n-ach person is 'achievement motivated' and therefore seeks achievement, attainment of realistic but challenging goals, and advancement in the job. There is a strong need for feedback as to achievement and progress, and a need for a sense of accomplishment.

h) Stacey Adams' Equity Theory:

As per the equity theory of J. Stacey Adams, people are motivated by their beliefs about the reward structure as being fair or unfair, relative to the inputs. People have a tendency to use subjective judgment to balance the outcomes and inputs in the relationship for comparisons between different individuals. Accordingly:

$$\frac{\text{Out comes by a person}}{\text{Inputs by a person}} = \frac{\text{Out comes by another person}}{\text{Input by another person}}$$

If people feel that they are not equally rewarded they either reduce the quantity or quality of work or migrate to some other organization. However, if people perceive that they are rewarded higher, they may be motivated to work harder.

MOTIVATION TECHNIQUES

If a manager wants to get work done by his employees, he may either hold out a promise of a reward (positive motivation) or he/she may install fear (negative motivation). Both these types are widely used by managements.

1) Positive Motivation:

This type of motivation is generally based on reward. A positive motivation involves the possibility of increased motive satisfaction. According to Flippo - "Positive motivation is a process of attempting to influence others to do your will through the possibility of gain or reward". Incentive motivation is the "pull" mechanism. The receipt of awards, due recognition and praise for work-well done definitely lead to good team spirit, co-operation and a feeling of happiness.

• Positive motivation include:-

• Praise and credit for work done

• Wages and Salaries

• Appreciation

• A sincere interest in subordinates as individuals

• Delegation of authority and responsibility

2) Negative Motivation:

This type of motivation is based on force and fear. Fear causes persons to act in a certain way because they fear the consequences. Negative motivation involves the possibility of decreased motive satisfaction. It is a "push" mechanism. The imposition of punishment frequently results in frustration among those punished, leading to the development of maladaptive behavior. It also creates a hostile state of mind and an unfavorable attitude to the job. However, there is no management which has not used the negative motivation at some time or the other.

3. Monetary incentives:

The term monetary incentives includes pay revision or increase, fringe benefits, bonus etc. monetary incentives have more motivation power than non monetary incentives.

4.job based techniques:

job based techniques cover job simplication , job rotation, job enlargement, job enrichment, job analysis and evaluation. Job enrichment increases the awareness of purpose of performing a particular job.

5. MBO technique:

Both workers and managers participate in the determination of the area of responsibility and the expected results. They used MBO as guidance for operation and assessing their contribution towards organizational development.

6. Learship techniques:

Autocratic, democratic, and persuasiveness are some of the styles of leadership. They have their own implications for workers motivation in the short run as well as in the long run.

7. Sensitivity training:

This type of training is given to groups of managers. They, in turn motivate their subordinates after receiving sensitivity training.

JOB ENRICHMENT

Job Enrichment: In general terms, job enrichment is to redesign a job to increase its motivating potential, in other words, it is to increase the challenge of one's work. Unlike job enlargement, this is about building more complexity into jobs by introducing planning and decision-making responsibility that is normally carried out at higher levels

According to experts, jobs can be enriched by upgrading the five core dimensions of work:

- *Skill variety*: The degree to which jobs are completed with a variety of different activities in the use of one's different skills and talents.
- *Task identity*: The degree to which a job is done from beginning to end with a visible outcome.
- *Task significance*: The degree to which the jobs involve a significant impact on other people whether they are from the organization or the world at large.
- *Autonomy*: The degrees to which the jobs provide significant freedom, independence, and discretion to the individual in completing their work by letting them schedule the work and determine the procedures to be used.
- *Job feedback*: The degree to which clear and direct feedback is provided to the individual when completing their work activities.

Goals / Benefits:

- Reduce repetitive work.

- Increase the employee's feelings of recognition and achievement.

- Provide opportunities for employee advancement (i.e. promotions into jobs requiring more skills).

- Provide opportunities for employee growth (i.e. an increase in skills and knowledge without a job promotion).

COMMUNICATION

DEFINITION

According to Koontz and O'Donnell, "Communication, is an intercourse by words, letters symbols or messages, and is a way that the organization members shares meaning and understanding with another".

PROCESS OF COMMUNICATION

Communication is the exchange of messages between people for the purpose of achieving common meanings. Unless common meanings are shared, managers find it extremely difficult to influence others. It cannot be replaced by the advances in information technology and data management that have taken place over the past several decades. Communication can be though of as a process or flow. Before communication takes place, a purpose, expressed as a message to be conveyed is needed. It passes between the sender and the receiver. The result is transference of meaning from one person to another.

Communication process can be presented by a model which is made up of seven parts: (1) The communication process, (2) encoding (3) the message (4) the channel (5) decoding (6) the receiver, and (7) the feedback.

Source – Encoding – Message – Channel – Decoding – Receiving –Feedback

1. *Source:* The source initiates a message. This is the origin of the communication and can be an individual, group or inanimate object. The effectiveness of the communication depends to a considerable on the characteristics of the source. The person who initiates the communication process is known as sender, source or communicator. In an organization, the sender will be a person who a need or desire to send a message to others. The sender has some information which he wants to communicate to some other person to achieve some

purpose. The sender attempts to achieve understanding and change in the behavior of the receiver.

2. ***Encoding:*** Once the source has decided what message to communicate, the content of the message is put in a form the receiver can understand. The sender includes the individual's view of the organization or situation as a function of personal education, interpersonal relationships, attitudes, knowledge and experience.

Three conditions are necessary for successful encoding of the message.

- ***Skill****:* Successful communication depends on the skill you possess. Without the requisite skills, the message of the communicator will not reach the receiver in the desired form. One's total communicative success includes speaking, reading, listening and reasoning skills.

- ***Attitudes***: Our attitudes influence our behavior. We hold predisposed ideas on a number of topics and our communications are affected by these attitudes.

- ***Knowledge:*** We cannot communicate what we don't know. The amount of knowledge the source holds about his or her subject will affect the message he or she seeks to transfer.

3. ***The Message:*** The message is the actual physical product from the source encoding. The message contains the thoughts and feelings that the communicator intends to evoke in the receiver.

- The Content: The thought or conceptual component of the message is contained in the words, ideas and symbols and concepts chosen to relay the message.

- The Affect: The feeling or emotional component of the message is contained in the intensity, force, demeanor (conduct or behavior) and sometimes the gestures of the communicator

4. ***The Channel:*** The actual means by which the message is transmitted to the receiver (visual, auditory, written etc) is called the channel. The channel is the medium through which the message travels. The channel observable carrier of the message.

5. ***Decoding:*** Decoding means interpreting what the message means. The extent to which the decoding is done by the receiver depends heavily on the individual characteristics of the sender and receiver. The greater the similarity in the background or status factors of the communicators, greater the probability that a message will be perceived accurately.

6. **The Receiver:** The receiver is the object to whom the message is directed. Receiving the message means one or more of the receiver's senses register the message.

Feedback: The final link in the communication process is a feedback loop. Feedback, in effect, is communication traveling in the opposite direction. If the sender pays attention to the feedback and interprets it accurately, the feedback can help the learn whether the original communication was decoded accurately. Without feedback, one-way communication occurs between managers and their employees.

Types of communication:

- On the basis of relationships between concerned parties i.e. formal or informal.

- On the basis of it flow or directions i.e. downward, upward or horizontal.

- On the basis of methods used for the purpose i.e. oral, written by gestures.

1.**Formal communication:** follows the chain of command of the formal communication this may include executive orders regarding new bonus systems or stock option plans, technical information for decision making purposes, and procedural policies and rules as forth in company manuals.

2. Informal communication, also called grapevine are not provided in the organization structure. it may be used to spread false or distorted messages.

3. Downward communication refers to the flow of messages from the top level to the lower level of organization.

4. Upward communication refers to the movement of message from the lower level to the higher level mgt.

5. Horizontal communication refers to the passing of message within a dept. as in the case of staff relationship.

6. Oral Communication takings place verbally without any kind of written instructions come under Oral communication.

7.Written communication on the other hand implies messages circulated in written form E.G circulars issued in an org. communication by gestures takes place when bodily expression come into pay for passing message.

Principles of Effective Communication

1. Language

2. Clarity

3. Purpose of communication

4. Physical and human setting

5. Consultation

6. Content of message

7. Follow up Action

8. Time and opportunity

9. Training to the communicator

10. Action support communication.

Characteristics of Effective Communication

- ✓ Communication is essentially a two process, involving a sender and receiver.
- ✓ Communication is an ongoing process.
- ✓ Feedback is essential aspect of communication.
- ✓ The purpose of communication is to create mutual understanding.
- ✓ Communication may be oral or a written.

Barriers to effective communication

1. Physical barriers are easy to spot – doors that are closed, walls that are erected, and distance between people all work against the goal of effective communication. While most agree that people need their own personal areas in the workplace, setting up an office to remove physical barriers is the first step towards opening communication. Many professionals who work in industries that thrive on collaborative communication, such as architecture, purposefully design their workspaces around an "open office" plan. This layout eschews cubicles in favor of desks grouped around a central meeting space. While each individual has their own dedicated work space, there are no visible barriers to prevent collaboration with their co-workers. This encourages greater openness and frequently creates closer working bonds.

2. Perceptual barriers, in contrast, are internal. If you go into a situation thinking that the person you are talking to isn't going to understand or be interested in what you have to say, you may end up

subconsciously sabotaging your effort to make your point. You will employ language that is sarcastic, dismissive, or even obtuse, thereby alienating your conversational partner. Think of movie scenarios in which someone yells clipped phrases at a person they believe is deaf. The person yelling ends up looking ridiculous while failing to communicate anything of substance.

3. Emotional barriers can be tough to overcome, but are important to put aside to engage in conversations. We are often taught to fear the words coming out of our own mouths, as in the phrase "anything you say can and will be used against you." Overcoming this fear is difficult, but necessary. The trick is to have full confidence in what you are saying and your qualifications in saying it. People often pick up on insecurity. By believing in yourself and what you have to say, you will be able to communicate clearly without becoming overly involved in your emotions.

4. Cultural barriers are a result of living in an ever shrinking world. Different cultures, whether they are a societal culture of a race or simply the work culture of a company, can hinder developed communication if two different cultures clash. In these cases, it is important to find a common ground to work from. In work situations, identifying a problem and coming up with a highly efficient way to solve it can quickly topple any cultural or institutional barriers. Quite simply, people like results.

5. Language barriers seem pretty self-inherent, but there are often hidden language barriers that we aren't always aware of. If you work in an industry that is heavy in jargon or technical language, care should be taken to avoid these words when speaking with someone from outside the industry. Without being patronizing, imagine explaining a situation in your industry to a child. How would you convey these concepts without relying on jargon? A clear, direct narrative is preferable to an incomprehensible slew of specialty terms.

6. Gender barriers have become less of an issue in recent years, but there is still the possibility for a man to misconstrue the words of a woman, or vice versa. Men and women tend to form their thoughts differently, and this must be taken into account when communicating. This difference has to do with how the brain of each sex is formed during gestation. In general, men are better at spatial visualization and abstract concepts such as math, while women excel at language-based thinking and emotional identification. However, successful professionals in highly competitive fields tend to have similar thought processes regardless of their gender.

7. Interpersonal barriers are what ultimately keep us from reaching out to each other and opening ourselves up, not just to be heard, but to hear others. Oddly enough, this can be the most difficult area to change. Some people spend their entire lives attempting to overcome a poor self-image or a series of deeply rooted prejudices about their place in the world. They are unable to form genuine connections with people because they have too many false perceptions blocking the way. Luckily, the cure for this is more communication. By engaging with others, we learn what our actual strengths and weaknesses are. This allows us to put forth our ideas in a clear, straightforward manner.

SYSTEM & PROCESS OF CONTROLLING

a) The Establishment of Standards:

Because plans are the yardsticks against which controls must be revised, it follows logically that the first step in the control process would be to accomplish plans. Plans can be considered as the criterion or the standards against which we compare the actual performance in order to figure out the deviations.

b) Measurement of Performance:

The measurement of performance against standards should be on a forward looking basis so that deviations may be detected in advance by appropriate actions. The degree of difficulty in measuring various types of organizational performance, of course, is determined primarily by the activity being measured. For example, it is far more difficult to measure the performance of highway maintenance worker than to measure the performance of a student enrolled in a college level management course.

c) Comparing Measured Performance to Stated Standards:

When managers have taken a measure of organizational performance, their next step in controlling is to compare this measure against some standard. A standard is the level of activity established to serve as a model for evaluating organizational performance. The performance evaluated can be for the organization as a whole or for some individuals working within the organization. In essence, standards are the yardsticks that determine whether organizational performance is adequate or inadequate.

d) Taking Corrective Actions:

After actual performance has been measured compared with established performance standards, the next step in the controlling process is to take corrective action, if necessary. Corrective action is

managerial activity aimed at bringing organizational performance up to the level of performance standards. In other words, corrective action focuses on correcting organizational mistakes that hinder organizational performance. Before taking any corrective action, however, managers should make sure that the standards they are using were properly established and that their measurements of organizational performance are valid and reliable.

At first glance, it seems a fairly simple proposition that managers should take corrective action to eliminate problems - the factors within an organization that are barriers to organizational goal attainment. In practice, however, it is often difficult to pinpoint the problem causing some undesirable organizational effect.

REQUIREMENTS OF EFFECTIVE CONTROL

1. Focus on Objectives: The **control system** should always focus on objectives. It should aim to achieve the objectives of the organization.

2. Suitability: The **control system** should be suitable to the needs of the organization.

3. Promptness: The **control system** should be prompt. That is, it should find out the deviations quickly. This will help the management to correct the deviations quickly.

4. Flexibility: The control system should be flexible. It should change according to the changes in plans, situations, environments, etc. A rigid control system will always fail. Hence flexibility is necessary for a control system.

5. Forward Looking: The control system should be forward-looking. It should forecast the future deviations. That is, it should find out the deviations before it happens. It should also take steps to prevent these future deviations.

6. Economical: The control system should be economical. This means the cost of the control system should not be more than its benefits.

7. Simplicity: The control system should not be complicated. It should be easy to understand and simple to use. Those who are going to use the control system should understand it clearly and completely.

8. Motivating: The control system should be motivating. That is, it should give more importance to preventing the mistakes and less importance to punishing the employees. So, it should encourage, not discourage the employees.

9. Suggestive: The control system should be suggestive and it should give complete answers for the following questions:-

1. What is the Problem?
2. Where is the Problem?
3. How to solve the Problem?

10. Proper Standards: The control system should have proper standards. The standards should be very clear. They should be definite, verifiable, specific and measurable. They should not be too high or too low.

CONTROL OF OVERALL PERFORMANCE

A well designed plan of control covers almost all management activities. The main areas of control are:

1. ***Control over Policies***: The success of any business organization to a large extent, depends upon, how its policies are implemented. Hence, the need of control over policies is important.

2. ***Control over Organization***: Control over organization is accomplished through the development of organization chart and organization manual. Organization manual attempts at solving organization problems and conflicts making long-range organization planning possible, enabling rationalization of organization structure, helping in proper designing of organization and department.

3. ***Control over Personnel:*** All employees working at different levels must perform their assigned duties well and direct their efforts in controlling their behavior.

4. ***Control over Wages and salaries:*** Such type of control is done by having programme of job evaluation and wage and salary analysis. This work is done either by personnel department or industrial engineering department.

DIRECT CONTROL VERSUS PREVENTIVE CONTROL

Direct control

1. Cause of negative Deviations from standards. Uncertain, Lac of knowledge, experience or judgment

2. Questionable assumptions underlying direct control

- Assumption that that performance can be measured
- Assumption that personal responsibility exists
- Assumption that time expenditure if warranted
- Assumption that mistake can be discovered in time
- Assumption that the person responsible will take Corrective steps.

Preventive control

Assumption:

Qualified managers make a minimum of errors. Management fundamental can be used to measure performance Application of management fundamentals can be evaluated.

Advantages:

1. Greater accuracy

2. Encourage self control

3. Lighten the managerial burden

4. Impressive

Thus control is a very important process through which managers ensure that actual activities confirm to plan activities. It is mainly used to measure progress to uncover deviations and to indicate corrective action

REPORTING

'Management Reporting' may be defined as "A system of communication, normally in the written Form, of facts which should be brought to the attention of various levels of management who use them to take suitable action." In other words the process of providing information to the

management is known as Management Reporting. The word "Information" refers to the data processed or evaluated for a specific purpose.

Objectives of Management Reporting

(1) To obtain the required information relating to the business to discharge its managerial functions of planning. Organizing, controlling, directing, and decision making etc. efficiently and effectively.

(2) To ensure the operational efficiency of the concern.

(3) To facilitate the maximum utilization of resources.

(4) To secure industrial understanding among people who are engaged in various aspects of work of enterprise.

(5) To enable to motivating improving discipline and morale.

(6) To help the management for effective decision making.

Essentials of Good Reporting System

The following are the essentials of a good management reporting system:

(1) Proper Form: A good report should have a comprehensive form with suggestive title, heading, sub heading and number of paragraphs as and where necessary for easy and quick reference.

(2) Contents: Simplicity is one of the requisites of reporting in relation to the contents of a report. Further the contents should follow a logical sequence. Wherever necessary the contents should be represented in the form of visual aids such as charts and diagrams etc.

(3) Promptness: It means that the system should ensure the preparation and submission of report at the proper time. It facilitates business executives to make suitable decisions based on quick reports without delay.

(4) Accuracy: Information conveyed should be accurate. This means that the person responsible for reporting should have sufficient care in preparing the report as correctly as possible within the parameters of possible accuracy in this regard.

(5) Comparability: In order to ensure that the furnished information is useful, it is essential that reports are also meant for comparison. The report should provide information about both the actual and the budgeted performance of the budget period. So that meaningful comparison can be made to find out the deviations and to initiate appropriate action.

(6) Consistency: In order to make a meaningful and useful comparison, uniform accounting principles and procedures should be followed on consistent basis over a period of time for collection, classification and presentation of accounting information.

*(7) **Relevancy:*** The report should be presented with relevant data to disclose the fact in unambiguous terms. Because, inclusion of both the relevant and the irrelevant data in the management reports may result in faulty decisions. Therefore, the contents expressed therein should reveal the reporter's greater consciousness of expression with reference to length and time in particular.

(8) *Simplicity:* The report should be as far as possible in simple form. In other words, the report should avoid technical jargons, duplication of work and presented in a simple style.

*(9) **Flexibility:*** The system should be capable of being adjusted according to the requirement of the users.

*(10) **Cost-Benefit Analysis:*** Cost-Benefit Analysis should be made and the cost of reporting should commensurate with the expenditure involved.

POSSIBLE QUESTIONS

1. Discuss in detail about how the creativity and innovation are helpful for modern management.

2. Explain in detail about system and process of controlling.

3. Define the term motivation. Elaborate the theories of motivation.

4. Define the term control. Explain the requirements of effective control system.

5. Define the term motivation. Elaborate the motivational techniques in detail.

6. Define the term control. Explain direct and preventive control in detail.

7. Define the term communication. Explain the process of communication in detail.

8. Elaborate in detail about theories of motivation.

9. Define the term Leadership. Explain the different types of Leadership.

10. Discuss the Leadership theories.

11. Discuss the different barriers in communication.

12. What is Leadership? What are the essential qualities of a good leader?

13. Define communication. What are the barriers to effective communication?

14. Discuss the types of Leadership?

15. Discuss the process of controlling?

16. Explain about the motivation theories and techniques.

17. Difference between direct and preventive control.

18. Describe in detail about the control system of overall performance in management.

19. Explain in detail about the Maslow's hierarch of needs.

20. Describe in detail about the leadership qualities of good leader.

21. Difference between the creativity and innovation with example.

22. Describe in detail about the human factor in the management.

23. Explain in detail about the harmonizing objectives of the management.

24. What are the principles following the effective communication.

25. Discuss the types of communication and process.

UNIT - III

ENGINEERING ETHICS

Senses of 'Engineering Ethics' - variety of moral issued - types of inquiry - moral dilemmas - moral autonomy - Kohlberg's theory - Gilligan's theory - consensus and controversy – Models of Professional Roles - theories about right action - Self-interest - customs and religion - uses of ethical theories.

SENSES OF ENGINEERING ETHICS

The word ethics has different meanings but they are correspondingly related to each other. In connection with that, engineering ethics has also various senses which are related to one another.

Comparison of the senses of Ethics and Engineering Ethics

Ethics	Engineering Ethics
1. Ethics is an activity which concerns with making investigations and knowing about moral values, finding solutions to moral issues and justifying moral issues and justifying moral judgments.	1. Like the ethics, engineering ethics also aims at knowing moral values related to engineering, finding accurate solutions to the moral problems in engineering and justifying moral judgments of engineering.
2. Ethics is a means of contrasting moral questions from non-moral problems.	2. Engineering Ethics gives a total view of the moral problems and how to solve these issues specifically related to engineering field.
3. Ethics is also used as a means of describing the beliefs, attitudes and habits related to an individual's or group's morality. Eg. : Ethics given in the Bhagavat Gita or the Bible or the Quran.	3. Engineering ethics is also using some currently accepted codes and standards which are to be followed by group of engineers and engineering societies.
4. As per the definition of dictionaries – 'moral principles' is about the actions and principles of conduct of the people. i.e. ethical or unethical.	4. Engineering ethics also concerns with discovering moral principles such as

	obligation, rights and ideals in engineering and by applying them to take a correct decision.

Ethics defined: Ethics is defined as the discipline dealing with what is good and \b\ad and with moral duty and obligation.

