

<b>Detailed Solutions A-16/C-17/T-20      JUNE 2003</b>
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- Q 1. (a) – **C** – The founder of Scientific Management is F.W. Taylor.  
(b) – **A** - A Matrix organisation is a combination of Project and functional organisation.  
(c) – **D** – Theory X assumes that a typical person dislikes work.  
(d) – **B** - Grapevine is an informal communication system.  
(e) – **A** – One of the authorities under the Industrial Disputes Act, 1947 for investigation and settlement of industrial disputes is Courts of Inquiry.  
(f) – **D** – The acronym LTPD is Lot Tolerance Percent Defective.  
(g) – **A** – Direct Cost is Direct Material cost and Labour cost.  
(h) – **D** – Diversification is guiding activities into different lines of business.

**PART I**

**Q2(a) Management**

“Management is the accomplishment of results through the efforts of other people”  
– LAWRENCE APPLEY

“Management is the art of getting things done through and with people in formally organized groups”

– HAROLD KOONTZ.

**Q2(b) Division of Work (or Labour):** This is a famous principle of Economics, invented by the traditional economist, Adam Smith. Fayol had advocated Division of work to take advantage of specialization which results in increased human efficiency. The structure of organisation should so divide and group the activities of the enterprise so that they contribute most effectively and efficiently to enterprise objectives. Division of work means dividing the work on the principle that different workers (and different places) are best fitted for different jobs (or things) depending upon influences arising from geography, natural conditions, personal aptitude and skills. Division of work leads to specialization. Concept of division of work can be applied to all kinds of work – managerial and technical.

**Advantages of Division of Labour**

Since the same worker does the same work repeatedly:-

- (i) he gains proficiency and skill on the job and becomes an expert.
- (ii) rate of production increases.

(iii) product quality improves.

(iv) he is in a position to suggest changes in products, processing or methods of doing that work.

### **Disadvantages of Division of Labour**

(i) Division of labour gives rise to loss of craftsmanship, workers become Machine – minders and no more.

(ii) With the passage of time, the same job becomes dull and monotonous.

(iii) Workers do not remain all-rounders and one cannot work in place of another if he is absent.

Q2(c) (i) **Dummy Activity:** Every project consists of a number of job operations or tasks which are called activities. An activity is an element of a project and it may be a process, a material handling or material procurement cycle. A dummy activity does not consume time. When two activities start at the same instant of time, the head events are joined by a dotted arrow and this is known as dummy activity. A dummy activity may be non-critical or critical. It becomes a critical activity when its Earliest Start Time (EST) is same as its Latest Finishing Time (LFT).

(ii) **Critical Path:** It is that sequence of activities which decide the total project duration. Critical Path is formed by critical activities. A critical path consumes maximum resources. It is the longest path and consumes maximum time. A critical path has Zero float. The expected completion dates cannot be met, if even one critical activity is delayed. A dummy activity joining two critical activities is also called a critical activity. A critical path reveals those activities which must be manipulated by some means or the other, if the scheduled completion dates are to be met.

Q3(a) **Delegation:** There is a limit to what an individual can perform single-handed. After a point, other persons working in the organisation have to be associated for performing the task or decision-making. This is known as delegation of authority. Delegation of authority means granting of authority to subordinates to operate within prescribed limits. The principle of parity of authority and responsibility states that in delegating, managers must match the responsibility of subordinate with the grant of commensurate authority. Assignment of duties or tasks without adequate authority will render a subordinate ineffective. Authority without matching responsibility will make him irresponsible. If authority exceeds responsibility, the extra authority may be used arbitrarily, capriciously or without adequate consideration of the effect on others. If responsibility exceeds authority, we would in effect holding persons accountable for things they cannot control/change. An ideal delegation is one which ensures a proper balance between responsibility & authority. Authority and responsibility are co-extensive terms, i.e, the two go together. Thus, in the process of delegation of authority, this parity between authority and responsibility must be taken care of. No subordinate could be held responsible for showing those results for which no authority was granted to him. Thus, there has to be an equitable balance between authority and responsibility.

Q3(b) **Organisation Structure:** Organisation structure is the systematic arrangement of the people working for the organisation in order to achieve predecided goals.