Some of the *universally accepted ethical principles* are: integrity, honesty, responsibility, accountability, confidentiality, discipline, loyalty, conscientiousness, competency, diligence, wisdom, courage, temperance, justice, etc.

WHAT IS ENGINEERING ETHICS?

Engineering ethics is concerned with:

(i) The study of the moral issues and decisions confronting individuals and organizations engaged in engineering field; and

(ii) The study of related issues about the moral ideals, characters, policies, and relationships of people and corporations involved in technological activity.

It refers to the ethical obligations that engineers have to follow because of their Professional status.

It not only emphasizes how engineers should conduct themselves; it also encompasses how the engineers ought to be having in their professional work.

Definition: Engineering ethics may be defined as the identification, study and resolution of ethical problems occurring in the practice of the engineering *profession.*

Engineering Ethics Vs Professional Ethics

In general, the terms engineering ethics and professional ethics are used Inter changeably. But the professional ethics is wider in scope than the engineering ethics. In fact, the engineering ethics is a part of professional ethics.

Professional ethics is the discipline aimed at understanding the moral values that ought to guide all professional practices, including engineering, medicine, law and other practices. But the engineering ethics refers to the set of specific moral problems and issues related to engineering profession only.

AIMS IN STUDYING ENGINEERING ETHICS

(Why Study Engineering Ethics)

(Why It Is Necessary For Engineering Students To Study Engineering Ethics?) (Why Should A Future Engineer Bother Studying Ethics At All?)

1. Stimulating the moral imagination

The engineering ethics course is to stimulate the moral imagination of engineering students. Imagination is necessary for engineers in anticipating the consequences of actions as professionals and in finding solutions to ethical problems encountered in their professional life.

2. Recognizing ethical issues

The ethical problems encountered in engineering practice, often, are very complex. Also they involve conflicting ethical principles.The engineering ethics course helps engineers in recognizing various ethical issues.

1. *Developing analytical skills*

The technical and analytical skills required for analyzing moral issues are quite different than that for exercising good engineering practice.While analyzing moral issues, one requires clear thinking about concepts such as utility, justice, rights, duties, and respect for persons.The aim of engineering ethics is to train the engineers to analyze complex

problems.

4. Drawing out a sense of responsibility

The engineering ethics course encourages the engineers to desire to fulfill ethical ideals rather than ethical requirements. Ethical requirements Vs Ethical ideals: Ethical requirements are basic obligations and duties. But ethical ideals go beyond basic obligations and duties. Thus engineering ethics promotes a sense of responsibility and the moral autonomy of future engineers.

5. Addressing unclarity, uncertainty, and disagreement

The engineering ethics helps the engineers in addressing unclarity, uncertainty, and disagreement about moral issues. As we know, resolving ethical issues expose a certain amount of vagueness, ambiguity, uncertainty, and disagreement. The study of engineering ethics helps engineers to learn to resolve these problems in the most ethical manner.

The following figure summarizes the above five aims in studying engineering ethics.
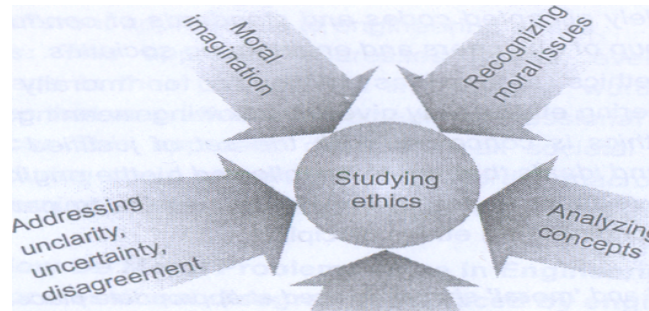
What is morality?

The   term   'morality' concerns with (a) what ought or ought not to be done in a given situation, (b) what is right or wrong in handling it, (c) what is good or bad about the persons, policies and principles involved in it.

SELF CONFIDENCE

The socio-psychological concept of **self-confidence** relates to self-assurance in one's personal judgment, ability, power, etc.

Factors

1.**Self-belief** has been directly connected to an individual's social network, the activities they participate in, and what they hear about themselves from others.

2.**Positive self-esteem** has been linked to factors such as psychological health, mattering to others, and both body image and physical health. Low self-esteem in adolescents has been shown to be an important predictor of unhealthy behaviors and psychological problems such as suicidal ideation later in life.

3. During adolescence, self-esteem is affected by age, race, ethnicity, puberty, health, body height, body weight, body image, involvement in physical activities, gender presentation, gender identity, and awakening or discovery of sexuality. Self-confidence can vary and be observed in a variety of dimensions. Components of one's social and academic life affect self-esteem. An individual's self-confidence can vary in different environments, such as at home or in school.

WORK ETHICS

Definition: The work ethics is a cultural norm that advocates being personality accountable and responsible for the work that one does and is based on belief that work has intrinsic value.
The term is often applied to characteristics of people, both at work and at play.

In sports, for example, work ethic is frequently mentioned as characteristics of good player. Regardless of the context, work ethic is usually associated with people who hard and do a good job.

Elements of Work Ethics

1. Interpersonal skills

2. Initiative

3. Being dependable

VARIETY OF MORAL ISSUES

Approaches To Engineering Ethics

There are two different approaches to engineering ethics.

Micro-ethics: This approach addresses typical, everyday problems that the engineers face in their professional life. In other words, micro-ethics describes ethical issues that may affect an engineer's professional and personal life.

Macro-ethics: This approach deals with all societal problems that engineers encounter during their career. In other words, macro-ethics discusses ethical issues concerning all societal problems that engineers might encounter.

Where And How Do Moral Problems Arise In Engineering?

(Contexts of professional disagreements faced by engineers)

Engineers carry out various activities and decision-making exercises involving technical, financial, managerial, environmental, and ethical issues. There are many situations and moral issues that cause professional disagreements among engineers.

1. Organization oriented issues

Being an employee to a firm, the engineer has to work towards the achievement of the objectives of his/her organization.

Engineers have to give higher priority to the benefits of the organization than one's own benefits.

Engineers should be able to work collectively with colleagues and other members in order to achieve firm's goals.

2. Clients or customers oriented issues

As we know, the purpose of any business is to reach and satisfy the end users.

Therefore the customers' requirements should be met.

In this regard, engineers have a major role to play in identifying the 'customer

Voice', and incorporating the voice of the customer into the product design and manufacture. Apart from engineering technicality issues, engineers also should face other moral and ethical issues with /customers.

3.Competitors oriented issues

In withstand in a market, engineers should produce things better than their competitors by all means. But engineers should not practice cut-throat order to competition. They should follow certain professional behavior while facing their competitors.

Thus engineers should hold paramount the safety, health and welfare of the customers in the performance of their professional duties.
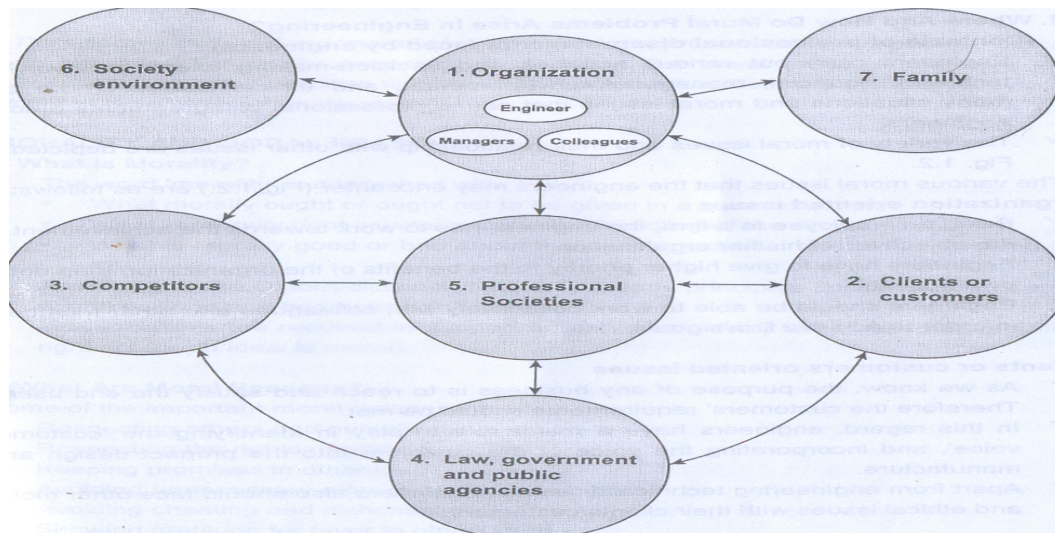
4.Law, government and public agencies oriented issues

The engineers should obey and voluntarily comply with all the governmental rules and regulations related to them.

They should also respect and honestly practice all other similar laws, policies, and regulations.

5. Professional societies oriented issues

The engineers should follow strictly the various codes of ethics by various professional societies such as National Society of Professional Engineers (NSPE), the Institute of Electrical and Electronics Engineers (IEEE), and American Society of Mechanical Engineers (ASME), in order to perform standard professional behavior.

Professional codes of ethics reflect basic 'norms' of conduct that exist within a particular professional and provide general guidance relating to a variety of issues.

6. Social and environmental oriented issues

Since the works of engineers have a direct and vital impact on the quality of life for all people, the engineers should be dedicated to the protection of the public health, safety and welfare. Also engineers need to be aware their role as agents of experimenters. They should have a united commitment in protecting the environment. They should not involve in any unethical environmental issues such as misusing scarce resources, and fouling environment.

7. Family oriented issues

As a human being and the member of a family, the engineers do have the family

Obligations to take care the needs of their family members. But they should not take any decisions for their own benefits at the cost of public, clients, or employers.

Thus the above discussion explains how the ethical problems often arise in the engineering profession.

TYPES OF INQUIRY

Inquiry means an investigation. Like general ethics, Engineering ethics also involves investigations into values, meaning and facts. These inquiries in the field of Engineering ethics are of three types.

1. Normative Inquiries

2. Conceptual Inquiries

3. Factual or Descriptive Inquiries

Normative Inquiries

➢ Normative inquiries are useful to identify the values that guide the individuals and groups in taking a decision.

➢ Normative inquiries are meant for identifying and establishing the morally desirable norms or standards that are used as guide to assess something as good or bad.

➢ Generally, normative questions are about what ought to be?; and what is good?

*Examples of 'formative questions***:** Some examples are

- When and why the engineers have obligations to their employers, their clients, and the general public?

  1. When should the engineers attempt for whistle blowing?
  2. Why must some engineering information kept confidential?
  3. What are the moral rights an engineer should possess in order to fulfill their professional obligations?
  4. How an engineer can protect the public safety in a given situation?

- From .the above questions, it is clear that the goal of normative inquiries is justifying many moral judgments.

Conceptual Inquiries

  ➢ These inquiries are useful in clarifying the meaning of concepts, principles, and issues in engineering ethics.

  ➢ In other words, the aim of conceptual inquiries is to clarify the meaning of key ideas and issues, possibly expressing by single word or by statements.

Examples of conceptual inquiries: Some examples are

- What is safety?
- What is meant by risk?
- How safety is related to risk?
- What is a bribe? When a gift becomes a bribe?
- What is a profession?

Factual Inquiries

  ➢ Factual inquiries are also known as *'descriptive or exploratory' inquiries.*

  ➢ These inquiries are helpful to provide facts required for understanding and resolving value issues.

  ➢ Researchers and engineers use these inquiries to get various information such as the history of engineering profession, the effectiveness of professional societies in promoting moral conduct, the procedures used in risk-benefit analysis, and psychological profiles of engineers.

➢ The above-obtained information through factual inquiries provides an understanding of the background conditions that generate moral problems. Thus factual inquiries are helpful in understanding the business, social, and political realities in which the company operates.

Examples of factual inquiries: Some examples are

- What are the laws enforced in the intellectual property rights law recently?

- What are the procedures used in making risk assessments?

- In what way, the 'code of ethics' of engineering societies inspires and guides the engineers' obligations?

- What is the validity period of a patented product?

MORAL DILEMMAS

✓ Moral dilemmas are situations in which two or more moral obligations, duties, rights, goods, or ideals come into conflict with each other.

✓ The crucial feature of a moral dilemma is that all the moral principles cannot be fully respected in a given situation.

✓ Also solving one moral principle can create two or more conflicting applications for a particular situation.

Causes of Moral Dilemmas

Moral dilemmas are situations, mostly, due to the following three problems.

1. Problem of vagueness
2. Problem of conflicting reasons; and
3. Problem of disagreement.

I. Problem of Vagueness

✓ Vague means not clearly expressed or perceived; not specific or exact.

✓ A given situation, sometimes it is unclear to the engineers to apply the most appropriate moral considerations or principles. They may not know how and which moral principles to be used in resolving a moral problem. This situation creates a typical moral dilemma.

- *Example:* Consider an engineer, starting a new assignment as quality inspector checking

the incoming raw materials/spare parts from the suppliers. Supplier offers (on behalf of some festival, say, Deepavali) him an expensive DVD player as a gift.

Now this situation is a moral dilemma. Because the engineer is unclear about: what to do? whether to accept the gift or not?, whether the thing offered is a gift or a bribe?; will it create a conflict If interest?

Thus the problem of vagueness i.e., unclarity causes a moral dilemma.

II. Problem of Conflicting Reasons

✓ This is a situation where two or rare moral problems conflicting each other, each of which seems to be correct.

In other words, this is a situation where two or more moral obligations, duties, rights or ideals come into conflict with each other; independently each one is good and correct. But when they come together it is very difficult choice to choose the good one.

This situation is another moral dilemma.

• *Example:* Let us examine the Space Shuttle Challenger° explosion, focusing on the dilemma faced by the engineering manager, Bob Lund. He had the following conflicts:

1. Launching the Challenger Space Shuttle despite there was an unknown probability that the shuttle wald explode; which will kill all the persons on the board.

2. Postponing the launch, which may lead to loss of future contracts from NASA, the loss of job to many workers, etc. - Now, the job of Bob Lund is to make the best choice out of these conflicts. At last, he chose to risk the launching of shuttle. This situation is one of the good illustrations for the moral dilemma due to the problem of conflicting reasons.

III. Problem of Disagreement

✓ It is quite obvious that individuals and groups may have different views, suggestions, interpretations, and solutions on a moral problem in particular situations. This disagreement among individuals and groups on interpreting moral issues will create a situation of another moral dilemma.

• *Example:* In most corporations, there are disagreements among managers regarding whether customers can be allowed to inspect their plants and

procedures, as a confidence building measure.

Steps in Confronting Moral Dilemmas

In order to face/overcome the above said moral dilemmas, one can follow one or more of the following steps.

Step 1: Identifying the pertinent moral factors and reasons. It involves addressing solutions for conflicting responsibilities, opposing rights, and incompatible ideals involved.

Step 2: Collecting all the available moral considerations, which are relevant to the moral factors involved.

Step 3: Ranking the above collected moral considerations on the basis of importance as applicable to the particular situation.

Step 4: Making factual inquires. In other words, finding alternative courses of action to resolve the moral dilemmas and following the complete implications of each.

Step 5: Inviting discussions, suggestions from colleagues, friends, and other involved persons to critically examine the moral dilemmas.

Step 6: Taking the final decision. That is, selecting the more reasonable solution weighing all the relevant moral factors and reasons.

In practice, exercising the above skills to face moral dilemmas is very difficult. The study of engineering ethics helps the engineers to develop and strengthen the skills in resolving various moral dilemmas.

MORAL AUTONOMY

- ✓ As already discussed, the practical aim in studying and teaching this engineering ethics course is to foster the moral autonomy of future engineers.
- ✓ Autonomy means 'self-determining' or 'independent'.
- ✓ Autonomy is the ability to think critically and independently about moral issues and apply this normal thinking to situations that arise during the professional engineering practice.

In other words, moral autonomy means the skill and habit of thinking rationally on ethical issues based on moral concern.

That is, it is concerned with the independent attitude of an individual related to ethical issues.

It is the ability to arrive at reasoned moral views based on the responsiveness to humane values.

Factors Influencing the Moral Concern

The moral concern of a person depends on many factors. Some of the factors influencing one's moral concern are:

1. Atmosphere in which the person is brought up in his childhood.

2. One's relationship with friends and relatives.

3. One's interaction with his neighbors.

4. One's family structure and the family's economy.

5. Influence of religious institutions such as temples, churches, mosques, etc.

6. Influence of educational institutions such as school, college, etc.

7. Influence of teachers and other mentors.

8. Influence of media like newspapers, novels, televisions, movies, etc.

Influence of some social events.

The need for moral autonomy in the field of engineering ethics

✓ The objectives of engineering ethics are not related to implanting particular moral beliefs on engineers.

✓ In other way they help the engineers and other professionalists to strength their professional values such as honesty, respect the colleagues and think for the welfare of the general public.

✓ Though the above said values have been already in the minds of the engineers, engineering ethics helps to improve these qualities in a better manner among the engineers, and not inculcating newly.

Skills Required To Improve Moral Autonomy

The important skills required for engineers to improve the moral autonomy, given by hike Martin and Roland Schinzinger, are as follows:

1. Proficiency in recognizing moral problems and issues in engineering. That is, the skill required to identify and to differentiate problems related to law, economics, environment, society, or religion.

2. Skill in understanding, clarifying, and critically evaluating the arguments, which are against the moral issues.

3. The ability to form consistent and complete perspectives on the basis of relevant facts**.**

4. The ability to make imaginative and creative alternative solutions under difficult situations.

5. Sensitivity to valid difficulties and delicacies.

Conclusion

From the above decisions on moral autonomy, we can conclude that moral autonomy helps an engineer to increase his moral outlook in an appreciable manner. It also helps him to be morally responsible in his daily activities.

KOHLBERGS THEORY

Lawrence Kohlberg's Theory

✓ According to Kohlberg, the people progressed in their moral reasoning through a series of stages. His theory is based on the foundation that morality is a form of reasoning that develops in structural stages.

● The three levels of moral development, suggested by Kohlberg, are:

1. Pre-conventional level;

2. Conventional level; and

3. Post-conventional level.

1. Pre-conventional Level

✓ The pre-conventional level of moral development is based on the desire to derive benefits for oneself.

● In the first level, individual behave according to socially acceptable norms, which are taught mainly by parents and teachers.

● At this level, individuals are motivated mainly by their interest to avoid punishment, or by their desire to satisfy their own needs, or by the external power exerted on them

● This is the level of development of all young children and some adults, who are

unable to reach beyond a certain limit.

2. Conventional Level

✓ In the second level, the moral thinking and behavior of the individual are determined by the standards of their family, community, and society. That is, the norms or customs of one's family/community/society are accepted and adopted as the ultimate standard of morality.

- At this level, individuals are motivated by the desire to please others and to meet the social units' expectations, without bothering much about their self-interest.

- Thus as per the second level, individuals give more importance to loyalty and close identification with others, than their own self-interest.

✓ Many studies of Kohlberg reveal that most adults are living at this level only.

✓ The second level of moral thinking is found in society generally. That's why   it is named as 'conventional' level of moral development.

3. Post-conventional Level

✓ In the post-conventional level, the individuals are guided by strong principles and convictions, not by selfish needs or pressures from society.

- According to Kohlberg, these individuals are called as 'autonomous', because they think for/by themselves and also they do not believe that customs are always right.

- The people at this level want to live by general principles that are universally applied to all people. They   always desire to maintain their moral integrity, self respect, and the respect of other autonomous individuals.

- Kohlberg felt that the majority of adults do not reach the post-conventional level.

The table summarizes the Kohlberg's levels of moral development.

Kohlberg's levels of moral development

Level	Appropriate age	Moral development
Pre-Conventional	Birth to 9 years	- Self-centered attitude - Willingness to avoid punishment - Desire to gain reward

Conventional	Ages 9 to 20 years	• Respect for conventional rules and authority • Willingness to please or satisfy others • Importance to loyalty and close
Post Conventional	Over 20 years or may be never	• Thinking for and by themselves. • Agreed upon universal general principles. Personal moral stands.

Drawbacks of Kohlberg's Theory

There are certain drawbacks in applying the Kohlberg's theory te practical situations.

They are:

1. How to judge, whether an individual belongs to first, or second, or third level? What are the criteria'?

2. What is the exact stage to specify moral development or growth? How does one can say that the higher levels represent more advanced stage of moral maturity?

3. According to this theory, only a few people reach the post-conventional level. Hence this theory does not record the path of moral development that the majority of people follow.

GILLIGAN'S THEORY

- Carol Gilligan, a former student and colleague of Kohlberg, has criticized Kohlberg's theory as male biased.

✓ She also charged Kohlberg that Kohlberg's studies were concluded with male samples only and also his approach is dominated by a typical preoccupation with general rules and rights.

✓ According to Gilligan, males have tendency to over-ride the importance of moral rules and convictions while resolving moral dilemmas; whereas females have tendency to try hard to preserve personal relationships with all people involved in a situation.

✓ Also Gilligan felt that men mostly focus their attention on content of the problem,

whereas women focus their attention on the context i.e., situation of the problem.

- Gilligan refers her context-oriented emphasis on maintaining personal relationships as the ***ethics of care,*** and contrasts it with Kohlberg's ethics of rules and rights.

Gilligan's Levels of Moral Development

Based on her own studies, Gilligan reconstructed the Kohlberg's three levels of moral development, as given below:

1. Pre-conventional level

- This is almost the same as Kohlberg's first level.

- That is, in this level an individual is concerned with self-centered reasoning.

2. Conventional level

- This level differs from Kohlberg's second level.

- According to Gilligan, women will not hurt others and have a willingness

- To sacrifice their own interests in order to help others.