Organisation structure is concerned with the establishment of positions (persons) and the relationships between positions. The structure provides an appropriate frame work for authority and responsibility relationships between various positions. In designing the organisation structure, there are two main considerations :-

- Differentiation and
- Integration

Differentiation means differences in cognitive and emotional orientation among managers in different departments and the differences in the formal structure of these departments. Integration refers to the quality of the state of collaboration that is required to achieve unity of effort. Various departments are integral part of the whole system. Design structure of one department may be different from that of the other, because each department is interacting with the environment in a different way. The overall objective of organisational designing should be integration of activities and authority roles and relationships existing in different departments.

### **Steps involved in Organisation Design**

The steps involved are:-

- (i) Understand and formulate the objectives and goals of the organisation and the nature of business to be carried out.
- (ii) Determine the functions necessary to achieve the objectives of the organisation.
- (iii) Related functions – eg, Inventory Control, Production Control and Quality Control can be grouped together.
- (iv) Examine all the functions and outline the various positions to be filled to take up those functions.
- (v) Prepare job descriptions, duties and responsibilities of each position.
- (vi) Fill up all the positions by recruiting suitable persons either from outside or from within, by upgrading the existing personnel after giving them extensive appropriate training.

**Q4(a) Communication:** An organisation structure provides channels for the flow of information on which the decisions of the organisation will be based. As such, an organisation can be described as the network of communication channels.

Downward communication moves downward in an organisation. The formal communication between a superior and subordinate where the superior sends instructions or directions to his subordinates is downward communication. This downward communication from the superior to the subordinate must be :

- Complete in all respects
- Issued in a clear language
- Timely
- Rational
- Capable of implementation
- In writing
- Explained clearly as to its purpose

- Brief and to the point

Upward Communication moves from subordinate to the superior in the form of feedback. It takes the forms of :-

- Reports by Subordinates to their Superiors
- Grievances and Problems
- Suggestions and Ideas.
- Clarifications sought by subordinates.

Q4(b) **Hygiene Factors:** Maslow's Need Hierarchy Theory on Motivation has been modified by Fredrick Herzberg and his associates. Their research purports to find a two-factor theory of motivation. In one group of needs are such things as policy and administration, supervision, working conditions, interpersonal relations, salary, status, job security and personal life. These were found by Herzberg and his associates to be only dissatisfiers and not motivators. In other words, if they exist in a work environment in high quantity and quality, they yield no dissatisfaction. Their existence does not motivate in the sense of yielding satisfaction, but their lack of existence would, however, result in dissatisfaction. These were referred to as 'hygiene Factors'.

Q4(c) The three important traits required for a coach of a cricket team are:-

(i) **Decisiveness** - The coach is constantly taking various decisions with regard to type of coaching required, time for resting of players, type of bowling to be done at different types of pitches, the batting line up for various matches, etc. Therefore, the coach has to be capable of guiding the captain in taking the right decisions, especially at critical moments of the match.

(ii) **Maturity** – Only a person who has a reasonable maturity level will be able to guide and coach the team players. The team will have players belonging to different religions, regions and temperaments. Only a matured coach with the right attitude will be able to tackle, motivate and guide such diverse players into action.

(iii) **Popularity** - The Coach has to be endearing to all the members of the team. This is possible only if he is popular. A popular coach will be able to get things done through the players more easily and effectively.

Q5(a) **Man-Power Planning:** Man-power Planning is the planning done in relation to the man-power resources (or the human assets) of the enterprise. It might be defined as the process, which is undertaken for matching or balancing, the manpower demands of an enterprise – both in the short-run and the long run – with the supplies of manpower. The objective is to provide the right man at the right job, at the right time – through the formulation and implementation of the suitable personnel programmes and policies. Importance of Man Power Planning in Human Resources Management are as below:-

- Matching jobs with personnel
- Avoiding shortage/surplus of staff

- Commenting on the current manpower position
- Forecasting future manpower needs
- Control over wage/salary costs
- Optimum utilisation of manpower
- Formulation & Implementation of operational plans
- Integration with entire managerial process

Q5(b) **Psychological Tests:** Psychological Tests are conducted with a view to ascertaining the mental suitability of the candidate for performing a particular job in a social situation. Some of the popular psychological tests are:-

(i) **Intelligence Tests** – These are conducted for having an idea of the intelligence of a person with reference to an examination of mental traits like mental alertness, power of reasoning, power of memory, originality, Initiative etc.

(ii) **Interest Tests** – These tests are designed and given to candidates to understand their areas of interest.

(iii) **Aptitude Tests** – Aptitude means natural ability to acquire knowledge or skills. The purpose of these tests is to find out the potential of individuals for development on the jobs of their interest.

(iv) **Personality Tests** – These tests are conducted to assess the Self Confidence, Temperament, Dominance, Courtesy, Emotional Maturity, Value System, Team spirit etc. of the individual.

Q5(c) **Methods of ‘On – the Job Training’ for Managers:**

(i) **Experience** – Under this method a person who is to act and perform as a manager, is placed on some appropriate managerial position and is expected to develop as a manager – through learning from the experience.

(ii) **Coaching** - Under this method a new manager is taught the art of managing by a senior experienced manager, known as coach.

(iii) **Understudy** – Under this method, a junior manager works under the instructions and guidance of some Senior manager, with the intention that after the period of training, the junior manager will take over the position of the senior manager. During the period of training the junior manager is called as an ‘Understudy’.

(iv) **Position Rotation** – It is that method of managerial development, whereby one manager is rotated among several managerial positions at the horizontal level – in different departments, at regular intervals of time.

(v) **Special Projects** –A Special project might be assigned to a manager, which is a piece of task outside the scope of his normal functions. This helps him to learn new things.

(vi) **Placement On Committees** – When a manager is placed on a Committee as a special member of that Committee, he not only develops conversational powers but also comes to learn – interacting with others. It develops his human relations skill.

(vii) **Selective Readings** - Managers are expected and advised to go through professional magazines and journals maintained in the company library during their leisure time.

(viii) **Case Study Method** -Here a manager is provided with a case from a real-life organisational situation, pertaining to a specific managerial area.

(ix) **Brain-Storming** - Here a problem is posed before a group of trainee-Managers, and ideas are invited from them for a solution to the problem.

(x) **Multiple Management** - Under this method, there are two Boards of Directors - a Senior Board and a Junior Board. The Junior Board is the a training ground for getting eligibility to placement on senior Board. The members of the Junior Board acquire sufficient experience of handling organisational issues before assuming the responsible roles as members of the Senior Board.

Q6(i) **Planning & Controlling Planning:**Planning can be defined as deciding in advance about the objectives to be pursued by the enterprise, the selection of best alternative course of action to reach those objectives and a specification of activities-technical, financial, personnel, etc, required for the implementation of the pre-selected courses of action. Planning is goal oriented. It has a reference to future. It is the primary function of Management. It involves choice and it is an intellectual exercise. It is all-pervasive. It is both long-range and short range. It is continuous. It is actionable. It is flexible. It is an integrated system. Policies, Procedures, Rules and Methods are aids to planning. Planning helps management to face future with greater strength and confidence. It helps to focus attention on objectives. It leads to operational life of the enterprise along the most efficient lines. It enables the exercise of control and provides various parameters for control. It guides decision-making process. Planning provides a sense of direction to action. It helps creativity and innovation. Planning facilitates coordination and cooperation.

### **Controlling**

Controlling is defined as that managerial function which seeks to ensure an absolute conformity of actual performance by organizational personnel with the planned standards, to facilitate the most effective and efficient attainment of the enterprise objectives. Controlling is the ‘Central-tendency point’ in the performance of managerial functions. It makes a bridge between standards of performance and their realistic attainment. It is a pervasive managerial exercise. Controlling implies a follow-up action to other managerial functions. It is based on information feed-back. It is a continuous managerial exercise. The steps involved in controlling are:-

- Determination of standards of performance.
- Measurement of actual performance.

- Comparison of actual performance with standards.
- Analyzing the causes of deviation.
- Undertaking suitable remedial action to correct the deviation.

The primary objective of controlling is to bring the actual operational performance of the enterprise on the right track as per standards of control. Controlling infuses confidence into the operational life of the enterprises. It improves managerial decision-making. It helps in attaining maximum production at minimum cost. It is a moral check on employees. It judges managerial competence. It aids delegation and decentralization of authority.

**Q6(ii) Difference Between Classical Theory & Neo-Classical Theory of**

**Organisation.:** The classical theory has its origin in the writings of Taylor. However, the main ideas of the theory have been developed by Mooney, Brech, Allan and Urwick. Neo-classical theory was inspired by the Hawthorne experiments conducted by Elton Mayo & his associates.