3. Post-conventional level

- This level also differs from Kohlberg's third level.

- In this level, tie individual is able to maintain balance between his own needs with the needs of others.

- The balancing can be achieved through context-oriented reasoning i.e., examining all facts, people and circumstances involved, rather than by applying abstract rules ranked in a hierarchy of importance.

The table summarizes Gilligan's levels of moral development.

Level	*Appropriate age Range*	*Moral development*
Pre-conventional	Not listed	Goal is individual survival i.e., Self-centered attitude.
Transition is from selfishness to responsibility to others		
Conventional	Not listed	Self-sacrifice is goodness i.e., Individuals sacrifice their interests to others.
Transition is from goodness to truth that she is a person too		
Post-conventional	May be never	Principle of nonviolence - not hurt others or self. To balance between one's own needs with the needs of others.

Heinz's Dilemma

Gilligan's criticism on the Kohlberg's theory can be made very clear with the help of a famous example used by Kohlberg in his questionnaires and interviews. This is called Heinz's Dilemma.

This example was about a woman and Heinz, her husband living in Europe. The woman was affected by cancer. The doctors told her to use an expensive drug to save her life. The pharmacist who also invented that medicine charged ten times the cost of making the drug. Besides his poverty, Heinz took a lot of effort to borrow money, but he could get only half of the amount needed. He approached to the pharmacist and begged him to sell the medicine at a cheaper price or allow him to pay for it later. But the pharmacist refused to do so. Finally, without any hope, Heinz forcibly entered into the pharmacy and stolen the drug. The question here is "Was the theft morally right or wrong?"

By asking this question among the male, Kohlberg has received two sets of answers: One is based on the conventional level i.e. Heinz did a wrong thing. Another one is based on the post conventional level i.e,Heinz was correct as the life of the wife is more important than the property right of the pharmacist.

But when the same question was asked among the women, they gave (all women) same answers. They replied that Heinz was wrong. They further told that instead of stealing the medicine, Heinz could have tried other alternative solutions. They also told that Heinz should have convinced still the pharmacist to get the medicine. From the above, Kohlberg concluded that women's decisions are always based on conventional rule and they always have different opinions in applying the general moral rules and principles about the right to live.

CONSENSUS AND CONTROVERSY

✓ Literally, consensus means 'agreement', and controversy means 'disagreement'.

✓ When an individual exercise moral autonomy, he may not be able to attain the same results as other people obtain in practicing their moral autonomy. Here there might be some differences in the practical application of moral autonomy. This kind of controversies i.e., disagreements are inevitable.

✓ since exercising moral autonomy is not as precise and clear-cut as arithmetic,

Therefore the moral disagreements are natural and common. So in order to allow scope or disagreement, the tolerance is required among individuals with individuals with autonomous, reasonable and responsible thinking.

According to the principle of tolerance, the objective of teaching and studying engineering ethics is to discover ways of promoting tolerance in the exercise of moral autonomy by engineers.

- Thus ethics is not merely producing always a unanimous moral conformity; it is about finding the proper ways and means for promoting tolerance in the practical applications of moral autonomy by engineers.

- In a way, the goal of courses on engineering ethics and goals of responsible engineering have some similarities. Both situations require the need for some consensus regarding the role of authority.

Relationship between autonomy and authority

1. Moral autonomy and respect for authority are compatible with each other. Exercising moral autonomy is based on the moral concern for other people and recognition of good moral reasons. Also moral autonomy emphasizes the capabilities and responsibilities of people.

Authority provides the framework through which learning attitudes are encouraged.

2. Sometimes, conflicts will arise between individuals' need for autonomy and the need for consensus about authority. This situation can be reduced by having open and frank discussion regarding a moral issue with the help of authority.

✓*Illustration:* Consider the relationship between autonomy and authority, with reference to a classroom. In the classroom, the teachers have authority over students. Authorities of the teachers help in maintaining the dignity and decorum of academic climate in an institution; also in restoring the confidence and respect between teachers and students.

As per the first point, there should be the acceptance of authority by both the teachers and students, in order to conduct the classes in orderly ways.

When the authority is misused, conflicts may arise between autonomy and authority. As per the second point, allowing open discussions between teachers and students can reduce the unhealthy academic atmosphere.

MODELS OF PROFESSIONAL ROLES

The main aim of the profession of engineering is to improve the public safety, wealth and welfare. In order to perform these functions, the engineer has to play various models to channelize his attitudes towards the achievements of objectives. They are as follows:

1. **Engineers as Savior**

The engineers are responsible for creating an utopian society in which everything is possible and can be achieved without much effort – This can only be achieved through technological developments made by the engineers for safe-guarding the society from poverty, inefficiency, waste and manual labour.

2. **Engineers as Guardian**

Engineers only know the directions through which technology will be developed. So, they should be given position of high authority based on their expertise skills in determining what is in the best interests of the society. They should act as guardians to the technological improvements.

3. **Engineers as Bureaucratic Servant**

Engineer's role in the management is to be the servant who receives and translates the directive of management into better achievements. They have to solve the problems given by the management, within the limits set by the management.

4. **Engineers as Social Servant**

The role of engineers is not only providing service to others but also their responsibility to the society. The interests of the society can be expressed to the engineers either directly or indirectly. So, the engineers, with the co-operation of the management have the work of receiving society's directives and satisfying the desires of the society.

5. **Engineers as Social enabler and Catalyst**

The engineer has to play a role of creating a better society and should be the cause of making social changes. Service given by the engineers to the society includes carrying out the social directives. Engineers are needed to help the management and the society to understand their needs and to create decisions about technological development.

6. **Engineers as Game Player**

We cannot say that engineers are servants or masters of anyone. They are playing the economic game rules which may be effective at a given time. Their aim is to play successfully within the organization enjoying the happiness of technological work and the satisfaction of winning and moving ahead in a completive world.

THEORIES ABOUT RIGHT ACTION

There are four types of theories on ethics, which help to create the fundamental principles of obligation suitable and applicable to professional and personal conduct of a person in his everyday life. These theories are essential for cause of right action and morality. They are:

1. Theory based on "Golden mean" ethics (Aristotle, 384 – 322 B.C.). The best solution is achieved through reason and logic and is a compromise or "golden mean" between extremes of excess and deficiency. For example, in the case of the environment, the golden mean between the extremes of neglect and exploitation might be protection.

Problem: Variability from one person to another in their powers of reasoning and the difficulty in applying the theory to ethical problems.

2. Theory based on "Rights – based" ethics (John Locke, 1632 – 1704). Every person is free and equal and has the right to life, health, liberty and possessions (in effect prohibiting capital punishment, medical charges, jails and income taxes).

Problem: One person's right may be in conflict with another's rights.

3. Theory based on "Duty – based" ethics A major proponent of duty of ethics was Immanuel Kant (1724-1804), who regards moral duties as fundamental rather than good consequences. In his view, ethical actions are those actions required by a list of duties such as: be honest, don't cause suffering to other people, be fair to others, show gratitude for others' kindness, don't commit suicide, seek to improve one's own intelligence and character, develop one's own talents, etc.

According to Kant, **the above actions are our duties b**ecause

> ➢ They express respect for persons;
>
> ➢ They are universal principles.

- Thus the moral standard of the ethics of respect for person is: ***Those actions are right that equally respects each human person as a moral agent***. This theory also emphasizes that the moral agency of individual human beings are paramount compared to what is good for society as a whole.

Drawback in Kant's theory: The major problem with Kant's view is that principles of duty were absolute and they are never having justifiable exceptions. These principles of duty that have exceptions are called prima facie duties. These prima facie duties were addressed by contemporary ethicist John Rawls.

4. Theory based on "Utilitarian" ethics (John Stuart Mill, 1806 – 1873). The best choice is that which produces the maximum benefit for the greatest number of people (which could endanger minority rights).

✓ *Different versions of utilitarianism*

There are two important versions of utilitarianism. They are:

1. Act utilitarianism, and
2. Rule utilitarianism.

1. <u>Act Utilitarianism</u>

✓ The act utilitarianism concept was developed by John Stuart Mill (1806-1873).

✓ *The act utilitarianism focuses on individual actions rather than on general rules.*

It is understood that most of the common rules of morality such as don't lie, don't steal, be honest, don't harm others, keep promises etc are good guidelines to judge a human being. But according to Mill, a person's actions should be judged based on whether the greatest good was achieved in a given situation.

2. **Rule Utilitarianism**

Rule utilitarianism differs from act utilitarianism in owning that moral rules are more important than an individual's action.

Richard Brandt proposed this version of utilitarianism.

According to Brandt, though sticking to general moral rules such as don't lie, don't steal, be honest, don't harm others, etc might not always maximize good in a particular situation, overall, sticking to moral rules will ultimately guide to the most good.

Problem: Qualification of the benefits can be difficult.

All these theories can be differentiated on the basis of what they provide for moral concept, good results for all, duties and human rights.

SELF – INTEREST, CUSTOMS AND RELIGION

     Already we have seen various virtues defining professional responsibility. Now let us discuss the following three other types of values.

1. Self-interest values;
2. Custom values; and
3. Religious values.

1. Self-respect and Ethical Egoism

●   Self-interest means one's personal good.

It is understood that almost all ethical theories acknowledges the importance of self-respect. Also these theories persist that the search of self-interest should be balanced and restrained by moral responsibilities to other people.

Concept of ethical egoism:

This concept is introduced by Thomas Hobbes and Ayn Ran.

According to this theory, *the sole duty of each of us is to maximize his or her own good.*

Egoism is an exclusive concern to satisfy one's own interests, even at the possible

expense of others. This is commonly characterized as 'looking out for No.1'

- Also the rational egoist claims that the only reason for showing an interest in others is for the sake of oneself.

- Classical economists like Adam Smith and Milton Friedman also support this theory of ethical egoism. They believe that society benefits mostly when (i) individuals pursue their private good, and (ii) companies (as expressions of many individuals interests) pursue maximum profits in a competitive free market.

- But morality requires that one should respect others' rights and should care about well-being for their sake.

- Thus, according to morality, the theory of ethical egoism is a defective and should be rejected.

2. Customs and Ethical Relativism

- Customs' are considered to have a great significance in deciding one's moral' values.

- *Ethical pluralism:* Ethical pluralism is the view that there may be alternative moral perspectives that are reasonable; but none of them can be accepted completely by all the rational and the morally concerned persons.

  Ethical relativism: It states that actions are morally right when law or custom approves them and they are said to be wrong when they violate laws or customs.

✓ While ethical egoism reduces moral values to self-interest, ethical relativism reduces moral values to laws, conventions, and customs of particular societies.

Merits of ethical relativism concept
(Why would anyone accept ethical relativism?)
    Some people accept/support the ethical relativism because of the following reasons:

1. Laws and customs seem to be clear, unambiguous, and practical.

2. Ethical relativism treats values as subjective at the cultural level. It also states that moral standards vary significantly from one culture to another. This concept is also known as *descriptive relativism.*

3. Ethical relativism is confused with moral relationalism. The moral relationalism, also known as *moral contextualism,* states that moral judgments should be made in relation to some factors which may vary from case to case.

4. Ethical relativism was agreed by early cultural anthropologists because they

overemphasize the extent of moral differences between cultures.

✓ However, ethical relativism is subjected to moral skepticism about moral reasons. It is not helpful to measure ethical values with legal standards.

3. Religion and Divine Command Ethics

Positive connections between morality and religion

➢ It is understood that moral values are highly influenced by religious beliefs. For example, the Christianity has been influential in Western countries; Islam has been influential in the Middle East; and Hinduism, Buddhism, and Confucianism have been influential in Asian countries.

➢ According to C.J. Ducasse, the main social function of religion is to motivate right action, which involves the notion of ethics per se; the main personal function of religion is to sustain people's convictions and to promote tolerance and moral concern for others.

➢ Many times, religions set a higher moral standard than the normal moral standards. For example, Christianity calls people to love their neighbors as they love themselves; and Buddhism treats animals as equivalent to men.

➢ Sometimes, religions set a lower moral standard than the normal acceptable moral standards. For example, some religions do not recognize the equal rights of women

➢ It can be realized that all religions emphasize a particular virtue. For example, the Christianity emphasizes the virtues of hope, faith, and love; Islam emphasizes the Pursuit of excellence; Hinduism emphasizes the correctness of the action; Buddhism emphasizes compassion; and Judaism emphasizes the virtue of righteousness.

Conflicts between Morality and Religion

1. View of Divine Command Ethics: Divine Command Ethics views that an act is right means it is commanded by God; and the act is wrong means it is forbidden by God.

2. The argument against this view is that if there were no God to issue commands, then there would be no morality.

3. The other difficulties raised by the view if God's commands are:

4. How to know God exists or not?

5. How to know precisely what God's commands are? And

6. Why does God make certain commands and not others?

Thus, religious beliefs may provide an added inspiration to be good.

Golden rules from Religious and Ethical Writings

- **Hindu version:** "Let not any man do unto another any act that he wisheth not done to himself." (Mahabharata, Shanti Parva, ccLX.21)

- **Christian version**: "Treat others as you would like them to treat you." (Luke 6:31,New English Bible)

- **Muslim version**: "No man is a true believer unless he desires for his brother that which he desires for himself" (Hadith,Muslim, Imam 71-72)

- **Buddhist version**: "Hurt not others with that which pains yourself." (Udanavarga, v 18)

- **Jewish version**: "What is hateful to yourself do not do to your fellow man. That is the whole of the Torah." Babylonian Talmud, Shabbath 31a)

- **Confucian version**: "Do not do to others what you would not want them to do to you."

USES OF ETHICAL THEORIES

Ethical theories have so many uses. Out of them, the following three are the most important uses:

1. Resolving Moral Dilemmas

- Ethical theories are very much helpful in understanding the moral dilemmas to some extent. But the ethical theories cannot give good moral judgment in solving complex moral dilemmas.

- Ethical theories help in finding out the moral considerations or reasons that are involved in the dilemma. The virtue ethics interprets the management engineer's dilemma in terms of competing ideals of character and relationships such as loyalty to employers and colleagues versus loyalty to the public.

- Ethical theories provide a more accurate sense of what kinds of information are relavant to solve the moral dilemmas.

- Ethical theories develop the moral terms, and provide framework for moral reasoning when discussing with colleague's about the moral issues.

2. Justifying moral obligations

- Ethical theories are very much helpful in justifying the moral obligations of engineers and others who are involved in technological development. By considering safety- regulated obligations as an example, we make clear the application of ethical theories like utilitarnism, rights ethics and duty ethics in providing a moral basis for professional responsibilities.

- Duty ethics could support these obligations of engineers in one or more basic principles of duty.

- Rights ethics imply that these obligations of engineers relating to safety have to be based on the requirements that professionals should respect the moral rights of those affected by their work.

3. Relating professional and ordinary morality

- The special obligations involving safety that engineers acquire as a result of their work are intimately connected with ordinary or everyday morality. The ethical theories are useful to express everyday moral experience and also to justify the obligations of professionals.

- Engineer acquires moral obligations regarding safety through some laws and enforced codes which make them to be obligated.

- Engineers acquire safety obligations through the contractual agreements which they are hired by their employers.

POSSIBLE QUESTIONS

1. Discuss in detail about moral dilemmas.

2. Elucidate the three main levels of moral developed by Laurence Kohlberg.

3. Explain Gilligan's theory in detail.

4. Describe the general types of inquiries involved in engineering inspection.

5. Discuss the scope and aim of ethics.

6. Explain in detail about the theories of right action

7. Explain the uses of ethical theories and its limitations.

8. Write short notes on: (i) Moral Dilemmas (ii) Moral Autonomy.

9. Give an account on models of professional roles.

10. Explain the Gilligan's theory.

11. List out the name and explain ethical theories (Theories about right action).

12. Discuss the Kohlberg's theory and Gilligan's theory of moral development in detail.

13. Explain the professional roles playing engineers in the society.

14. What are the varieties of moral issues involved in the society?

15. Discuss in detail about the types of inquiry.

16. Difference between moral dilemmas and moral autonomy.

17. What are the three levels of moral development?

18. Explain in detail about the uses of ethical theories.

19. Distinguish between ethics and engineering ethics.

20. Difference between customs and religion.

21. Explain in detail about the scope and aim of engineering ethics.

22. Discuss in detail about the moral autonomy guidelines.

23. Write short notes on: (i) work ethics (ii) Engineering ethics

24. Explain in detail about Gilligan's theory of moral development in detail.

25. What are the difficulties arrived in moral dilemmas.

UNIT- IV

FACTORS OF CHANGES

Forces that shape culture, Social control – Meaning, Agencies, Institution, Customs, Values, Folkways, Norms and Laws. Social changes – Meaning and Nature – Theories.

FORCES THAT SHAPE CULTURE

Four main forces

a) Advances in Science and Technology, b) Global Redistribution of Knowledge, Power, and Wealth, c) Competing Political, Cultural, and Religious Ideologies, and d) Sustainability of the Physical Environment.

a)Advances in Science and Technology

The 20th Century discoveries in quantum physics that led to the development of solid-state electronics, information technology, global telecommunications, the media, and the Internet combined with the mapping of the human genome and the development of nanotechnology have changed our world forever. These scientific and technological advances have extended the biological range, speed, and accuracy of the human senses and enhanced our ability to communicate. The global village that has emerged because of our ability to know what is happening on the other side of the earth instantaneously has irrevocably changed the human experience of space and time that existed for more than 10,000 years. Despite the continued expansion of silicon-based memory, the information processing capability of the human brain remains more or less constant, so this global force places enormous and immediate stress on people's ability to manage ever increasing levels of data and information.

b)The Global Redistribution of Knowledge, Power, and Wealth

Peter Drucker was a true visionary. In 1997, Drucker predicted that the under-population of developed countries in North America, Japan, and Europe and the sharply rising birth rate in developing countries had irrevocably changed the landscape of the world's economy for the next 100 years. Global advances in science and technology combined with demographics have flattened the playing field for emerging nations like India and China. For example, calls made by Americans to customer service centers are often routed seamlessly to technical experts in India or other emerging nations.

c) Competing Political, Cultural, and Religious Ideologies

For thousands of years, people around the world have developed different languages, cultures, religions, and political ideologies, often holding strong convictions that these belief structures were reality itself. Today's conflict about competing political, cultural, and religious ideologies is not so much a conflict about different beliefs as it is a conflict about the nature of belief itself. Typified by Stephen R. Covey's claim that we see the world as we are, not as it is, reality is now viewed as a social construct – reality is manmade. Because the media makes it so easy to create and globally disseminate new structures of reality, the world has become an unregulated marketplace of differing ideologies that compete for people's time, attention, and resources.

d) Sustainability of the Physical Environment

The combined pressure exerted on our physical environment by the other three global forces has raised serious questions about the earth's ability to sustain the lifestyle of billions and billions of people. While the goal of a sustainable society is a popular notion, it has been difficult to implement, especially when it impacts business and economic growth. Some have tried to weave the theme of corporate responsibility and sustainable development into the fabric of the global business environment in the hopes of reducing the size of our ecological footprint on the earth. Others argue that the earth is the best teacher of sustainable practices, insisting that a more complete scientific understanding of nature's organizing principles can be applied to the design of a more sustainable, ecologically balanced society. Still others argue that we must mitigate the daily bombardment from the media to buy and consumer products and services, and instead purchase only what we need from environmentally friendly sources.

SOCIAL CONTROL

DEFINITION

Social control refers generally to societal and political mechanisms or processes that regulate individual and group behavior in an attempt to gain conformity and compliance to the rules of a given society, state, or social group.

Social control can be considered as an important aspect of an individual's socialization process. There are some universal norms or rules which should be followed by members of all societies. Any deviation from these norms may result in a minimum level of punishment for ensuring the social order. It refers to the processes of regulation of an individual or group behavior in a society, which encourages conformity and obedience. It may include social or political mechanisms.

Sociologists identify two basic forms of social control:

Formal Social Control:

Formal social control is implemented by authorized agents including police officers, employers, military officers, and others. It is carried out as a last option at some places when the desired behavior is not possible through informal social control. The situations and severity where formal control is practiced varies with countries.

This is practiced through law as statutes, rules, and regulations against deviant social behavior. For example, certain laws like prohibition of murder can be directed at all members of a society. Fishing and hunting regulations are made for certain groups. Corporate laws are laid for governing the behavior of social institutions. Formal control is conducted by government and organizations through law enforcement mechanisms. It can also be conducted through some formal sanctions including fines and imprisonment. Processes of formal control in democratic societies are determined and designed through legislation by elected representatives.

Courts or judges, military officers, police officers, school systems or teachers, and government agencies or bureaucrats, enforce formal control.

Informal Social Control:

It is exercised by a society without stating any rules or laws. It is expressed through norms and customs. Social control is performed by informal agents on their own in an unofficial capacity. Traditional societies mostly embed informal social control culture to establish social order.

Shame, sarcasm, criticism, ridicule and disapproval are some of the informal sanctions. Social discrimination and exclusion are included in informal control at extreme deviant cases. Self-identity, self-worth and self-esteem are affected in informal control through loss of group approval or membership. The severity and nature of informal control mechanisms differ from varied individuals, groups, and societies.

Informal is effective in small group settings including friends, family, neighborhood, work group and others. However, in some large and complex societies, informal social control and disapproval is ignored easily. At such situations, it is necessary to follow the formal one.

Some of the differences of formal and informal social control are:

•Formal social control includes written, formalized and codified statements in laws, rules, and regulations. Whereas informal control does not contain any written rules.

•Formal control agencies are authorized ones created by government and informal control agencies are created by social networks and organizations but not by government.