The classical theory considers organization structure as impersonal and mechanical, whereas Neo-classical theory considers organization as a social system.

The focus of classical theory is on work and economic needs of workers, where-as Neo-classical theory focuses on small groups and on emotional and human qualities of employees.

The Emphasis of classical theory is on order and rationality, whereas, the emphasis of Neo-classical theory is on personal security and social needs of workers.

According to classical theory, organizational behaviour is a product of rules and regulations, whereas Neo-classical proponents view organizational behaviour as a product of feelings and sentiments and attitudes.

Classical theory propagates authoritarian practices, elaborate rules and regulations to obtain results, whereas, Neo-classical theories propagate democratic practices and encourage involvement of employees in decision-making. They recognise the importance of human dignity and values.

Classical theory results in dissatisfaction and work alienations among workers, whereas, Neo-classical theory results in happy and satisfied employees trying to increase production.

**Q6(iii) Performance Appraisal:** Performance appraisal is a systematic and impartial assessment of an employee's performance on the assigned job, with a view to discovering how well or worse is the job being performed by him/her and also unearthing his/her potential for further development. Performance Appraisal is concerned with measuring differences among individuals as far as their job-performances are concerned. The methods used in performance appraisal of employees are Ranking method, Paired Comparison Technique, Graphic Rating Scale, Forced Distribution Method, Critical Incident method, Checklist Method, Forced choice-Description Method, Field-Review Method & Confidential Report Method.

Performance Appraisal helps in operational decision making in personnel management, provides clues to management for effecting improvements in selection procedures and placement of employees, helps in advising and directing the personnel department to design and implement suitable training programmes for the betterment of employee performance. It guides employee development and encourages healthy competition among employees. It seeks to discover the potential for growth in employees. It attracts good employees to the organization. During the process of performance appraisal, the management gets an idea of the difficulties faced by employees. It seeks to evaluate employee performance in a systematic manner.

Q6(iv) **Management Skills:**The skills required of a successful manager, whether he is working in a industry, business organization, an educational institute or a hospital etc. can be classified as follows: -

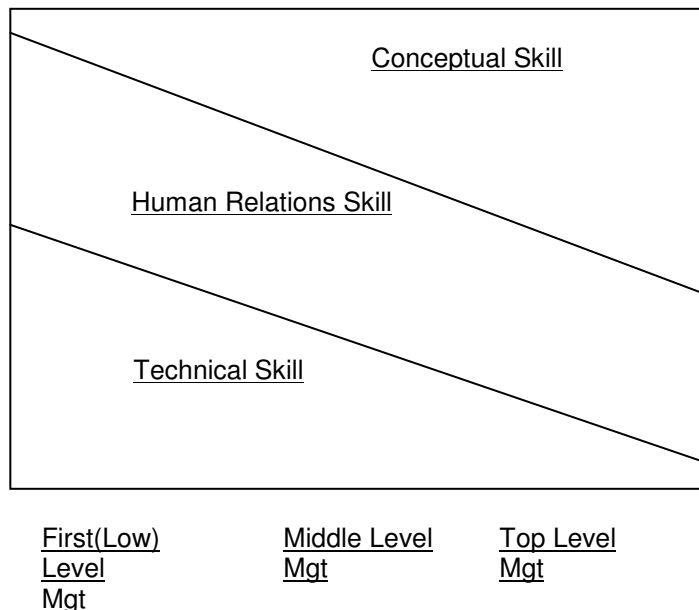
- (a) Technical Skills.
- (b) Conceptual Skills.
- (c) Human Relations Skills.

Technical skill refers to the proficiency in handling methods, processes and techniques of a particular kind of industrial/business operation. It is essential for a manager to know which technical skill should be employed in a particular work. Technical skill is essential for lower level management.

Conceptual skill is the ability to see the organization as a whole, to recognize inter-relationships among different functions of the business and external forces, and to guide effectively the organizational efforts. It is critical in top executive positions. It is easier to learn technical skill than the conceptual skill. Conceptual skills are decision-making skills (ability of the person to take timely and accurate decisions) and organizational skills(they help fix different people at different jobs).

Human Relations skill refers to the ability to work effectively with others and build cooperative work groups to achieve organizational goals. Communicating skills (ability to pass on information to others effectively) and motivating skills (inspiring people to do what you want them to do) are the two Human Relations skills.

The Need for skills at different levels of Management is given in the following diagram:-



## PART II

Q7(a) **Industrial Relations:** Industrial Relations(IR) is that aspect of management which deals with the manpower of the enterprises whether machine operators, skilled workers or managers. It is also defined as the relations between employers and employees in the industry.

Cordial and peaceful Industrial Relations between the employees and employer are highly essential for increasing productivity and the economic growth of the country. Through good industrial relations only, the enterprise can move towards the welfare of the employees and the management of the concern. Industrial relationship is the composite result of attitudes and approaches of the employees and management towards each other with regard to planning, supervision, direction and coordination of the activities of an organisation with a minimum of human effort and friction with an animating spirit of cooperation and with proper regard for the genuine well being of all members of the organisation.

### Causes of Poor Industrial Relations vis-a-vis conditions for good IR are: -

- (i) Inadequate fixation of wages and wage structure – There is a need for payment of fair wages and adequate wage structure, as well as, establishment of satisfactory working conditions.
- (ii) Dispute on sharing the gains of productivity – There is a need for adoption of a policy which ensures to the workers an equitable share of the gains of increased productivity.
- (iii) An intolerant attitude of contempt on the part of management towards the workers – There is a need for recognition by the employer that the workers are a part of the team working towards common objectives of the organisation.

Q7(b) **Compensation:** An employer is not liable to pay compensation to an employee under the following circumstances/occasions: -

- (i) When the injury disables a workman for less than 3 days.
- (ii) When injury is caused by an accident which occurred while the workman was under the influence of alcohol or drugs.
- (iii) The injury is caused due to willful disobedience of the rules by the workman, or.
- (iv) The injury is caused owing to the willful removal of any safety guard by the workman.

**Q8(a) Line Balancing:** Line balancing means balancing the line between the product lines or assembly lines. It aims at grouping facilities and workers in an efficient pattern in order to obtain optimum or most promising balance of the capability and flow of the production or assembly processes. Tasks are grouped so that their total time is preferably equal to or a little lesser than the time available at each work stations, thus reducing the idle time.

Each work station should have the same operating time and the various operations should be sequenced properly. There should be perfect balance between output rates of the parts and the sub assemblies. However, it is not, always possible that the parts reach in a steady stream immediately before sub-assembly. This may be because of the limitation as regards materials, men and equipments or it may be economical to manufacture and supply parts in batches. The flow control section has to cope with such situations and thus, carry big inventories and arrange facilities for storage.

Line balancing problems can be solved through heuristics approach, linear programming, dynamic programming and by using computer method.

**Q8(b) Inventory Procurement Cost & Inventory Carrying Cost:** Inventory is a detailed list of those movable items which are necessary to manufacture a product and to maintain the equipment and machinery in good working order. Inventory control is concerned with achieving an optimum balance between two competing objectives: -

- To minimize investment in inventory.
- To maximize service levels to the firm's customers and its own operating departments.
- A problem which always remains is that how much material may be ordered at a time. This is known as Economic Order Quantity (EOQ). EOQ depends upon two costs: -

- (i) Inventory procurement costs which consists of expenditure connected with
  - \* Receiving quotations
  - \* Processing Purchase Requisitions
  - \* Following up and Expediting Purchase order
  - \* Receiving materials and then inspecting them