•Formal control is much effective and stronger than informal social control. Any situations which cannot be handled by informal control are subjected to formal one.

•Formal control is effective for even large groups of population but informal control is effective only for a small group of people.

Social control, formal or informal, thus helps in regulation of society. The study of social control includes disciplines of sociology, anthropology, psychology, law and political science.

AGENCIES

There are several agencies of social control. Thai means social control is exercised through various agencies. The important agencies of social control are stated below:

1. Family:

Family is an important agency of social control. It is the first place where an individual is socialized. He learns various methods of living, behavior patterns, convention etc. from the family. He is taught to behave and respect social laws and obey social controls. He learns customs, folkways, traditions and modes from the family. Family influenced the individual directly through suggestion, persuasion, praise, blame, ridicule, criticism etc. Through these, mechanism family forces the individual to conform the custom, folkways and modes of the group.

2. Neighborhood:

Neighborhood is a simple and specific part of a community. It has a feeling or sentiment of local unit. There may be more than one neighborhood in a community. The neighborhood is the first community with which the individual comes into contact with. It exists, a deep influence on its members as an agency of social control. The local neighborhood reinforces or strengthens the individual family as an agency of social control. It comes only after the family in social importance. The elder members of the neighborhood or locality, who are very intimate to one another, keep group modes alive and enforce them in the locality.

3. Church:

Church is regarded as an institutionalized expression of religion. It serves as an agency of social control. In the past church was a powerful agency of social control for quite some time. The church and the priests were held in high esteem. The authority of the church was recognized and accepted by the people. As a result, nobody could disobey its order. The church had power to dethrone kings who did not accept its authority during this period.

4. Religion: Religion serves as an important agency of social control. It is religion, which supports the folkways and modes of a society by playing super natural sanctions behind them. It adopts negative as well as positive means to regulate the behavior of the individuals in society.

5. The School:

The school is a very powerful agency: of social control. It exercises social control through education. The child learns many things from the school, which he cannot learn from other sources. The child is taught to obey the discipline, which a student learns at school lasts with him throughout his life. In the college, also the students are required to obey social controls. The school and college or educational institutions are next to family as agencies of social control.

6. Law:

Law is a powerful method of control. The state runs its administration through the government. It enforces law within its territory with the help of the police, the army, the prison and the court; it enacts laws to regulate the lives of the people. The deviants or the violators of social rules are punished as per law; the state carries out certain function by means of law. E.A. Ross says that 'law is the most specialized and highly furnished engine of social control employed by society. It is law, which prevents the people from indulging in antisocial activities.

7. Administration:

Administration is very powerful and the most effective instrument of social control. It forces the individual to obey social control. The administrations punish the violators with the help of the police, the army etc.

8. Force:

Physical force or coercion is an important means of social control. It is ancient as society itself. It is essential for social progress. Even these days some societies resort to it against the deviants or those who disobey social norms. Every state has its own armed forces or police force. It is an effective weapon to prevent people from indulging in anti-social activities. It also makes people, obey social order. The state carries out its functions by means of law, which is ultimately backed by physical

force. As an important agency of social, control the state exercises its force over its people through various means such as the government law, administration, the armed forces, the police and the like.

9. Public Opinion:

Public opinion is very powerful in the democratic age. It not only controls the behavior of people but also controls the government. People these days are more concerned with the opinion held by the public. Fear of public opinion in general makes people control their conduct and behavior. The state controls the behavior of the people through public opinion and mould people in favor of its policies. It forms public opinion through various media like the newspaper, cinema, radio, television etc.

10. Propaganda:

Propaganda is a systematic attempt by a individual or individuals to control the attitudes of people through suggestions and consequently, their actions. With the development of means of mass communication, propaganda has become an effective means of social control. The state controls the people through this powerful means of social control namely propaganda.

INSTITUTIONS

Social institutions have been created by man from social relationships in society to meet such basic needs as stability, law and order and clearly defined roles of authority and decision making.

Every organization is dependent upon certain recognized and established set of rules, traditions and usages. These usages and rules may be given the name of institutions. These are the forms of procedure which are recognized and accepted by society and govern the relations between individuals and groups.

Definition

Wood ward and Maxwell: An institution is a set of folkways and mores into a unit which serves a number of social functions.

Horton: An institution is an organized system of social relationships which embodies certain common values and procedures and meets certain basic needs of society.

Landis: Social institutions are formal cultural structures devised to meet basic social needs.

Elements

A Group of People

- ❖ United by common interests
- ❖ Having material resources

❖ Having norms

❖ Fulfill some social need

Characteristics

➢ Social institutions are patterns of behavior grouped about the central needs of human beings in society.

➢ In all societies, the institution of family plays a central role.

➢ Social institutions are therefore social patterns directing the ordered behavior of human beings in the performance of their basic activities.

➢ The continuity of institutional practices is further assured by the development of rituals.

➢ The central aspects of institutions are the functions they perform and the pattern, established to carry out the functions.

➢ The claims of institutions upon the members are also known as loyalties.

➢ The institutions of a society are connected in a close end interdependent pattern.

➢ Institutions are connected through status and role of the member

➢ Institutions are the most important agencies in the formation of personality.

➢ Social institutions are the great conservers and transmitters of cultural heritage.

➢ Cultural heritage is thus transmitted through social interaction.

FIVE MAJOR INSTITUTIONS

Five major institutions in rural sociology are political, educational, economic, family and religion.

1. Political: Government as political institution, administers the regulatory functions of Law and order, and maintains security in society. Form of government and its method of working depend on the accepted patterns of behavior in a society. Development work is now a days a major responsibility of the government. For effective implementation of programmes, government may decentralize its functioning by creating local self-government like panchayats at different level.

2. Education: is the process of socialization, which begins informally at home and then formally in educational institutions. Education as an institution helps develop knowledge, skill, attitude and understanding of the people and strive to make them competent members of the society. Education widens the mental horizon of the people and make them receptive to new ideas. .

3. Economic: Economy provides basic physical sustenance of the society by meeting the needs for food, shelter, clothing, and other necessary supply and services. Economic institutions include agriculture, industry, marketing, credit and banking system, co-operatives etc.

4. Family: is the most basic social institution in a society, and is a system of organized relationship involving workable and dependable ways of meeting basic social needs.

5. Religion: -is belief in supernatural. Religion constitutes a set of beliefs regarding the ultimate power in the universe, the ideal and proper pattern of behaviour, and ceremonial ways to expressing these beliefs. Religion also provides a foundation for the mores of the society. Taboos in various cultures have religious sanction. Religion provides a means by which individuals can face crises and ups and downs in life with strength and fortitude

Function

➢ Reproduction and perpetuation of the family and human race.

➢ Socialization

➢ Provision of economic maintenance and livelihood in many cultures.

➢ Provision of love, affection and security to the individual.

➢ Provision of class status to the individual of the family into which he has been born.

CUSTOMS

A custom (also called a tradition) is anything, which many people do, and have done for a long time. Usually, the people come from the same country, culture, time or religion. If something is usually done the same way, you might say that is the "customary way" of doing things.

The meaning of culture is similar to the meaning of custom. A custom is more about practices, while culture is more about ideas or a group of customs. A custom overall is just similar to culture and culture means the way of life of a people.

Custom can also have a second meaning, as in "Custom paint job" on a car. This means paintwork that has been specially changes.Custom can also mean changed to suit better: altered in order to fit somebody's requirements.

Examples of it are:

• In some countries it is polite/respectful to bow to older people.

• In some countries it is OK to burp while eating your food.

• In some countries you take your shoes off before entering the house

- In some places they sit on the floor and eat

Social Importance of Customs

(i) Customs Regulate our Social Life: Customs act as the effective means of social control. Individuals can hardly escape their grip. They are the self-accepted rules of social life. They bind people together, assimilate their actions to the accepted standards and control their purely egoistic impulses. They are found between the preliterate as well as the literate people. They are the strongest ties in building up a social order.

(ii) Customs Constitute the Treasury of Our Social Heritage:

Customs preserve our culture and transmit it to the succeeding generations. They have added stability and certainty to our social life. They bring people together and develop social relationships among them. They provide for a feeling of security in human society. People normally obey them for their violation is always condemned and resisted. The children learn the language spoken, and the occupation followed by their parents through the customs. The imprint of custom can be found on various activities of the members of society.

(iii) Customs are Basic to Our Collective Life:

Customs are found in all the communities of the world. They are more influential and dominant in the primitive society than in the modern industrial society. Still no society can do without them. Customs are mercilessly imposed on the people in the primitive societies. As Malinowski writes in the context of the study of Trobriand Islanders that "a strict adherence to customs….is the main rule of conduct among our natives…" In the traditional societies customs are like sacred objects and their violation cannot be thought of.

Customs are so dominant and powerful that they can be called the "King of man". Shakespeare called it a "tyrant". Bacon considered it "the principal magistrate of man's life".

(iv)Customs Support Law:

Customs also provide the solid ground for the formulation and establishment of law. Customs become laws when the state enforces them as rules binding on citizens. Law divorced from custom is bound to become artificial. Such laws may often end in failures, as it has happened in the case of 'prohibition' in U.S.A. Customs consolidate law and facilitate its practice. If the laws are not supported by customs, they cannot succeed.

VALUES

- ✓ Important and lasting beliefs or ideals shared by the members of a culture about what is good or bad and desirable or undesirable.

- ✓ Values have major influence on a person's behavior and attitude and serve as broad guidelines in all situations.

- ✓ Some common business values are fairness, innovation and community involvement.

- ✓ The monetary worth of something in areas such as accounting, economics, marketing or mathematics.

A personal value is absolute or relative and ethical value, the assumption of which can be the basis for ethical action. *A value system* is a set of consistent values and measures. *A principle value* is a foundation upon which other values and measures of integrity are based. Some values are physiologically determined and are normally considered objective, such as a desire to avoid physical pain or to seek pleasure. Other values are considered subjective, vary across individuals and cultures, and are in many ways aligned with belief and belief systems.

Types of values

It Include ethical/moralvalues, doctrinal/ideological (religious, political) values, social values, and aesthetic values. It is debated whether some values that are not clearly physiologically determined, such as altruism, are intrinsic, and whether some, such as acquisitiveness, should be classified as vices or virtues. Values have been studied in various disciplines: anthropology, behavioral economics, business ethics, corporate governance, moral philosophy, political sciences, social psychology, sociology and theology to name a few.

Personal values

According to Morris Massey, values form during three significant periods:

Imprint period - from birth to 7 years

Modeling period - from 8 to 13 years

Socialization period - from 13 to 21 years

Personal values provide an internal reference for what is good, beneficial, important, useful, beautiful, desirable, constructive, etc. Values generate behavior and help solve common human problems for survival by comparative rankings of value, the results of which provide answers to questions of why people do what they do and in what order they choose to do them.

Personal values exist in relation to cultural values, either in agreement with or divergence from prevailing norms. A culture is a social system that shares a set of common values, in which such values permit social expectations and collective understandings of the good, beautiful, constructive, etc. Without normative personal values, there would be no cultural reference against which to measure the virtue of individual values and so culture identity would disintegrate.

Cultural values

Values relate to the norms of a culture, but they are more global and abstract than norms. Norms provide rules for behavior in specific situations, while values identify what should be judged as good or evil. While norms are standards, patterns, rules and guides of expected behavior, values are abstract concepts of what is important and worthwhile. Flying the national flag on a holiday is a norm, but it reflects the value of patriotism. Wearing dark clothing and appearing solemn are normative behaviors to manifest respect at a funeral. Different cultures reflect values differently and to different levels of emphasis. "Over the last three decades, traditional-age college students have shown an increased interest in personal well-being and a decreased interest in the welfare of others." Values seemed to have changed, affecting the beliefs, and attitudes of the students.

Members take part in a culture even if each member's personal values do not entirely agree with some of the normative values sanctioned in the culture. This reflects an individual's ability to synthesize and extract aspects valuable to them from the multiple subcultures they belong to.

If a group member expresses a value that seriously conflicts with the group's norms, the group's authority may carry out various ways of encouraging conformity orstigmatizing the non-conforming behavior of that member. For example, imprisonment can result from conflict with social norms that the state has established as law.

FOLKWAY

Definition

It is a mode of thinking, feeling, or acting common to a given group of people; especially : a traditional social custom

➢ Folkway, the learned behaviour, shared by a social group, that provides a traditional mode of conduct. According to the American sociologist William Graham Sumner, who coined the term, folkways are social conventions that are not considered to be of moral significance by members of the group (e.g., customary behaviour for use of the telephone).

> The folkways of groups, like the habits of individuals, originate in the frequent repetition of acts that prove successful for satisfying basic human needs. These acts become uniform and are widely accepted.

> Folkways operate primarily at an unconscious level and persist because they are expedient. They tend to group themselves around major social concerns, such as sex, forming social institutions (e.g., the family).

Characteristics of Folkways

1.Spontaneous Origin Folkways arise spontaneously. They are not deliberately planned or designed. They are developed out of experience. They are unplanned and uncharted.

2.Approved behavior- Folkways are the recognized ways of behavior. The group accords recognition to certain way while rejects others. Only such ways of behavior are folkways as have been approved by the group to which they relate.

3.Distinctiveness- There is numerous folkways in different societies .the folkways become related to a particular group. There is considerable variation in the folkways between groups.

4.Hereditary- Folkways are passed on from one generation to another. An individual receives folkways from his ancestors.

Folkway versus Custom

   Custom is often referred to as a folkway. But there is a difference between the two that the folkways are of more general and wider character than the customs and cover all those modes of behavior or spontaneous usages which are not included in the term customs. Thus for example- shaking hands, eating four meals etc are folkways rather than of customs. Customs are related to the survival and growth of the group but folkways are not necessarily so related. They are not made obligatory by the group. They are sanctioned informally.

NORMS

✓ Norms can be defined as attitudes and behaviors common to members of a particular group, or what they believe is "normal". For example, most cultures require that people wear clothes. Some even have laws to enforce this dictum: in many western countries, a naked person in public will be arrested with a charge of "indecent exposure".

- ✓ We have norms about how we speak. How you address your grandmother is probably different to how you talk with your spouse, and this is also different to how you speak to your boss, or your children. Your choice of words, your tone, and your body language are all norm-based. Nearly everything in human society is governed by norms of some kind. This is why it feels so strange to go to a very different culture, where their norms are so different to what we are used to – but it is normal to them.

- ✓ As groups, organizations have their own norms. When you move from one job to another, whether between companies, or even within the same organization, part of learning your new role is not just understanding the tasks you must perform, but also the unwritten rules – the norms – associated with that task.

LAWS

A law is a norm that is written down and enforced by an official law enforcement agency. Driving while drunk, theft, murder, and trespassing are all examples of laws in the United States. If violated, the person violating the law could get cited, owe a fine, or go to jail.

Three rough categories

1) Safe Bets are those laws which conform to human action at its most fundamental level. These are laws without which society could scarce survive, let alone progress. They are, roughly, the "natural rights" – life and property – and for this reason, though they are not things-in-themselves, they are an essential prerequisite for societal progress. These can and should be enforced at the highest political levels feasible.

2) Culture-specific laws are simply those which reflect the values of a culture: many laws, all regulations, and all tax-funded works programs. Sharia law and the American presumption of liberty are both under this category, as is most social legislation. The more restrictive/coercive the law, the smaller the scale at which its implementation is appropriate, lest we simply arrive back at a democratic tyranny of the majority. 50% is no magic number, and one should never err on the side of seeing culture as more homogenous. These laws can be supported at one's preference at a level where that value is shared, but must be opposed at any level where it is not.

3) Never appropriate laws are those based on a fundamental misunderstanding of human action. Socialism as an economic system, for example, is not workable under any culture because it runs

counter to the most basic principles of human action. Others, such as minimum wage laws, are based on faulty reasoning, the results of which can reflect no cultural value but misery.

SOCIAL CHANGES

The word "change" denotes a difference in anything observed over some period of time. Social change, therefore, would mean observable differences in any social phenomena over any period of time.

definitions:

Jones "Social change is a term used to describe variations in, or modifications of, any aspect of social processes, social patterns, social interaction or social organisation."

The important factors contributing to social change

1.Environmental factors: Geological and climatic phenomena like earthquakes, flood, draught, tornado, tsunami etc. cause drastic changes in the economy or material assets of a society which in turn leads to social change. Variation in the availability of water resources and mineral resources (eg. Petroleum) can also affect social change.

Biotic factors: Fluctuation in agricultural productivity, availability of fishery wealth, spread of diseases affecting man, crops and domesticating animals, changes in population structure, sex ratio, age ratio etc. can also contribute to significant changes in life style and thereby in the culture.

2.Cultural factors: The main cause of social change is the cultural factor. The basic elements of culture like language, religion, philosophy, literature, faith and values will take long time to change due to the influence of another culture. The co-existence of two different cultures for a long period can cause cultural diffusion leading to changes in both. India, for example, discarded age long customs like Sati and Child marriage because of her contact with the Europeans.

3. Demographic factors: Changes in population factors such as birth rate, death rate, migration or immigration can cause changes in sex ratio, age-ratio and other vital population parameters. Such changes affect marriage norms, familial relations, conditions of the marginalized etc. ultimately influencing social change.

4.Technological factors: Technological advancement has resulted in the production of surplus food, population growth, urbanization and industrialization. All these have affected family size, occupational divisions, gender roles, interdependency, social competition etc. Developments in the

field of transportation and communication reduced the social distance which gave momentum to cultural diffusion and thereby to social change.

5. Ideological factors: Political, social and religious ideologies can bring forth radical changes in social structure and social relationships. For example, the spread of communist political ideology in Kerala brought an end to feudalism followed by drastic changes in class structure which reflected even on family relations. The social philosophies of persons like Sree Narayna Gurn, Sahodharan Ayyappan, Ayyankali etc. resulted in the vertical mobility of oppressed communities in Kerala which brought lasting changes in the social sphere of the state.

6. Psychological factors: Man, by nature, is a lover of change. The inherent tendency to look for novelty compel man to experiment new ideas which may sometimes results in the establishment of new social setup. Change in attitude of society towards family planning, dowry, caste system, women's education etc. which brought about radical changes in society are primarily psychological in nature.

7.Other factors: In addition to above mentioned factors other elements such as wars, ethnic tensions, competition for resources, trade unionism, banking system, human rights movement, enhanced environmental awareness etc. have resulted in wide spread social variation and modification.

NATURE OF SOCIAL CHANGE

The main characteristics of the nature of social change are as follows:

(i) Social change is a universal phenomenon:

Social change occurs in all societies. No society remains completely static. This is true of all societies, primitive as well as civilized. Society exists in a universe of dynamic influences.

The population changes, technologies expand, material equipment changes, ideologies and values take on new components and institutional structures and functions undergo reshaping. The speed and extent of change may differ from society to society. Some change rapidly, others change slowly.

(ii) Social change is community change:

Social change does not refer to the change in the life of an individual or the life patterns of several individuals. It is a change which occurs in the life of the entire community. In other words, only that change can be called social change whose influence can be felt in a community form. Social change is social and not individual.

(iii) Speed of social change is not uniform:

While social change occurs in all societies, its speed is not uniform in every society. In most societies it occurs so slowly that it is often not noticed by those who live in them. Even in modern societies there seems to be little or no change in many areas. Social change in urban areas is faster than in rural areas.

(iv) Nature and speed of social change is affected by and related to time factor:

The speed of social change is not uniform in each age or period in the same society. In modern times the speed of social change is faster today than before 1947. Thus, the speed of social change differs from age to age.

The reason is that the factors which cause social change do not remain uniform with the change in times. Before 1947 there was less industrialization in India, after 1947 India has become more industrialized. Therefore, the speed of social change after 1947 is faster than before 1947.

(v) Social change occurs as an essential law:

Change is the law of nature. Social change also is natural. It may occur either in the natural course or as a result of planned efforts. By nature we desire change. Our needs keep on changing. To satisfy our desire for change and our changing needs social change becomes a necessity. The truth is that we are anxiously waiting for a change. According to Green, 'The enthusiastic response of change has become almost a way of life."

(vi) Definite prediction of social change is not possible:

It is difficult to make any prediction about the exact forms of social change. There is no inherent law of social change according to which it would assume definite forms. We may say that on account of the social reform movement untouchability will be abolished from the Indian society; that the basis and ideals of marriage will change due to the marriage laws passed by the government; that industrialization will increase the speed of urbanization but we cannot predict the exact forms which social relationships will assume in future.

(vii) Social change shows chain-reaction sequence:

A society's pattern of living is a dynamic system of inter-related parts. Therefore, change in one of these parts usually reacts on others and those on additional ones until they bring a change in the whole mode of life of many people. For example, industrialism has destroyed the domestic system of production.

The destruction of domestic system of production brought women from the home to the factory and the office. The employment of women meant their independence from the bondage of man. It

brought a change in their attitudes and idea. It meant a new social life for women. It consequent affected every part of the family life.

(viii) Social change results from the interaction of a number of factors:

Generally, it is thought that a particular factor like changes in technology, economic development or climatic conditions causes social change. This is called monistic theory which seeks to interpret social change in terms of one single factor.

But the monistic theory does not provide an adequate explanation of the complex phenomenon of social change. As a matter of fact, social change is the consequence of a number of factors. A special factor may trigger a change but it is always associated with other factors that make the triggering possible.

(ix) Social changes are chiefly those of modification or of replacement:

Social changes may be broadly categorized as modifications or replacements. It may be modification of physical goods or social relationships. For example, the form of our breakfast food has changed. Though we eat the same basic materials which we ate earlier, wheat, eggs, corn, but their form is changed. Ready-to-eat-cornflakes, breads, omelets are substituted for the form in which these same materials were consumed in yester years.

THEORIES OF SOCIAL CHANGE

The five theories of social change are as follows: 1. Evolutionary Theory 2. Cyclical Theory 3. Economic (Mandan) Theory of Social Change 4. Conflict Theory 5. Technological Theory.

A variety of reasons have been offered throughout history to explain why social change occurs. The problem of explaining social change was central to nineteenth century sociology. Many earlier theories of society that claimed to be scientific were in fact theories of change. Many different theories were propounded to define and explain social change. Broadly, theories of nineteenth century may be divided into theories of social evolution (Saint-Simon, Comte, Spencer, Durkheim etc.) and theories of social revolution (Marx).

Among the general theoretical explanations offered for understanding social change are geographical, biological, economic and cultural. All these we have discussed in the previous section.

Theories of social change can be divided into two groups:

(1) Theories relating to the direction of social change:

Various types of evolutionary theories, and cyclical theory.

(2) Theories relating to causation of change:

(a) Those explaining change in terms of endogamous factors or processes; and

(b) Those emphasizing exogamous factors such as economic, cultural or historical.

1. Evolutionary Theory:

Despite the wide variety in the possible directions change may take, various generalizations have been set forth. Because the lot of mankind generally has improved over the long term, by far the most numerous classes of theories of the direction of change comprise various cumulative or evolutionary trends. Though varying in many ways, these theories share an important conclusion that the course of man's history is marked up 'upward' trend through time.

The notion of evolution came into social sciences from the theories of biological evolution. With the advent of Darwinian Theory of biological evolution, society and culture began to be regarded as undergoing the same changes and demonstrating the same trends.

All these assumptions can be summarized as under:

1. That change is inevitable and natural.

2. That change is gradual and continuous.

3. That change is sequential and in certain stages.

4. That all successive stages of change are higher over preceding stage, i.e., evolution is progressive.

5. That stages of change are non-reversible.

6. That forces of change are inherent in the object.

7. That the direction of change is from simple to complex, from homogeneity to heterogeneity, from undifferentiated to the differentiated in form and function.

Criticism of Evolutionary Theory:

Evolutionary scheme (gradual and continuous development in stages) of any kind fell under both theoretical and empirical attack in the last century. It was criticised heavily on many grounds but mainly for its sweeping or over-generalisation about historical sequences, uniform stages of development and evolutionary rate of change. The biological evolution, from which the main ideas of social evolution were borrowed, provided somewhat clumsy and unsatisfactory answers.

2. Cyclical Theory:

Cyclical change is a variation on unilinear theory which was developed by Oswald Spengler (Decline of the West, 1918) and Arnold J. Toynbee (A Study of History, 1956). They argued that societies and civilisations change according to cycles of rise, decline and fall just as individual persons are born, mature, grow old, and die. According to German thinker Spengler, every society

has a predetermined life cycle—birth, growth, maturity and decline. Society, after passing through all these stages of life cycle, returns to the original stage and thus the cycle begins again.

FUNCTIONALISM AND SOCIAL CHANGE:

Functionalism, as a new approach of study of society, developed mainly as a reaction to evolutionism, in the early years of twentieth century. Critics of evolutionism advocated that there was no use to know the first appearance of any item of culture and social behaviour. They called it the "fruitless quest for origin". One of the most significant assumptions of functionalists is that society (or culture) is comprised of functionally interdependent parts or the system as a whole.

Functionalism' (ASR, 1963), P. Van den Berghe states that according to functional theory change may come from three main sources:

1. Adjustment to external disturbances such as a recession in world trade.

2. Structural differentiation in response to problems within the system, e.g., electoral reforms in response to political unrest.

3. Creative innovations within the system, e.g., scientific discoveries or technological advances.

3. Economic (Mandan) Theory of Social Change:

Owing largely to the influence of Marx and Marxism, the economic theory of change is also known as the Marxian theory of change. Of course, economic interpretations of social change need not be always Marxist, but none of the other versions (such as Veblen who also stressed on material and economic factor) of the doctrine are quite as important as Marxism.

The Marxian theory rests on this fundamental assumption that changes in the economic 'infra-structure' of society are the prime movers of social change. For Marx, society consists of two structures—'infra-structure' and 'super-structure'. The 'infra-structure' consists of the 'forces of production' and 'relations of production'.

4. Conflict Theory:

Social theorists in the nineteenth and early twentieth century's were concerned with conflict in society. But, the label of conflict theorists is generally applied to those sociologists who opposed the dominance of structural-functionalism. These theorists contend that in functionalism, there is no place of change and as such it cannot explain change.

They have neglected conflict in favour of a unitary concept of society which emphasises social integration. By contrast to functionalist approach, conflict theorists contend that institutions and

practices continue because powerful groups have the ability to maintain the status quo. Change has a crucial significance, since it is needed to correct social injustices and inequalities.

For example, in societies where there are deep divisions between regional, ethnic or racial groups, there may be little possibility of promoting economic development or welfare policies; such 'ameliorative' changes require some degree of consensus.

5. Technological Theory:

When the average person speaks of the changes brought about by 'science', he is generally thinking of 'technology' and the manifold wonders wrought thereby. The 'technology' refers to the application of knowledge to the making of tools and the utilisation of natural resources (Schaefer and Lamm, 1992). It involves the creation of material instruments (such as machines) used in human interaction with nature. It is not synonymous with machinery as it is understood in common parlance. Machines are the result of the knowledge gained by science but they themselves are not technology.

Critique:

The goals and consequences of technology and the production of material goods are being seriously questioned today. Does a high level of technology increase happiness and improve our family life? Do complex technologies bring us clean air, pure water and help us conserve natural resources? Do we not think that the rapidly changing technology is the cause of our all types of environmental degradation, pollution, health and social problems? People do not hesitate to say that modem technology (science) is responsible for moral degradation of our society.

POSSIBLE QUESTIONS

1. Explain the four main forces that shape culture.

2. Write short notes on:

   (i) Empathy   (ii) Self-Confidence

3. Explain the role of culture and its effects on society.

4. Explain the theories of social change in detail.

5. Explain in detail about customs and values in detail.

6. Write short notes on: (i) Folkways (ii) Norms (iii) Laws

7. Define social control. Explain the types of social control in detail.

8. Describe in detail about the agencies of social control.

9. Define social change. Explain the nature of social change in detail.

10. What are the general responsibilities of Engineers to society?

11. Explain the process of incorporating safety into the engineers design.

12. Define culture. What are the forces shape cultures?

13. Discuss the theories of Social changes in detail.

14. What are the general responsibilities of Engineers to work?

15. Explain the process in incorporating safety into the engineers design.

16. Difference between norms and laws.

17. Describe in detail about the institutions of social control.

18. Explain in detail about the nature of social changes.

19. Discuss the types of social control.

20. Difference between formal and informal social control.

21. Explain in detail about the formal social control with example.

22. Describe in detail about the informal social control with example.

23. Write short notes on:

    (i) Work ethics   (ii) Values

24. Write short notes on:

      (i) Self interest (ii) customs (iii) values

25. Difference between the social control agency and institutions.

UNIT - V

ENTREPRENEURSHIP AND MOTIVATION

Entrepreneur – Types of Entrepreneurs – Difference between Entrepreneur and Intrapreneur – Entrepreneurship in Economic Growth- Major Motives Influencing an Entrepreneur – Achievement Motivation Training, self rating, Business Game, Thematic Apperception Test – Stress management, Entrepreneurship Development Programs – Need, Objectives.

Meaning and Definition of entrepreneur

An entrepreneur is ordinarily called a businessman. He is a person who combines capital and labour for the purpose of production. He organizes and manages a business unit assuming the risk for profit. He is the artist of the business world.

In the words of J.B. Say, "An entrepreneur is one who brings together the factors of production and combines them into a product". He made a clear distinction between a capitalist and an entrepreneur. Capitalist is only a financier. Entrepreneur is the coordinator and organizer of a business enterprise.

Meaning and Definition of entrepreneurship

Entrepreneurship refers to a process of action an entrepreneur undertakes to establish his enterprise. It is a creative and innovative response to the environment. In other word entrepreneurship can be defined as an ability discover, create or invent opportunities and exploit them to the benefit of the society, which in turn brings prosperity to the innovation and his organization.

According to Joshep a Schumpeter describe entrepreneurship is the force of creative destruction whereby established way of doing things are destroyed by the creating of new and better ways to get things done.

Concept of entrepreneurship

Entrepreneur	Entrepreneurship	**Enterprise**
Person	**Process Action**	**Object**
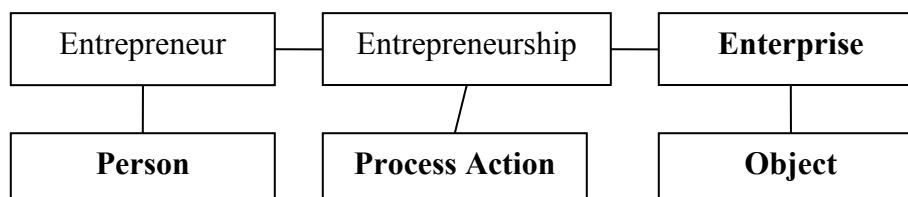
NATURE AND CHARACTERISTICS OF ENTREPRENEUR

1. Innovator: Within the constraints of available resources that society or a nation offers, entrepreneurs make the best use of them. Entrepreneurs have a creative vision to recognize a business opportunity. An entrepreneur should have creative thinking and be able to engage in the analysis of various problems and situations in order to deal with them. An entrepreneur introduces new products, new technologies and new economic activities. He creates new demands and new aspirations and new methods to fulfil them. Entrepreneur should anticipate changes and must be able to study various situations in which decisions may have to be made.

2. Motivation towards Achievement: A successful entrepreneur should have a strong motivation towards the achievement of a task and must be able to exert considerable efforts in getting things done by others. He has strong urge to achieve. He has a more aggressive level of entrepreneurial venturing, and need achievement.

3. Ability to Handle Uncertainty: The ability to handle uncertainty is critical because these business builders constantly make decisions using new, sometimes conflicting information gleaned from a variety of unfamiliar sources. Based on his research, entrepreneurial expert Amar Bhide says that entrepreneurs exhibit "a willingness to jump into things when it's hard to even imagine what the possible set of outcomes will be."

4. Moderate Risk Taker: Entrepreneurs are not wild risk takers but are instead calculating risk takers. Unlike "high-rolling, riverboat" gamblers, entrepreneurs rarely gamble. Their goals may appear to be high even impossible-in others' eyes, but entrepreneurs see the situation from a different perspective and believe that their goals are realistic and attainable

5. Skill for Organizing: A true entrepreneur is one who has the ability to mobilize resources in the best possible manner for achieving the business objectives. Entrepreneurs know how to put the right people together to accomplish a task. Effectively combining people and jobs enables entrepreneurs to transform their vision into reality.

6. Goal Oriented: Entrepreneurs are highly goal-oriented and specifically aim at producing goods and services that represent unmet needs of consumers. He adopts a 'hands-on' approach. Entrepreneur is planer and doer, dreamer and action-taker.

7. Desire for Responsibility: Entrepreneurs feel a deep sense of personal responsibility for the outcome of ventures they start. They prefer to be in control of their resources, and they use those resources to achieve self-determined goals.

8. Emotional Stability and Self-control: Emotional health is necessary for entrepreneurs to meet the challenges of exploiting a new business opportunity. Successful entrepreneurs believe in control being exercised from within. They believe in imposing control on themselves and their enterprises rather than leaving their success to fate.

9. Communication Ability: This ability pertains to communicate effectively. As a leader, an entrepreneur communicates effectively with all concerned such as financiers, employees, customers, suppliers, creditors and all who are concerned with the new enterprise.

10. Future Orientation: Entrepreneurs look ahead and are less concerned with what they did yesterday than with what they might do tomorrow. Not satisfied to sit back and revel in their success, real entrepreneurs stay focused on the future.

QUALITIES OF SUCCESSFUL ENTREPRENEUR

To become a successful as an entrepreneur in its business life, a businessman should possess a quite a number of essential qualities. Those are noted below:

1.Moderate risk taking: an entrepreneur always takes calculated risk to operate the organization

2. Hard work: an entrepreneur is very much hard worker, he or she always busy with various types work.

3. Accountability: a successful entrepreneur is accountable well as his associates always accountable to him.

4. Educated in real sense: successful entrepreneur is educated In real sense .he tries to implement his organizational objectives through his education.

5. Analytical mind: a successful entrepreneur is analytical minded. he scrutinizes every activity on the organization.

6. Dynamic leadership: a successful entrepreneur is always dynamic to operate the organization

7. Presence of mind: a successful entrepreneur is always at present of mind he is always aware of activities that to happening in the organization and around him

8. Accommodative: a good entrepreneur has the capacity to make his own place at every sector

9. Courageous and tactful: Corsages and techniques is very much essential for a successful entrepreneur

10. Maker of right decision: A successful entrepreneur makes right decision in right time in right place

11. Foresighted: a successful entrepreneur foresights the future and take decision accordingly

12. **Right perception of things:** A successful entrepreneur things in a right way

13. Enjoy simple life: A successful entrepreneur always deals a simple life a general people of the society

14. Strong desired to success: A successful entrepreneur have a strong desire to success. He is driven by the desire to success

15. **Innovation:** innovation is the process of making new something. A successful entrepreneur is innovative

TYPES OF ENTREPRENEUR

I. Classification on the basis of common characteristics:

1. Innovative: Innovative entrepreneur is one who assembles and synthesis information and introduces new combinations of factors of production. They are characterized by the smell of innovativeness. These entrepreneurs sense the opportunities for introduction new ideas new technology, new markets and creating new organizations.

2. Imitative/ Adoptive: Imitative entrepreneur is also known as adoptive entrepreneur. He simply adopts successful innovation introduced by other innovators. These entrepreneurs imitate the existing entrepreneurs and setup their enterprise in the same manner. Instead of innovating, they just imitate the technology and methods innovated by others.

3. Fabian: The Fabian entrepreneur is timid and cautious. He imitates other innovations only if he is certain that failure to do so may damage his business. They are very much skeptical in their approach in adopting or innovating new technology in their enterprise.

4. Drone: These entrepreneurs are conservative or orthodox in outlook. They never like to get rid of their traditional business and traditional machinery or systems of the business. They always feel comfortable with their old-fashioned technology of production even though the environment as well as the society have undergone considerable changes.

II. Arthur H. Cole Classification:

Arthur H. Cole classifies entrepreneurs as

1. Empirical: He is an entrepreneur hardly introduces anything revolutionary and follows the principle of rule of thumb.

2. Rational: The rational entrepreneur is well informed about the general economic conditions and introduces changes which look more revolutionary.

3. Cognitive: Cognitive entrepreneur is well informed, draws upon the advice and services of experts and introduces changes that reflect complete break from the existing scheme of enterprise.

III. Classification on the basis of ownership

1. Founder or "pure Entrepreneurs": Those individuals who are the founder of the business. They are the ones who conceptualize a business plan and en put in efforts to make the plan a success.

> **Example:** Dhirubhai Ambani of the Reliance Group.

2. Second generation operators of family owned business: They are individuals who have inherited the business from their fathers and forefathers.

> **Example:** Like mukesh ambani and Anil Ambani sons of Dhirubhai ambani of the reliance group now split into two: Reliance industries limited and reliance- anil dhirubhai ambani group.

3. Franchisees: Its method of doing business where in the parent owner licenses his trademarks, tried, and proves methods of doing business to franchises in exchange for a recurring payment.

> **Example:** NIIT has given its franchisee operations to local players after through security and proper training.

4. Owner- Manager: when a person buys a business from the founder and then invests his time and resources and, he is called as owner – manager.

> **Example:** Like saber, Bhatia is the founder entrepreneur of Hotmail.

IV. Classification based on the type of Business:

1. Industrial Entrepreneur: An Entrepreneur whop is into manufacturing of a product. He identifies the needs, wants of customer, and accordingly manufactures products to satisfy these needs and wants.

2. Trading Entrepreneurs: Trading entrepreneur is one who undertakes trading activities and is not concerned with the manufacturing of products. He identifiers potential markets, stimulated demands and generates interest among buyer to purchase a product.

3. Corporate Entrepreneur: A person who Demonstrates his innovative skill in organizing and managing a corporate undertake which is registered under some act that given it a separate legal entity.

4. Agricultural Entrepreneur: Agricultural Entrepreneurs are those entrepreneurs who undertake business related to agricultural activities. Like farm equipments, fertilizers and other inputs of agriculture.

V. Classification on the stages of development:

1. First Generation Entrepreneur: A First generation entrepreneur is one who starts an industrial unit by means of an innovative skill. He is essentially an innovator combing different technologies to produce a marketable product or service.

2. Modern Entrepreneur: A modern entrepreneur is one who undertakes business to satisfy the contemporary demands of the market. They undertake those ventures, which suit the current socio cultural trends.

3. Classical Entrepreneur: A Classical entrepreneur a stere –type entrepreneur one whose aim is to maximize the economic returns at a level constant with the survival of the firm, with or without element of growth.

FACTORS OF ENTREPRENEURSHIP DEVELOPMENT

Entrepreneurship does not emerge and grow spontaneously. Rather it is dependent upon some factors that affect entrepreneur growth. It these factors are positive then the growth is more on the contrary less. These factors are mainly environmental factors.

I. Economic Factor: Economic environment exercises perhaps the most direct and immediate influence on entrepreneurship. It has some conditions which are following below.

(a). Markets: The size are composition of market both influence entrepreneurship in their own ways. Practically, monopoly in a particular product in the market becomes more influential for entrepreneurship than a competitive market.

(b). Capital: Availability of capital help to bring together the Labour at one, machine of another and raw material of yet another to combine them to produce product.

(c). Labour: Labour is the most important factor of economic condition of entrepreneurship. It appears that the labour problem can't protect entrepreneurship from emerging.

(d). Raw materials: Without raw materials business can't be started, because production isn't possible.

(e). Industrial policy: It includes rules, incentives.

(f). Fiscal policy: It includes tax, vat.

II. Social Factors:

Social environment in a country exercises a significant impact on the emergence of entrepreneurship. The main components at social environment are as follows:-

(a). Social Mobility:

It means the people of society transfers from one place to another exchange culture, attitude etc. If mobility is positive then growth is also positive.

(b). Security:

Entrepreneurship security is an important facilitator of entrepreneurial behavior. Insecurity doesn't hinder entrepreneurship, but rather that different kinds of insecurity will result in different kinds of entrepreneurship.

(c). Legitimacy of entrepreneurship:

Illegal activities are not under business as well as entrepreneurship. High degree of legitimacy support to start business.

III. Political Factor:

It is also a important factor to the entrepreneur. A country's economic growth depends on its political factors. The political factors are as follows:-

(a). Political stability:

(b). Political ideology of government:

Political ideology of government influences the development of entrepreneurship. It political ideology is favorable to bus growth then entrepreneurship takes new initiative to from business.

(c). Nature of change in political ideology:

Due to the change of government the political ideology also changes again and again. As a result new sectors arise by declining the previous sectors.

IV. Psychological Factor:

Many entrepreneurial theorists have propounded theories of entrepreneurship that concentrate especially spontaneously psychological factors. These factors are following:

(a) Need for achievement:

Need for achievement motivate to enhance business tasks for success. It is psychological power.

(b) Perception and motivation:

Eternally support entrepreneurial behavior. Especially perception and motivation with positive forces to enter into business.

(c). Learning and personality:

More learning about business increases business efficiency. Different personality including reformist, innovator, ret realists, retails affect business.

V. Legal factor:

It means the country's law and order situation. It the law order situation keep calm and quiet the entrepreneurial growth may be high. Various types of legal factor are as follows:

(i).   Income tax law.

(ii).   Labor law.

(iii).   Wage law.

FUNCTIONS OF ENTREPRENEUR:

An entrepreneur performs a series of functions necessary right from the genesis of an idea up to the establishment and effective operation of an enterprise. He carries out the whole set of activities of the business for its success.

1. Organizational Function: Entrepreneur as an organizer and his organizing function is described by J.B. Say as a function whereby the entrepreneur brings together various factors of production, ensures continuing management and renders risk-bearing functions as well. His definition associates entrepreneur with the functions of coordination, organization and supervision.

2. Innovative Function: The basic function an entrepreneur performs is to innovate new products, services, ideas and information's for the enterprise. As an innovator, the entrepreneur foresees the potentially profitable opportunity and tries to exploit it. He is always involved in the process of doing new things.

3. Decision Making Function: The most vital function an entrepreneur discharges refers to decision making in various fields of the business enterprise. He is the decision maker of all activities of the enterprise.

4. Assumption of Risk: An entrepreneur, by definition, is risk taker and not risk shirker. He is always prepared for assuming losses that may arise on account of new ideas and projects undertaken by him. This willingness to take risks allows an entrepreneur to take initiatives in doing new things and marching ahead in his efforts.

5. Research: An entrepreneur is a practical dreamer and does a lot of groundwork before taking a leap in his ventures. In other words, an entrepreneur finalizes an idea only after considering a variety of options, analyzing their strengths and weaknesses by applying analytical techniques, testing their applicability, supplementing them with empirical findings, and then choosing the best alternative. It is then that he applies his ideas in practice.

6. Development of Management Skills: The work of an entrepreneur involves the use of managerial skills which he develops while planning, organizing, staffing, directing, controlling and

coordinating the activities of business. His managerial skills get further strengthened when he engages himself in establishing equilibrium between his organization and its environment. However, when the size of business grows considerably, an entrepreneur can employ professional managers for the effective management of business operations.

7. Overcoming Resistance to Change: New innovations are generally opposed by people because it makes them change their existing behavior patterns. An entrepreneur always first tries new ideas at his level. It is only after the successful implementation of these ideas that an entrepreneur makes these ideas available to others for their benefit. In this manner, an entrepreneur paves the way for the acceptance of his ideas by others. This is a reflection of his

will power, enthusiasm and energy which helps him in overcoming the society's resistance to change.

8. Catalyst of Economic Development: An entrepreneur plays an important role in accelerating the pace of economic development of a country by discovering new uses of available resources and maximizing their utilization. To better appreciate the concept of an entrepreneur, it is desirable to distinguish him from an entrepreneur and promoter.

ENTREPRENEURIAL PROCESS STAGES

The process of pursuing a new venture is embodied in the entrepreneurial process, which involves more than just problem solving in a typical management position. An entrepreneur must find, evaluate, and develop an opportunity by overcoming the forces that resist the creation of something new.

Entrepreneurial process can be defined as the process through which a new venture is created by an entrepreneur. This process involves finding, evaluating, and developing an opportunity by overcoming the strong forces that resist the creation of something new.

STEPS IN ENTREPRENEURIAL PROCESS

Identification and evaluation of the opportunity

Development of the business plan

Determination of the required resources

```
        ┌─────────────────────────────────────────────┐
        │   Management of the resulting enterprise    │
        └─────────────────────────────────────────────┘
                           │
                           ▼
        ┌─────────────────────────────────────────────┐
        │      Choosing the Competitive Strategy      │
        └─────────────────────────────────────────────┘
```
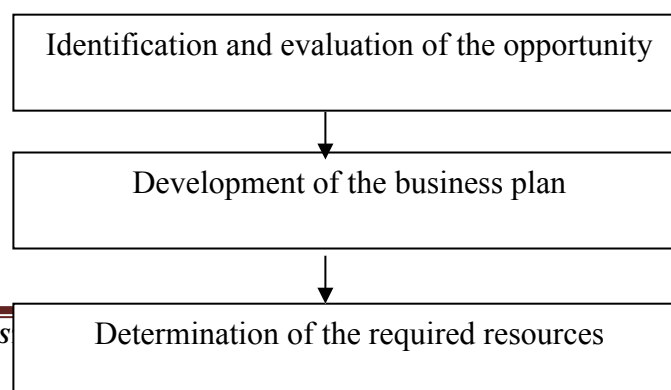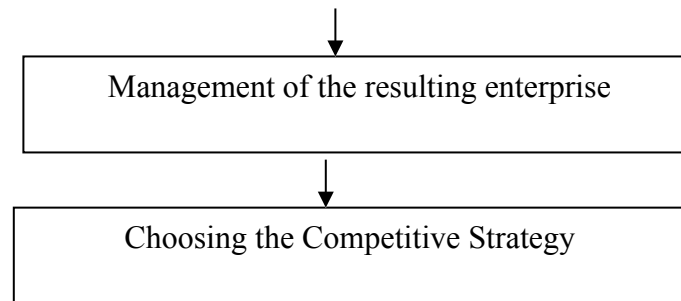
1. Identify and evaluate opportunity: opportunity identification is the process by which an entrepreneur comes up with the opportunity for a new venture. Opportunity identification and evaluation is a very difficult task. Most good business opportunities do not suddenly appear, but rather result from an entrepreneur's alertness to possibilities or, in some cases, the establishment of mechanisms that identify potential opportunities.

Different Aspects of this step relates to –

- ❖ Creativity and Business Idea generation
- ❖ Recognition of entrepreneurial opportunity
- ❖ Assessment of entrepreneurial opportunity (in terms of real and perceived value, risk and return
- ❖ Evaluating entrepreneurial opportunity (in terms of personal & entrepreneurial skills and competencies, prevailing and future circumstances and competitive environment)

Opportunity Evaluation Process

Most good business opportunities result from an entrepreneur being alert to possibilities. Some sources are often fruitful, including consumers and business associates. Channel members of the distribution system-retailers, wholesalers or manufacturer's reps-are also helpful. Technically-oriented individuals often identify business opportunities when working on other projects.

Whether the opportunity is identified by using input from consumers, business associates, channel members, or technical people, each opportunity must be carefully screened and evaluated. This evaluation of the opportunity is perhaps the most critical element of the entrepreneurial process, as it allows the entrepreneur to assess whether the specific product or service has the returns needed compared to the resources required.

This evaluation process involves looking at-

- ❖ The creation and length of the opportunity,
- ❖ Its real and perceived value,

❖ Its risks and returns,

❖ It's fit with the personal skills and goals of the entrepreneur, and

❖ Its uniqueness or differential advantage in its competitive environment.

Opportunity assessment plan

Opportunity analysis, or what is frequently called an opportunity assessment plan, is one method for evaluating an opportunity. It is not a business plan. Compared to a business plan, it should be shorter; focus on the opportunity, not the entire venture; and provide the basis for making the decision of whether or not to act on the opportunity.

An opportunity assessment plan includes the following: a description of the product or service, an assessment of the opportunity, an assessment of the entrepreneur and the team, specifications of all the activities and resources needed to translate the opportunity into a viable business venture, and the source of capital to finance the initial venture as well as its growth. The assessment of the opportunity requires answering the following questions:

✓ What market need does it fill?

✓ What personal observations have you experienced or recorded with regard to that market need?

✓ What social condition underlies this market need?

✓ What market research data can be marshaled to describe this market need?

✓ What patents might be available to fulfill this need?

✓ What competition exists in this market? How would you describe the behavior of this competition?

✓ What does the international market look like

2. Develop Business Plan:

A business plan is the written description of the future direction of the business. It helps entrepreneur in Putting Ideas together and Preparing B-Plan Draft.

A good business plan must be developed in order to exploit the defined opportunity. This is a very time-consuming phase of the entrepreneurial process. An entrepreneur usually has not prepared a business plan before and does not have the resources available to do a good job. A good business plan is essential to developing the opportunity and determining the resources required, obtaining those resources, and successfully managing the resulting venture.

3. Determine the Resources Required.

Assessing the resources needed starts with an appraisal of the entrepreneur's present resources. Any resources that are critical must be distinguished from those that are just helpful. Care must be taken not to underestimate the amount and variety of resources needed. The entrepreneur should also assess the downside risks associated with insufficient or inappropriate resources.

The next step in the entrepreneurial process is acquiring the needed resources in a timely manner while giving up as little control as possible. An entrepreneur should strive to maintain as large an ownership position as possible, particularly in the start-up stage. As the business develops, more funds will probably be needed to finance the growth of the venture, requiring more ownership to be relinquished. The entrepreneur also needs to identify alternative sup-pliers of these resources along with their needs and desires. By understanding resource supplier needs, the entrepreneur can structure a deal that enables the resources to be acquired at the lowest possible cost and with the least loss of control.

4. Manage the Enterprise

After resources are acquired, the entrepreneur must use them to implement the business plan. The operational problems of the growing enterprise must also be examined. This involves implementing a management style and structure, as well as determining the key variables for success. A control system must be established, so that any problem areas can be quickly identified and resolved. Some entrepreneurs have difficulty managing and growing the venture they created.

5. Choosing the Competitive Strategy:

One the entrepreneurial venture is up and running, the last step is to choose competitive strategy. Peter Drucker mentions following specific entrepreneurial strategies. These are:

❖ Being fastest with the most.

❖ Creative imitation.

❖ Entrepreneurial judo.

❖ Finding and occupying a specialized ecological niche.

❖ Changing values and characteristics by creating utility, by delivering what represents true value to the customer, by adoption to the customer's social and economical reality, by appropriate pricing.

DIFFERENCE BETWEEN ENTREPRENEUR AND INTRAPRENEUR

ENTREPRENEUR

People who have a talent for seeing opportunities and the abilities to develop those opportunities into profit-making businesses.

INTRAPRENEUR

The practice of using entrepreneurial skills without taking off the risks or accountability associated with entrepreneurial activities. It is practiced by employees within an established organization using a systemized business model.

CHARACTERISTICS	ENTREPRENEUR	INTRAPRENEUR	TRADITIONAL MANAGER
PRIMARY MOTIVES	Wants freedom, goal oriented, self reliant, and self motivated	Wants freedom and access to corporate resources, goal oriented and self motivated, but also responds to corporate rewards and recognition.	Wants promotion and other traditional corporate rewards power motivated,
TIME ORIENTATION	Uses and goals of 5 to 10 year growth of the business as guides; takes action how to next step along the way	End goals of 3 to 15 years, depending on the type of venture; urgency to meet self imposed and corporate time tables	Responds to quotes and budgets ; to weekly, monthly, quarterly, and annual planning horizons; and to the next promotion or transfer,
TENDENCY TO	Gets hand dirty; may	Gets hands dirty;	Delegates action;

ACTION	upset employee by suddenly doing their work,	may know how to delegate but when necessary, does what needs to be done,	supervising and reporting takes most energy,
SKILLS	Knows business intimately; more business acumen then managerial or political skills; often technically trained if in technical business; may have had profit and loss responsibility in the company,	Professional management ; often business school trained; uses abstract analytical tools, people-management and political skills,	Professional management ; often business school trained; uses abstract analytical tools, people-management and political skills,
ATTITUDE TOWARDS COURAGE AND DESTINY	Self confident, optimistic and courageous,	Sees others being in charge of his or her destiny; can be forceful and ambitious but may be fearful of others ability to do him or her in,	Self confident and courageous; many are cynical about the system but optimistic about their ability to outwit it.
FOCUS OF ATTENTION	Primarily on technology and marketplace,	Both inside and outside; sells insiders on needs of venture and market place but also focuses on customers.	Primarily on events inside corporation,

ATTITUDE TOWARDS RISK	Likes moderate risk; invests heavily but expects to succeed,	Like moderate risks; generally not afraid of being fired, so sees little personal risk,	Cautions,
USE OF MARKET RESEARCH	Creates needs; creates products that often cannot be tested with market research; potential customers do not yet understand them; talks to customers and forms own opinion,	Does own market research and initiative market evaluation, like the entrepreneur.	Has market studies done to discover needs and guide product conceptualization,

ENTREPRENEURSHIP IN ECONOMIC DEVELOPMENT

"Economic development is the effect for which entrepreneurship is a cause" Economic development essentially means a process of upward change whereby the real per capita income of a country increases over a period of time Entrepreneurship has an important role to play in the development of a country. It is one of the most important inputs in economic development. The number and competence of entrepreneurs affect the economic growth of the country. Entrepreneurship helps in the process of economic development in the following ways.

1) Employment Generation : Growing unemployment particularly educated unemployment is the problem of the nation. The available employment opportunities can cater only 5 to 10 % of the unemployed. Entrepreneurs generate employment both directly and indirectly. Directly, self employment as an entrepreneur and indirectly by starting many industrial units they offer jobs to millions. Thus entrepreneurship is the best way to fight the evil of unemployment.

2) National Income : National Income consists of the goods and services produced in the country and imported. The goods and services produced are for consumption within the country as well as to

meet the demand of exports. The domestic demand increases with increase in population and increase in standard of living. The export demand also increases to meet the needs of growing imports due to various reasons. An increasing number of entrepreneurs are required to meet this increasing demand for goods and services. Thus entrepreneurship increases the national income.

3) Balanced Regional Development : The growth of Industry and business leads to a lot of Public benefits like transport facilities, health, education, entertainment etc. When the industries are concentrated in selected cities, development gets limited to these cities. A rapid development when the new entrepreneurs grow at a faster rate, in view of increasing competition in and around cities, they are forced to set up their enterprises in the smaller towns away from big cities. This helps in the development of backward regions.

4) Dispersal of economic power : Industrial development normally may lead to concentration of economic powers in a few hands. This concentration of power in a few hands has its own evils in the form of monopolies. Developing a large number of entrepreneurs helps in dispersing the economic power amongst the population by weakening the harmful effects of monopoly.

5) Better standards of living : Entrepreneurs play a vital role in achieving a higher rate of economic growth. Entrepreneurs are able to produce goods at lower cost and supply quality goods at lower price to the community according to their requirements. When the price of the commodities decreases the consumers get the power to buy more goods for their satisfaction. In this way they can increase the standard of living of the people.

6) Creating innovation : An entrepreneur is a person who always looks for changes. Apart from combining the factors of production, he also introduces new ideas and new combination of factors. He always try to introduce newer and newer technique of production of goods and services. An entrepreneur brings economic development through innovation.

7) Capital formation : Entrepreneurship promotes capital formation by mobilizing the idle saving of the public and put it under continues transaction so as to improve the value of the capital by utilizing in a profitable way under different stages of enterprise.

8) Resource mobilization : The natural resources including the human resource skill can be effectively utilized for functioning of an enterprise towards economic development which might otherwise remain unutilized and idle.

9) Backward and forward linkages : Entrepreneurship will give the opportunity for the people to involve at different levels starting from production to ultimate consumption, the backward and forward linkages which stimulate the process of economic development in the country.

10) Promotes country's export trade: Last but no means the least; it also promotes country's export trade i.e., an important ingredient to economic development.

MAJOR MOTIVES INFLUENCING AN ENTRERENEUR

MOTIVATION means movement or motion, an inner state that energizes, activates or moves and directs human behavior towards goals. It is a need satisfying and goal seeking behavior. **David McClelland** identified several motivating needs which are basic to entrepreneurship development.

➢ **Need for Achievement**

The need to excel, known as achievement, is a critical factor in the personality of an entrepreneur. People with high need for achievement have desire for success in competition with others, or with a self-imposed standard of excellence. They try to accomplish challenging tasks. Entrepreneurs, by and large, have been found to be people with a high drive, high activity level and goal orientation. They take external help whenever needed and feel happy on accomplishment of the task.

➢ **Need for Independence**

Need for independence is the prime characteristic that will drive the entrepreneur to start their own business. These entrepreneurs do not conform to routine jobs and practices. They set their own challenging goals and make efforts to achieve these goals. The entrepreneurs do not wait for directions from others and choose their own course of action. They are masters of their own activities and take full responsibility for the outcome of their actions. The independence provides opportunity for trying out new ideas and helping them to achieve their life goals.

➢ **Need for Power**

High need for achievement leads one in to launching an enterprise but may not/be adequate to contribute to its success. Once an entrepreneur starts an enterprise and wants to manage it successfully, he / she also need to influence people, a drive which sells them his / her ideas and leads them in the process of establishing and expanding the organization. Such drive to influence people and to lead them to implement his / her ideas may be called as need for power. It implies controlling the actions and activities of other people. This helps them to become successful enterprise builders. However, they do not develop emotional bonds with people they work with; and their need for affiliation is low.

➢ **Need for Affiliation**

If a man "readily thinks about interpersonal relationships", he has a concern for affiliation, wrote McClleland. It implies, among other things, "a tendency of the people to conform to the wishes and norms of those whom they value." Apparently, social activists, environmentalists, teachers, and doctors and nurses may seem as predominantly driven by these needs. Entrepreneurs are believed to be low on affiliation, as they are and expected to be, innovative, trendsetters and tradition breakers. However, it is not necessary that affiliation should only interfere with achievement.

➢ Need for Autonomy

The need for autonomy is a desire for independence which, in effect, becomes a desire to do work of one's choice and at one's pace, defining one's own rules of the game, taking initiative, making independent and innovative choices and being responsible and accountable to oneself rather than some external authority for performance. Research evidence too seems to suggest desire for independence as the prime motivator of entrepreneurial behavior. Hence, in the context of entrepreneurship it may be interpreted as the determination not to work for someone else.

ACHIEVEMENT MOTIVATION TRAINING

This model primarily targets the achievement drive competency. Originally developed by Harvard psychologist David McClelland and his colleagues at Hay/McBer, it has been used in many different settings with many different types of individuals, including corporate executives, small business entrepreneurs, minority businessmen and women, business school students, police officers, and social workers. It also has been used in other countries. In fact, it was first used in 1963 with Indian businessmen. Although the training has been offered in different ways, from week-long residential retreats to semester-long college courses, it typically involves 70 hours of work spread over 5 or more days.

Achievement Motivation 1: On the first day of the program, the participants are informed of the training objectives. They are told that the program is intended to increase the strength of their achievement motivation and that the faculty has confidence that the program will be effective. Next the faculty spends some time describing what achievement motivation is, the characteristics of people with strong achievement motivation, and the relation of achievement motivation to success in managerial work.

Achievement Motivation 2: Second, through presentation of research Consortium for Research on Emotional Intelligence in Organization Achievement Motivation 2 findings, the faculty demonstrates that increased achievement motivation should lead to improved managerial

performance and personal success. Third, the activities help participants conceptualize clearly what achievement motivation is and how it affects behavior. Finally, the small group activity is designed to help the participants see how achievement motivation is involved in everyday work experience.

Achievement Motivation 3:The participants conclude this part of the program by developing detailed personal goals for the next two years and the next five years. Most of a day is devoted to the next activity: playing a business game. During the game, the participants are scored on several criteria, and at the conclusion of the game they receive feedback on their individual scores.

Achievement Motivation 4: The participants practice achievement-related actions in cases, role plays, and real life. A fourth input is to practice achievement-related actions in business and other games. A fifth input is for the participants to relate the achievement behavior model to their own behavior, self-image, and goals. Sixth, the program helps participants develop a personal action plan. Finally, the program provides participants with feedback on progress toward achieving goals.

Seven "training inputs" of the programme

1. To learn achievement motivation thinking.
2. To help understand participants understand their own characteristics and goals.
3. To help participants practice achievement-related actions in cases, role plays, and real life.
4. To practice achievement related actions in business and other games.
5. To relate the achievement behavior model to participants own behavior, self-image, and goals.
6. To develop a personal action plan.
7. To give participants feedback on progress toward achieving goals.

SELF RATING

The Entrepreneur Self-Test was developed by the Rural Entrepreneurship Initiative, the predecessor of the Center for Rural Entrepreneurship. This assessment was designed to help an individual identify and understand his/her entrepreneurial potential. The test can be used at the community level with residents engaged in or considering involvement with a business. Community or nonprofit service providers working with potential entrepreneurs might also use this test.

The Entrepreneur Self-Test consists of **three sections**: motivation, capacity, and support.

Motivation

➢ **Evaluate your overall motivation** to start and operate your own business. Score on a 1 to 10 scale, where 10 indicate strong agreement with the statement and 1 indicates little or no agreement with the statement.

➢ **Perceive Opportunities** - I am constantly seeing business opportunities or ideas that have potential commercial value.

➢ **Growth Oriented** - I like growing or building business or taking ideas and make something of them.

➢ **Creative** - I am creative and I am regularly coming up with new ideas on how to do things better or more efficiently.

➢ **Innovative** - I am innovative and I am able to find solutions to challenges and problems.

➢ **Resourceful** - I am resourceful and I am able to find solutions to challenges and problems.

➢ **Dynamic** - I am a dynamic person providing vision, hope and energy to those I am working and partnering with.

➢ **Hard Working** - I am a hard working person and I do what it takes to succeed.

➢ **Flexible** - I am flexible and I am able to adapt to changes and surprises quickly and successfully.

➢ **Risk Tolerant** - I am risk tolerant and I am able to successfully manage risk associated with creating and growing a business.

Capacity

➢ Evaluate your capacity related to the following business skills. Consider not only your own capacities, but also the capacities of the other members of your management team. Rate yourself on a scale of 1 to 10 with 1 being no capacity and 10 being high capacity.

➢ Ability to assess market opportunities.

➢ Ability to develop products or services.

➢ Ability to provide products or services.

➢ Marketing and communications capacity.

➢ Fiscal management.

➢ Ability to acquire financial capital.

Support

➢ Evaluate the level of support you feel from your family and community as you pursue your business opportunities. Score on a 1 to 10 scale where 10 indicates strong agreement with the statement and 1 indicates little or no agreement with the statement.

- I am challenged and happy in my work building a business.

- I believe there is good balance between my work and my personal life.

- My family and friends are supportive of my work and encouraging to me.

- My community is supportive of me and my business.

BUSINESS GAME

Business game (also called business simulation game) refers to simulation games that are used at an educational tool for teaching business. Business games may be carried out for various businesses training such as: general management, finance, organizational behavior, human resources, etc. Often the term Business simulation is used with the same meaning.

Business games are used as a teaching method in Universities, and more particularly in business schools, but also for education. Simulation is considered to be an innovative learning method (Aldrich 2004), and are often computer-based.

THEMATIC APPERCEPTION TEST

The Thematic Apperception Test, or TAT, is a projective psychological test. Historically, it has been among the most widely researched, taught, and used of such tests. Its adherents assert that the TAT taps a subject's unconscious to reveal repressed aspects of personality, motives and needs for achievement, power and intimacy, and problem-solving abilities

Procedure: The TAT is popularly known as the *picture interpretation technique* because it uses a standard series of provocative yet ambiguous pictures about which the subject is asked to tell a

story. The subject is asked to tell as dramatic a story as they can for each picture presented, including the following:

- what has led up to the event shown
- what is happening at the moment
- what the characters are feeling and thinking
- what the outcome of the story was

The TAT is a projective test in that, like the Rorschach test, its assessment of the subject is based on what he or she projects onto the images which can be interpreted as the subject chooses. Therefore, to complete the assessment, each narrative created by a subject must be carefully recorded and analyzed to uncover underlying needs, attitudes, and patterns of reaction. Although most clinical practitioners do not use formal scoring systems, several formal scoring systems have been developed for analyzing TAT stories systematically and consistently.

STRESS MANAGEMENT

➢ Stress management refers to the wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving everyday functioning.

➢ In this context, the term 'stress' refers only to a stress with significant negative consequences, or distress in the terminology advocated by Hans Selye, rather than what he callseustress, a stress whose consequences are helpful or otherwise positive.

➢ Stress produces numerous physical and mental symptoms which vary according to each individual's situational factors. These can include physical health decline as well as depression. The process of stress management is named as one of the keys to a happy and successful life in modern society. Although life provides numerous demands that can prove difficult to handle, stress management provides a number of ways to manage anxiety and maintain overall well-being.

➢ Despite stress often being thought of as a subjective experience, levels of stress are readily measurable, using various physiological tests, similar to those used in polygraphs

TYPES OF STRESS

1. Acute stress: Acute stress is the most common form of stress. It comes from demands and pressures of the recent past and anticipated demands and pressures of the near future. Acute stress is thrilling and exciting in small doses, but too much is exhausting. A fast run down a challenging ski slope, for example, is exhilarating early in the day. Because it is short term, acute stress doesn't have enough time to do the extensive damage associated with long-term stress. The most common symptoms are:

- ❖ Emotional distress — some combination of anger or irritability, anxiety and depression, the three stress emotions.

- ❖ Muscular problems including tension headache, back pain, jaw pain and the muscular tensions that lead to pulled muscles and tendon and ligament problems.

- ❖ Stomach, gut and bowel problems such as heartburn, acid stomach, flatulence, diarrhea, constipation and irritable bowel syndrome.

- ❖ Transient over arousal leads to elevation in blood pressure, rapid heartbeat, sweaty palms, heart palpitations, dizziness, migraine headaches, cold hands or feet, shortness of breath and chest pain.

2. Episodic acute stress: There are those, however, who suffer acute stress frequently, whose lives are so disordered that they are studies in chaos and crisis. They're always in a rush, but always late. If something can go wrong, it does. Often, they describe themselves as having "a lot of nervous energy." Always in a hurry, they tend to be abrupt, and sometimes their irritability comes across as hostility. Interpersonal relationships deteriorate rapidly when others respond with real hostility. The workplace becomes a very stressful place for them.

The symptoms of episodic acute stress are the symptoms of extended over arousal: persistent tension headaches, migraines, hypertension, chest pain and heart disease. Treating episodic acute stress requires intervention on a number of levels, generally requiring professional help, which may take many months.

3. Chronic stress: Chronic stress comes when a person never sees a way out of a miserable situation. It's the stress of unrelenting demands and pressures for seemingly interminable periods of time. With no hope, the individual gives up searching for solutions. Chronic stress kills through suicide, violence, heart attack, stroke and, perhaps, even cancer. People wear down to a final, fatal

breakdown. Because physical and mental resources are depleted through long-term attrition, the symptoms of chronic stress are difficult to treat and may require extended medical as well as behavioral treatment and stress management.

4. Time Stress: You experience time stress when you worry about time, or the lack thereof. You worry about the number of things that you have to do, and you fear that you'll fail to achieve something important. You might feel trapped, unhappy, or even hopeless. Common examples of time stress include worrying about deadlines or rushing to avoid being late for a meeting.

5. Anticipatory Stress: Anticipatory stress describes stress that you experience concerning the future. Sometimes this stress can be focused on a specific event, such as an upcoming presentation that you're going to give. However, anticipatory stress can also be vague and undefined, such as an overall sense of dread about the future, or a worry that "something will go wrong."

6. Situational Stress : You experience situational stress when you're in a scary situation that you have no control over. This could be an emergency. More commonly, however, it's a situation that involves conflict, or a loss of status or acceptance in the eyes of your group. For instance, getting laid off or making a major mistake in front of your team are examples of events that can cause situational stress.

7. Encounter Stress: Encounter stress revolves around people. You experience encounter stress when you worry about interacting with a certain person or group of people – you may not like them, or you might think that they are unpredictable. Encounter stress can also occur if your role involves many personal interactions with customers or clients, especially if those groups are in distress. For instance, physicians and social workers have high rates of encounter stress, because the people they work with routinely don't feel well, or are deeply upset. This type of stress also occurs from "contact overload": when you feel overwhelmed or drained from interacting with too many people.

8. Emotional Stress: The pain of emotional stress can hit harder than some other types of stress. For example, the stress that comes from a conflicted relationship tends to bring a greater physical reaction and a stronger sense of distress than the stress that comes from being busy at work. Therefore, it is important to be able to manage emotional stress in effective ways. Strategies that help you to process, diffuse, and build resilience toward emotional stress can all work well, and different approaches can work in different situations. Here are some ways to manage emotional stress.

STRESS MANAGEMENT TECHNIQUES

1. Exercise: Exercise can be a key, central method to compensate for stressors. Physical exercise not only promotes overall fitness, but it helps you to manage emotional stress and tension as well. Exercise can also aid in relaxation and improve sleep. For one thing, exercise can emotionally remove one temporarily from a stressful environment or situation. Being fit and healthy also increases your ability to deal with stress as it arises.

2.Relaxation techniques and meditation: There are many ways to use structured relaxation techniques to help control stress and improve your physical and mental well-being. While some types of meditation and relaxation therapies are best learned in a class, it's also possible to learn meditation techniques on your own.

3.Autogenic training: Autogenic training has been used by physicians as a part of therapy for many conditions. Popular in Europe (where it is even covered by some insurance plans), this method is currently gaining acceptance in the United States. No particular physical skills or exercises are involved; however, people desiring to learn this technique must be prepared to invest time and patience.

- **Biofeedback:** Biofeedback is one method of learning to achieve relaxation, control stress responses, or modify the body's reactions through the use of monitoring equipment that provides information from the body which would normally not be available.

- **Imagery:** Imagery, sometimes referred to as guided imagery, is the use of pleasant or relaxing images to calm the mind and body. By controlling breathing and visualizing a soothing image, a state of deep relaxation can occur. This method can be learned by anyone and is relatively easy to try out.

4. Meditation techniques: Ranging from practices associated with specific religions or beliefs to methods focusing purely on physical relaxation, meditation is one of the most popular techniques to achieve physical and mental relaxation. There are thousands of different types of meditation, and many can be learned on your own. The meditative state is one in which there is a deep centering and focusing upon the core of one's being; there is a quieting of the mind, emotions, and body.

5. Progressive muscle relaxation: Progressive muscle relaxation is a method developed in the 1930s in which muscle groups are tightened and then relaxed in succession. This method is based upon the idea that mental relaxation will be a natural outcome of physical relaxation. Although muscle activity is involved, this technique requires no special skills or conditioning, and it can be

learned by almost anyone. Progressive muscle relaxation is generally practiced for 10-20 minutes a day. As with the relaxation response, practice and patience are required for maximum benefits.

6. Yoga: There are many forms of yoga, an ancient Indian form of exercise based upon the premise that the body and breathing are connected with the mind. The practice of yoga is thought to be over 5,000 years old. One goal of yoga is to restore balance and harmony to the body and emotions through numerous postural and breathing exercises.

7. Deep Breathing: Deep breathing is a simple but very effective method of relaxation. It works well in conjunction with other relaxation techniques such as Progressive Muscular Relaxation, relaxation imagery and meditation to reduce stress. To use the technique, take a number of deep breaths and relax your body further with each breath. That is all there is to it!

8. Humour: Humour is one of the greatest and quickest devices for reducing stress. Humour works because laughter produces helpful chemicals in the brain. Humour also gets your brain thinking and working in a different way - it distracts you from having a stressed mindset. Distraction is a simple effective de-stressor - it takes your thoughts away from the stress, and thereby diffuses the stressful feelings.

9. Crying: Not much is known about the physiology of crying and tears, although many find that crying - weeping proper tears - has a powerful helpful effect on stress levels. Whatever the science behind crying, a good bout of sobbing and weeping does seem to release tension and stress for many people.

ENTREPRENEURSHIP DEVELOPMENT PROGRAMS

Meaning

Entrepreneurial Development Programme means a programme conducted to help a person in strengthening his entrepreneurial motive and in acquiring skill and capabilities required for promoting and running an enterprise efficiently. A programme which is conducted with a motive to promote potential entrepreneurs, understanding of motives, motivational pattern, their impact on behaviour and entrepreneurial value is termed as entrepreneurial development programme. There are a number of programmes which give information to the prospective entrepreneurs regarding new business idea, how to set up a new venture, how to prepare a project report, sources of finance etc. These Programmes should not be confused with EDP; these are all a part of EDP. EDP is primarily concerned with developing, motivating entrepreneurial talent and understanding the impact of motivation on behavior.

A well designed EDP envisages three tiered approach:

1. Developing achievement motivation and sharpening entrepreneurial   traits and behaviour.

2. Guidance on industrial opportunities, incentives, facilities and rules and   regulations.

3. Developing managerial and operational capabilities.

Need for EDP

Entrepreneurs are considered as agents of economic growth. They create wealth, generate employment, provide new goods and services and raise the standard of living. EDP is an effective way to develop entrepreneurs, which can help in accelerating the pace of socio-economic development, balanced regional growth, and exploitation of locally available resources. It can also create gainful self-employment. An EDP equips entrepreneurs and makes them competent to anticipate and deal with a variety of problems that any entrepreneur may have to face. It gives confidence to the entrepreneur to face uncertainties and take profitable risks. It prepares them to deserve   and   make   good   use   of   various   forms   of   assistance. EDP can be beneficial in the following ways:

➢ **Economic Growth:** EDP is a tool of industrialization and path to economic growth through entrepreneurship.

➢ **Balanced Regional Development:** EDP helps in dispersal of economic activities in different regions by providing training and other support to local people.

➢ **Eliminates Poverty and Unemployment:** EDPs provide opportunities for self-employment and entrepreneurial careers.

➢ **Optimum use of Local Resources:** The optimum use of natural, financial and human resources can be made in a country by training and educating the entrepreneurs.

➢ **Successful Launching of New Unit :** EDP develops motivation, competence and skills necessary for successful launching, management and growth of the enterprise.

➢ **Empowers New Generation Entrepreneurs :** EDP, by inculcating entrepreneurial capabilities and skill in the trainees, create new generation entrepreneur who hitherto was not an entrepreneur

OBJECTIVES OF EDP

The basic objectives of EDP are to:

The main objectives of an entrepreneurial development programmed are:

1. To identify and train the potential entrepreneurs in the region;

2. To develop necessary knowledge and skills among the participants in EDPSs.

3. To impart basis managerial knowledge and understanding;

4. To provide post-training assistance;

5. To develop and strengthen entrepreneurial quality and motivation;

6. To analyze the environmental issues related to the proposed project;

7. To help in selecting the right type of project and products;

8. To formulate the effective and profitable project;

9. To enlarge the supply of entrepreneurs for rapid industrial development;

10. To develop small and medium enterprises sector which is necessary for employment generation and wider dispersal of industrial ownership?

11. To industrialize rural and backward regions;

12. To provide gainful self-employment to educated young men and women;

13. To diversity the source of entrepreneurship;

14. To know the pros and cons of being an entrepreneur.

15. To provide knowledge and information about the source of help, incentives and subsidies available from government to set up the project;

16. To impart information about the process, procedure and rules and regulations for setting up a new projects.

POSSIBLE QUESTIONS

1. What is meant by Entrepreneur and Explain in detail about the types of entrepreneur?

2. Explain in detail about the motives influencing entrepreneur development.

3. Define stress management and explain its methods in detail.

4. Explain the functions of entrepreneur in detail

5. Explain in detail about Entrepreneurship in Economic Growth.

6. Elaborate in detail about the steps involved in entrepreneurial process.

7. Explain in detail about factors influencing Entrepreneurship in Economic Growth.

8. Elaborate in detail about various stress management techniques.

9. Difference between Entrepreneur and Intrapreneur.

10. Elucidate the objectives of entrepreneurial development programmes.

11. Describe the role of entrepreneurship in economic development.

12. Describe the functions of Entrepreneurs.

13. Discuss the need of entrepreneurship in economic growth.

14. What are the motives influencing an entrepreneur. Explain in detail.

15. Describe the need of entrepreneurship in economic development.

16. Describe the qualities of Entrepreneurs.

17. Explain in detail about the types of stress management.

18. What are the methods to following the controlling the stress.

19. Discuss in detail about the entrepreneurs development in the society.

20. What are the major motives influencing entrepreneurs growth.

21. Write a short notes on : (i) Self rating   (ii) Business game

22. Describe in detail about the achievement motivation training.

23. What are the steps to following the achievement motivation training?

24. Explain in detail about the need and objectives of the entrepreneurship development programmes.

25. Write a short notes on: (i) Entrepreneurs   (ii) Intrapreneurs

question	opt1	opt2	opt3	opt4	opt5	opt6	answer
The father of Scientific Management is_____	F.W. Taylor	Henry Fayol	Charles Babbage	Louis Allen			F.W. Taylor
Management is _____	Pure Science	Applied Science	Art	Science and Art			Science and Art
Administrative function is _____ management functi	Top level	Middle level	Lower level	Top to lower level			Top level
Henry Fayol stated _____ principles	14	15	20	24			14
Functional organization was organized by_____	F.W. Taylor	Henry Fayol	Charlas	Marshall			F.W. Taylor
_____ function comprises the activities of selection	Planning	Organizing	Staffing	Controlling			Staffing
Principles of Management can be applied to_____	Big organizations	All organizations	Small organizations	Tiny organizations			All organizations
Division of work promotes_____	Specialization	Efficiency	Wastage	Confusion			Efficiency
In the _____management system each member of the organization effectively participates and involves himself.	MBE	MBO	MBG	MBA			MBO
Assigning a work to others and delegate them with adequate authority is the process of _____	Delegation	Decentralisation	Division of work	Direction			Division of work
MBO was introduced by _____	Peter F.Drucker	Elton Mayo	Frank B.Gilbreth	Henry Fayol			Peter F.Drucker
Implementation of policy is concerned with _____	Management	Administration	Business	Profession			Management
_____ is the determination of future course of actio	Planning	Directing	Motivating	Organising			Planning
_____ has given a keyword POSDCORB	Luther Gulick	Mc Cllenand	Mc Gergor	F.W. Taylor			Luther Gulick
Esprit de corps means_____	Union is strength	service is our motto	Buyer seware	None of the above			Union is strength
Which is the basic function of management_____	Planning	Directing	Motivating	Organising			Planning
which actuates the organizational methods to work efficiently for achievement of organizational purposes_____	Planning	Directing	Motivating	Organising			Directing
Which implies measurement of accomplishment against the standards and correction of deviation if any to ensure achievement of organizational goals_____	Planning	Directing	Motivating	Controlling			Controlling
What is the first step in Planning_____	Establishing objectives	Analysis the environment	Selection of a cours	Sequence of operation			Analysis the environment
Which is the oldest formal approach of management thou	Classical approach	Behavioral approach	Quantitative approa	Systems approach			Classical approach
The major contributor to bureaucratic management_____	Max Weber	Peter F.Drucker	Henry Fayol	F.W. Taylor			Max Weber
Objectives may be defined as the goals which an organiza	Planning	achieve goal	controlling	staffing			achieve goal
The time study is to determine the proper time for perform	system	operation	controlling	motivating			operation
The first men who advocated the view that the management should can be target	F.W.Taylor	Peter drucker	Henry fayol	Mc Gergor			Peter drucker
Division of work or specialization alone can give maximu	power	productivity and efficienc	support	Controlling			productivity and efficiency
Who fills up the gap which exists between functional and	Top level	Middle level	Lower level	All the above			Middle level
Which level of management is also called as supervisory	Top level	Middle level	Lower level	None of the above			Lower level
_____ is the primary function of management	Planning	controlling	Motivating	staffing			Planning
Organizing is the distribution of work in GroupWise or se	profit maximisation	tatget fix	effective performan	auditing			effective performance
Responsibility is_____	Delegation of power	Power of command	Obligation to do du	Delegation of Duty			Obligation to do duty
The actual performance of a work starts with the function	direction	planning	communication	decision making			direction
_____ is the process of passing information, experience	decision making	controlling	communication	profit planning			communication
One of the earliest and most enduring descriptions of man	Adam Smith.	Peter Drucker.	Jack Welsh.	Henry Mintzberg.			Henry Mintzberg.
planning first step is_____	Sequence of operation	Analysis the environment	derivative plans	Feed back			Analysis the environment
Objectives may be defined as the goals which an organiza	coordinating	achieve goal	controlling	planning			achieve goal
Objectives must be set in _____	clear cut terms	history	target	feed back			clear cut terms
_____ increases employee job satisfaction and com	staffing	motivation	tranning	planning			motivation
The strategy must be consistent with the_____ environ	internal	history	external	decision making			external
Policies are general statements or understandings that gui	communication	decision making	stratergy	policies			decision making
A policy should be translatable into the _____	practices	stratergy	decision making	Feed back			practices
_____ are identified as the anticipated environment i	decision making	Planning premises	staffing	communication			Planning premises
External Premises is _____	social	organistion	sales forces	workere			social
Forecasting is a process of predicting or estimating the fu	record	experts	recommondation	past and present data			past and present data
_____ in concerned with future events	forecasting	planning	communication	strategy			forecasting
Which one of the following can be delegated in managem	authority	responsibility	accountability	none of the above			authority
The number of persons reporting directly to a superior pe	communicating	coordinating	span of control	Directing			span of control
Top management functions are the most important becaus	overall organization	specific problems	routine problems	extradinay problems			overall organization
The decision-maker has freedom to choose an _____	alternative	problem	stratergy	controlling			alternative
Which one of the following is not a planning premises___	Internal	controllable	tangible	remedial			Internal
_____ decisions are decisions taken to meet nor	programmed	Non-programmed	Tactical Decisions	Strategic Decisions			Non-programmed
The need for decision making arises in order to achieve co	specific objectives.	Problem Identification	Search for Alternati	Choice of Alternative			specific objectives.
Sales forecasting is not related to estimating_____	Industry sales	company sales	territory sales	sales performance			company sales
_____ refers to the structure of jobs and positions with	informal organisation	formal organization	company	management			formal organization
Informal organization is not established by any formal __	authority	power	command	rights			authority
The formal organization does not consider the goals of the	organisation	individuals	public	private			individuals
_____ helps in formulating training programme	diagram	graph	organisation chart	paragraph			organisation chart
Specific and detailed guide to action is called_____	Rule	procedure	policy	strategy			Rule
Delphi technique is associated with_____	Decision making	planning	coordination	leadership			planning
Which one of the following is a feature of a good plan___	Consistency	highly ambitious targets	financial procedure	rigid targets			Consistency
MBO denotes_____	Management by objecti	management by objection	management by orie	management by opinions			Management by objectives

question	opt1	opt2	opt3	opt4	opt5	opt6	answer
According to Herzberg, which of the following is a maintenance factor_____	Salary	work itself	responsibility	recognition			Salary
According to Abraham Maslow, the most elevated type of need is_____	Safety	esteem	self – actualization	physiological			physiological
Which one of the following theories is a process theory of	Maslow's need hierarchy	vroom's valence expectancy	motivation – hygiene	equity theory			motivation – hygiene
According to Maslow's need hierarchy theory, which of the	physiological, safety, social, esteem, self-actualization	safety, social, esteem, physiological, self-actualization	self- actualization , safety, esteem, social, physiological	physiological, safety, esteem, social, self-actualization			physiological, safety, esteem, social, self- actualization
Which one of the following aspects of managing has not been emphasized by McGregor's theories X and Y_____	planning	organizing	directing	appraising			planning
Which one of the following is not a form of autocratic lead	strict	benevolent	incompetent	free-rein			free-rein
Communication begins with_____	encoding	idea generation	decoding	channel selection			idea generation
Which one of the following is not an element of communic	encoding	channel	Receiver	Measurement			Measurement
On which form of communication do managers spend max	oral communication	written communication	Non-verbal commun	pictorial communication			oral communication
Grapevine is a type of_____	informal communication	formal communication	written communicat	pictorial communication			informal communication
Which one of the following is not an element of direction_	guiding employees	instructing employees	motivating employee	controlling employees			controlling employees
Which one of the following principles is related to purpose	unity of command	Managerial communicatio	maximum individua	principle of leadership			principle of leadership
Which one of the following is not an element of empowerm	delegation of authority	goal setting	self – management	control mechanism			goal setting
Which one of these is used for motivation_____	job simplification	job rotation	job enlargement	job enrichment			job rotation
Which one of the following factors is used improving quali	flexible work schedule	tall organization structure	tight work schedule	financial incentives			flexible work schedule
The concept of power refers to_____	defined authority and re	a relative hierarchical posi	the ability to influen	the specialized knowledge possessed by			the ability to influence the behavior of others
on which type of leadership, has the recent emphasis been	transformational leaders	transactional leadership	autocratic leadership	Democratic Leadership			transactional leadership
_____ is a physical or cognitive property of an indivi	Human Factor	Psychological Factor	Historical Factor	Individual Factor			Human Factor
_____ involves the study of factors and development	Psychological Factor	Human Factor	Individual Factor	Historical Factor			Human Factor
_____ is defined as the production of new and useful	Creativity	Distillation	Incubation	Perspiration			Creativity
_____is defined introduction of a new idea	Creativity	Innovation	Incubation	Perspiration			Innovation
Which is generally used in exploiting existing ideas	Incremental innovation	Radical Innovation	Perspiration	Incubation			Incremental innovation
_____ is defined as the art or process of influencin	Motivation	Leadership	Communication	Innovation			Leadership
Who retains much power and decision-making authority _	Autocratic Leader	Democratic Leader	Free-Rein Leader	Participative Leader			Autocartic Leader
Which leadership style promotes the sharing of responsibil	Democratic Leader	Free-Rein Leader	Participative Leader	Autocratic Leader			Democratic Leader
Who doesnot consult employees, nor they are allowed to g	Autocratic Leader	Participative Leader	Free-Rein Leader	Democratic Leader			Autocartic Leader
Which leadership style effectively delegate tasks to subord	Free-Rein Leader	Autocratic Leader	Democratic Leader	Participative Leader			Democratic Leader
Which leadership style tends to minimize the amount of direction and face time required_____	Autocratic Leader	Free-Rein Leader	Transactional Leade	Democratic Leader			Free-Rein Leader
_____process of stimulating people to actions to acc	Creativity	Motivation	Innovation	Incubation			Motivation
Who formulated Theory X & Theory Y_____	McGregor	Henry Fayol	F.W.Taylor	Victor Vroom			McGregor
Who formulated motivation hygiene theory_____	Frederick Herzberg	McGregor	Henry Fayol	F.W.Taylor			Frederick Herzberg
Which theory was formulated by victor vroom_____	ERG theory	Expectancy theory	Equity theory	Motivation-hygiene theory			Expectancy theory
Which is also called as Two- factor theory_____	Motivation-hygiene theo	Maslow's hierarchy of nee	Vroom's Expectanc	Theory X and theory Y			Motivation-hygiene theory
Which type of motivation is generally based on reward	Postive Motivation	Negative Motivation	Intrinsic Motivation	Extrinsic Motivation			Postive Motivation
Which type of motivation is based on force and fear_____	Extrinsic Motivation	Intrinsic Motivation	Postive Motivation	Negative Motivation			Negative Motivation
_____ is an attempt to motivate employees by givi	Job simplification	Job rotation	Job enlargement	Job enrichment			Job enrichment
_____is important in building and sustaining huma	Creativity	Innovation	Communication	Incubation			Communication
The person who initiates the communication process is kno	Sender	Encoder	Decoder	Receiver			Sender
_____ is the medium through which the message t	Encoding	channel	Decoding	Feedback			channel
What is the use of decoding in communication process___	Interpreting	Analysing	Executing	Evaluating			Interpreting
Which is the final link in the communication process ___	Encoding	Feedback	Decoding	Receiving			Feedback
_____ follows the chain of command	Formal communication	Informal communication	Verbal communicat	Non Verbal communication			Formal communication
_____refers to the passing of message within a dep	Verbal communication	Horizontal communication	Formal communicat	Vertical communication			Horizontal communication
_____is a process which guides activity towards so	planning	organizing	directing	controlling			controlling
_____helps in measuring the actual performance a	planning	controlling	directing	organizing			controlling
_____ measures performance results in terms of qu	Input Standards	Output Standards	Performance Standa	Established standards			Output Standards
_____ measures work efforts in to performance tas	Output Standards	Input Standards	Established standard	Performance Standards			Input Standards
Which ensures the overall directions of individuals and gro	planning	controlling	organizing	directing			controlling
Which helps to ensure the objectives and accomplishments	directing	organizing	planning	controlling			controlling
Which is the final step in control process_____	Establish objectives and	Measure actual performan	Compare results wit	Take necessary action			Take necessary action
_____ is the process of providing information to th	planning	Reporting	directing	Organising			Reporting
_____is carried out once the deviations from the p	Preventive control	Direct control	Indirect Control	Effective Control			Direct control
_____ is based on the idea that most of the negativ	Indirect Control	Preventive control	Effective Control	Direct control			Preventive control
The central principle which derives from McGregor's Theo	Directional and control	Co-ordination	Scalar Principle	Integration			Integration
Equity – Inequity theory was propagated by _____	Adam	Frederick Herzberg	McGregor	Henry Fayol			Adam
Maslow Need Hierarchy starts with_____	Social	Phsysiological	Esteem	Safety			Phsysiological
The purpose of job enrichment is to_____	expand the number of ta	increase job efficiency	increase job effectiv	increase job satisfaction of middle management			increase job effectiveness
While guiding organization members in appropriate direct	consideration behavior	authoritarian behavior	Theory Y behavior	leadership behavior			leadership behavior
One of the most helpful mechanisms for refining a spoken or written communication is called the_____	grapevine	counseling service	five C ' s	complaint system			five C ' s
_____is the sharing information to one per	planning	communication	directing	Direct control			communication

question	opt1	opt2	opt3	opt4	opt5	opt6	answer
Ethics is an activity which concerns with making ____	Activity	Investigation	Knowledge	Attributes			Investigation
Engineering Ethics gives a total view of the____	Moral problems	Moral Values	Attitudes	Beliefs			Moral problems
Ethics is also used as a means of describing the ____	Beliefs,Attitudes & hab	Organisation	Attitudes & respons	Leadership			Beliefs,Attitudes & habits
Moral reasons include____	Connecting people	Others & Ourselfs	Management	Diversification			Others & Ourselfs
What are the approaches to engineering ethics____	Micro & Macro Ethics	Formal ethics	Informal Ethics	None of the above			Micro & Macro Ethics
The inquiry which is guiding the individuals & groups in	Conceptual Inquiries	Normative Inquiries	Factual Inquiries	Descriptive Inquiries			Normative Inquiries
What describes the meaning of concepts,principles and iss	Factual Inquiries	Normative Inquiries	Conceptual Inquirie	Descriptive Inquiries			Conceptual Inquiries
The engineer has to conduct ____	Normative Inquiries	Factual Inquiries	Descriptive Inquirie	Conceptual Inquiries			Factual Inquiries
____ can also called moral problen	Accidents	Technology	Creativity	Moral Dilemmas			Moral Dilemmas
Autonomy means____	Self governing	Self Interest	Self respect	Self attitude			Self governing
Moral autonomy is based on the____	Social convention	Social Interest	Psychology	Satisfaction			Psychology
Moral autonomy is a ____ of thinki	Habit	Skill and habit	Knowledge	Skills			Skill and habit
The first psychological theory was developed by ____	Alfred marshall	Jean Piaget	Dam Shan	Shan Alfrad			Jean Piaget
____ level is related to the moral de	Pre conventional level	conventional level	Post conventional le	Pre and Post conventional level			Pre conventional level
No adult tries to go beyond this level is ____	conventional level	Pre conventional level	Post conventional le	Pre and Post conventional level			conventional level
____ want to live by general princi	Pre and Post convention	Post conventional level	Pre conventional lev	conventional level			Post conventional level
____ was one of the students of Ko	Caorl Gilligan	Jean Piaget	Alfred marshall	Dam Shan			Caorl Gilligan
Kohlberg's first level is ____	Pre conventional level	Post conventional level	conventional level	None of the above			Pre conventional level
women don't want to hurt others is ____	Post conventional level	conventional level	Pre conventional lev	None of the above			conventional level
Ethics is the branch of Philosophy concerned with ____	Moral principles	Moral Values	Moral attitudes	Moral Dilemmas			Moral principles
"Profession" means a____	Obey	job	skill	Respect			job
morals are concerned with the principles of ____	right and wrong	wrong	right	correct			right and wrong
____ is the quality of being honest	division	Investigation	Creativity	Integrity			Integrity
____ leads to self-respect and pride	Moral Values	Creativity	Integrity	Moral attitudes			Integrity
____ that help in guiding various er	Moral principles	Moral Values	Moral Dilemmas	Moral attitudes			Moral Values
____ approach stresses more about	Micro & Macro Ethics	Micro Ethics	Macro Ethics	None of the above			Micro Ethics
____ approach deals with all the social pr	Macro Ethics	Micro & Macro Ethics	Micro Ethics	None of the above			Macro Ethics
There are____ types in Inquiries	2	3	5	6			3
Autonomy means being ____	Independent	Safe	Culture	Beliefs			Independent
Moral Autonomy is defined as the ____	Skill and Habit	Habit	Skill	Wright and Wrong			Skill and Habit
General agreement of opinion is termed as ____	Consensus	Controversy	Comparitive	Creativity			Consensus
Authority is very much required in a classroom environm	Training	Practice	Learning	Teaching			Learning
The prime aim of the profession of engineering is to prom	Public good	Public Safe	Public Welfare	None of the above			Public good
Guardian role states that an engineer should be in a ____	Co ordination	Decision Making	Premises	Planning			Decision Making
Burecuicratic servant role states that an engineer should a	Calm	Loyal	Love	Affective			Loyal
Game player role uses the ____ ru	Economic games	Political games	Timing	None			Economic games
There are____ theories in right actic	4	5	2	1			4
The utilitarian theory suggests that the plans and actions s	Controverst	Consequences	Creativity	All the three			Consequences
The theory based on rights states that all people have____	Basic rights	Basic good	Basic things	Wright and Wrong			Basic rights
____ simply means looking after o	Self interest	Self attitides	Self respect	Self decision			Self interest
Ethical egoism concentrates only on an individual in satif	Self attitides	Self interest	Self decision	Self respect			Self interest
____ appear to be tangable and cle	Customs and Laws	Customs	Laws	Rights			Customs and Laws
Good moral judgement is the one that solves____	Moral principles	Moral Values	Moral Dilemmas	Moral Autonomy			Moral Dilemmas
Ethical theories help in identifying the reasons that have l	Moral Dilemmas	Moral Autonomy	Moral Values	Moral principles			Moral Dilemmas
Ethical theories help in identifying the kind of informatio	Moral Autonomy	Moral Dilemmas	Moral principles	Moral Values			Moral Dilemmas
Ethical theories help in ____ moral	Prioritizing	Customs	Values	Duties			Prioritizing
Ethical theories help in identifying the various alternative	Self attitides	Moral principles	Moral Dilemmas	Moral Values			Moral Dilemmas
Ethical theories help in justifying to others why a particul	Moral Values	Basic good	Moral principles	Moral Dilemmas			Moral Dilemmas
The theory help in strengthening one's ability to make bal	division	Moral Dilemmas	Moral principles	Moral Values			Moral Dilemmas
Ethical theory explain the obligation are ____	Health	Welfare	Safety,health & We	Safety			Safety,health & Welfare
The primary objective an engineer is to bring out safe tech	private	public	rural	None of the above			public
The justifications given by both ethical theories and ordin	one and the same	one and two are same	one same	two and three same			one and the same
Engineers should consider ____ to	Service	Duty	Training	practice			Service
Ethical relativism attempts to reduce ____	Obligation	Moral Values	Moral principles	Moral Dilemmas			Moral Values
Ethical egoism tells that each person is the best judge of tl	Self values	Self rating	Self respect	Self interest			Self interest
Obligation are not duties but actions done due to one's ow	goodness	Bad things	Normal	None			goodness
____ help in understanding attainm	Dams theory	Kohlberg's theory	Gilligan's theory	None			Gilligan's theory
Gilligans has said that women are different,but they are no	inferior	polite	Brave	Strong			inferior
There are____ approaches in Engin	2	1	0	3			2
____ include respecting others and	Moral Dilemmas	Moral Autonomy	Moral attitudes	Moral reasons			Moral reasons

question	opt1	opt2	opt3	opt4	opt5	opt6	answer
_____ refers generally to societal and politi	Social convention	Social control	Ethics	Social Changes			Social control
Internalisation of norms and values by a process known as	Socialization	Society	Social view	Social control			Socialization
_____ began to be studied as a separate fie	Social Control Theory	Public Base Theory	Economic Theory	None			Social Control Theory
_____ influenced the individual directly thro	Individual	Society	Family	Group			Family
_____ has a feeling or sentiment of local un	Neighborhood	Society	Family	Friend			Neighborhood
The _____ is the first community with whi	Society	Friend	Neighborhood	Family			Neighborhood
_____ regarded as an institutionalized expre	School	Church	College	All the three			Church
The authority of the church was recognized and accepted	Individual	Friend	People	None of the above			People
_____ adopts negative as well as positive m	Ego	Self Interest	Religion	Customs			Religion
_____ exercises social control through educe	School	Home	Temple	Church			School
_____ is very powerful and the most effect	Social control	Group discussion	Administration	Co ordination			Administration
_____ not only controls the behavior of peop	Institution	Public opinion	Private opinion	Group			Public opinion
_____ is a systematic attempt by a individ	Integrity	Controversy	Discussion	Propaganda			Propaganda
An _____ is a set of folkways and mores	Environment	institution	Interest	Integrity			institution
_____ as an institution helps develop knowl	Education	Economy	Government	Political			Education
_____ is a system of organized relationship	Relative	Neighbour	school	Family			Family
_____ also provides a foundation for the mo	Society	Hindu	Religion	Caste			Religion
_____ is anything which lots of people do, a	Duty	Religion	Custom	Respect			Custom
The meaning of culture is similar to the meaning of _____	Economy	Respect	Religion	Custom			Custom
Customs also provide the solid ground for the formulation	Law	Obey	Religion	Respect			Law
Law divorced from custom is bound to become_____	artificial	Natural	Attractive	Creativity			artificial
Customs are so dominant and powerful that they can be ca	King	King of economic	King of man	King of Forest			King of man
_____provides a means by which individuals ca	Religion	Self work	Self interest	Custom			Religion
_____opinion is very powerful in the d	dealers	Public	Share holders	private			Public
The church and the priests were held in high_____	knowledge	stress	esteem	ego			esteem
_____enforced by government to prevent th	External sanctions	Organisation	Management	Internal sanctions			External sanctions
_____is the most specialized and highly furnis	economy	education	Law	Professional			Law
_____forces the individual to obey so	Administration	Controversy	Management	Organisation			Administration
_____is ancient as society itself	quality	skill force	mental force	Physical force			Physical force
_____also makes people, obey social c	quality	Force	mental force	skill force			Force
Values have major influence on _____	behavior	culture	obligation	rights			behavior
The monetary worth of something in areas such as _____	Accounting	Social	Science	innovation			Accounting
_____is absolute or relative and ethical	value system	A personal value	ethical values	Moral Values			A personal value
Values can be defined as broad preference concerning app	culture	courses of action	motivation	promotion			courses of action
personal values modelling period from_____years	8-13 years	6-12 years	5-10 years	2 years			8-13 years
Individual-_____emphasize values which their n	cultures	moral education	democracy	norms			cultures
Folkway the learned behavior, shared by a _____	social group	engineer	promotor	individual			social group
Folkways are the recognized ways of _____	motivation	behavior	norms	laws			behavior
_____can be defined as attitudes and bel	Norms	laws	Culture	values			Norms
_____is a norm that is written down and en	law	social changes	values	norms			law
The word_____denotes a difference in an	change	culture	norms	values			change
culture specific laws are simply those which reflect the va	regulations	Human action	culture	changes			culture
_____refers to the modification in wages o	value system	Safe bets	social changes	culture specific			social changes
social changes is a _____phenomenon	time factor	universal	particular	uniform			universal
social changes occurs in the life of the entire_____	Economic	society	community	Political			community
social changes also is _____	artifial	nature	creativity	innovation			nature
social change results form the intraction of a number of_	changes	production	factor	selling			factor
some thinkers subscribe to the_____of s	cyclic theory	motivation theory	linear theory	gilligans theory			linear theory
personal values socialization period start from _____	1 to 7 years	13 to 21 years	8 to 13 years	22 to 25 years			13 to 21 years
_____provide the solid ground for the formula	Customs	values	norms	culture			Customs
As groups, organisation have their own_____	customs	norms	values	ethics			norms
_____vary from culture to culture	norms	customs	laws	social changes			norms
social changes in urban areas is faster than in _____	cities	rural	remote villege	society			rural
moderb saociety is in the _____stage	starting	developing	last	moderate			last
cyclical nature of social change may be called theoris of_	linear theory	cultural theory	cyclic theory	phenomenon			cultural theory
To satisfy our desire for change and our changing needs _	social changes	values	laws	norms			social changes
values have been studied in various disciplines	science	Political	behavioral economi	theories			behavioral economics
_____provide an internal reference for what is go	personal values	principle value	ethical values	virtues			personal values
norms are the specific_____expectations fo	values	culture	social changes	laws			culture
A society pattern of living is a dynamic system of _____	inter related	motivated	formation	innovation			inter related

question	opt1	opt2	opt3	opt4	opt5	opt6	answer
Who can start a business_____	Only highly educated pe	Only an uneducated perso	Only rich person	Any one of the above			Any one of the above
While selecting of line a business, an entrepreneour must	Profitability	Risk involved	Profits	All above			All above
Point out the quality in an entrepreneur_____-	Initiative	Lack of experience	Lack of confidence	Lack of decision making ability			Initiative
Entreprenur undertake_____-	calculated risk	high risk	low risk	moderate and calculated risk			high risk
For small business owners, one of the most important obje	market presence	growth	profitability	innovation			innovation
Which of the following is not considered a common chara	Internal locus of control	High need for achievemen	Self-confidence	External locus of control			Internal locus of control
which of the following is not a function of the entrepren	Risk taking	innovation	provision of capital	day to day conduct of business			day to day conduct of business
Knowledge + Skill + Traits = _____	Innovation	Competency.	Skill	Creativity.			Competency.
The capacity to develop new ideas, concepts and processe	Innovation	invention	skill	creativity			creativity
An entrepreneur is the _____ of the e	owner	employee	customer	supplier			owner
The object of job training is to increase the_____	confidence	knowledge of worker	experience	promotion			knowledge of worker
who introduces new goods, inaugurates new method of pr	Imitative Entrepreneurs	Fabian Entrepreneurs	Innovating Entrepre	Drone Entrepreneurs			Innovating Entrepreneurs
EDP help in selecting the right type of project and ____	Promotion	innovation	Product	Formulation			Product
Entreprenur catalyst for social_____	Demand	Change	Risk	Development			Change
Drone entrepreneurial activity may be resticted to just ___	1 or 3	1 or 2	2 or 3	3 above			1 or 3
who participate in managing the daily roution of the busin	sole proprietors	active partners	inventors	challengers			active partners
Entrepreneurship promotes_____	capital formation	Achievement	unemployment	service			capital formation
who combines various factors of production to produce a	manager	intrapreneur	Entrepreneur	seller			Entrepreneur
Entrepreneurship is the process of _____ in the mar	Employment	Opportunities	Production	Selling			Opportunities
Initative entreprenur is also known as_____	Innovative entrepreneur	drone entrepreneur	fabian entrepreneur	imitative entrepreneur			imitative entrepreneur
which entrepreneurs prefer to setup their business individ	active partners	sole operators	investors	challengers			sole operators
Private entrepreneur is motivated by_____	service	capital	profit	efforts			profit
who explore opportunities to purchase the existing units_	life timers	buyers	challengers	inventors			buyers
who involves themselves in research & development activ	challengers	inventors	life timers	buyers			inventors
who wants promotion and other traditional corporate rewa	manager	entrepreneur	intrapreneur	customer			manager
_____ development is the effect of entreprene	political	social	Economic	service			Economic
Entrepreneurship is the best way to fight the evil of____	national income	profit	export	unemployment			unemployment
An increasing number of entrepreneurs are required to icr	supply	demand	service	economic			demand
The growth of industry and business leads to a lot of ___	private	service	group	public			public
who brings economic development through innovation___	intrapreneur	manager	Entrepreneur	customer			Entrepreneur
motivation means_____	movement	Achievement	power	goal			movement
what is the need satisfying and goal seeking behaviour__	development	promotion	motivation	formation			motivation
_____scale is something we use to assess our at	business game	self rating	motivation	promotion			self rating
Business game is also called business_____	self rating	development	achievement	simulation game			simulation game
Business games are used a method in _____	universities	production	selling	marketing			universities
Thematic apperception test is projective _____test	social	psychological	economic	effective			psychological
Thematic apperception is popularly known as the _____	chart	diagram	picture	theory			picture
The standard version of the test contains _____picture	30	10	50	20			20
Stress management refers to the _____spectrum	wide	small	economic	social			wide
_____ is named as one of the key to happy & success	thematic apperception	stree management	self rating	motivation			stree management
_____ is the most common form of stree among hu	chronic stress	stressor	acute stress	active stress			acute stress
chronic stree is unlike _____stree	acute	chronic	memory	Development			acute
The talents of entrepreneurs can be raised by undertaking	motivation	formulation	development	service			development
_____ is the source of entrepreneurship	Profitability	diversity	supply	demand			diversity
The entrepreneur formulate the effective and profitable__	resources	innovation	projects	employment			projects
An entrepreneur is an _____--	society	individual	board of director	manager			individual
_____ entrepreneurs imitate the existing entrepre	Innovative entrepreneur	Fabian entrepreneurs	imitative entrepren	Drone entrepreneurs			imitative entrepreneur
An entrepreneur is the economic_____	customer	agent	employee	manager			agent
who imitates other innovations _____	Innovative entrepreneur	Fabian entrepreneurs	imitative entrepren	Drone entrepreneurs			Fabian entrepreneurs
Drone entrepreneur always feel comfortable with their old	production	selling	supply	innovation			selling
The developed countries most entrepreneurs deal with___	large scale	smale scale	sole operator	group			large scale
Sole operators operate their business mainly in the form o	proprietorship	joint venture	public	social			proprietorship
Entrepreneurs primarily focus of attention on _____	outside	technology	inside corporation	promotion			technology
Intrapreneurs to have _____risk	high	moderate	calculated	cautions			moderate
Entrepreneurship helps in the process of economic develo	national income	unemployment	motivation	growth			national income
_____become successful enterprise builders	intrapreneur	entrepreneur	manager	engineer			entrepreneur
EDP providing post _____assistance	strengthen	development	training	potential			training
Entrepreneur catalyst for social_____	demand	change	risk	development			change
Life timer entrepreurs have a strog desire for any taking p	motivation	formation	responsibility	innnovation			responsibility
An entrepreneur creative a new product based on _____	innovation	devlopment	technology	diversification			society