- \* Processing seller's Invoices

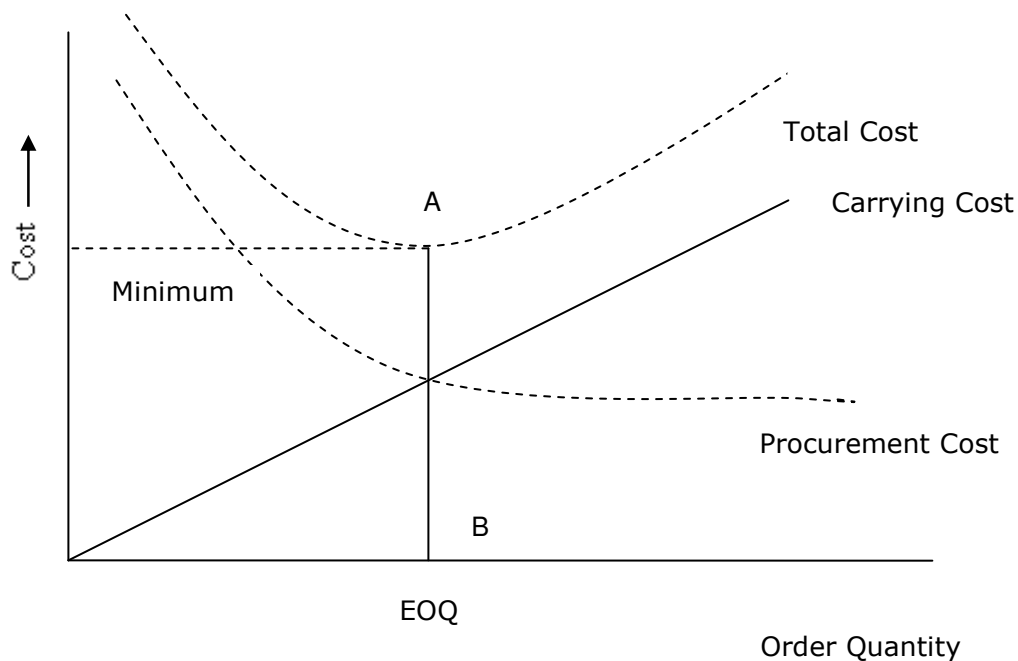
Procurement costs decrease as the order quantity increases.

(ii) Carrying Costs, which vary with quantity ordered, consists of

- \* Interest on capital investment
- \* Cost of storage facilities
- \* Cost involving deterioration & obsolescence, and
- \* Cost of insurance, property tax, etc.

Carrying costs are almost directly proportional to the order size or lot size or order quantity.

**Q8(c) Economic Order Quantity and Total Cost:** The sum of Inventory procurement cost and inventory carrying cost is total cost.



In the above figure, the procurement cost and inventory carrying cost have been plotted with respect to quantity in lot. Total cost is calculated by adding the procurement cost and carrying cost. Total cost is minimum at the point A and thus B represents the Economic Order Quantity (EOQ).

**Q9(a) Production & Productivity: Production** is any process or procedure developed to transform a set of input elements like men, materials, capital, information and energy into a specified set of output element like finished products and services in proper quantity & quality, thus achieving objectives of an enterprise. The essence of production is the creation of goods and services. There are four recognized factors of production, which are :-

- \* Nature (Land & other material resources)
- \* Labour (Human efforts)
- \* Capital (Factory building, machinery, tools, etc)
- \* Enterprise (activity that organizes other factors of production)

**Productivity** may be defined as the ratio between output and input. Output means the amount produced or the number of items produced while inputs means various resources employed, eg., land & Building, equipment and machinery, materials, labour, etc. Productivity can be increased if more products can be obtained from the same amount of inputs viz available resources. The factors which affect productivity in manufacturing and services are: -

- \* Product or system Design.
- \* Machinery & Equipment.
- \* The skill & effectiveness of the worker
- \* Production Volume.

**Q9(b) Improving Productivity:** The essence of production is creation of goods, may be by the transformation of raw materials or by assembling so many small parts. The four factors of production are land, labour, capital & Enterprise (Management). Management brings together land, labour & capital for production of input into output. Management organizes other three factors of production into an operating unit. By equitable and efficient combination of the right type of factors of production, management can increase productivity i.e., Management can get more number of goods (output) from the same amount of resources (input) as follows:

- By reducing scrap of materials
- Changing the design of the component or component layout
- By using the correct process of production
- By using properly trained workers for production.
- By suitable materials handling, storage facilities and proper packaging.
- Improvement in work methods after doing proper work study.
- Use of improved tools, simple attachments, other devices.
- Improving machine set-up timings.
- Proper maintenance of machinery to avoid sudden breakdowns.
- A suitable plant layout which can accommodate more machinery in the same space.
- Proper orientation, construction and inside conditions of a building.

- Linking wages more closely to output will increase productivity.
- Develop and utilize more standard terms in service industries.
- Redesign the content of jobs to make them more interesting and challenging.
- Improve communication to encourage everyone to work towards the same desired objectives.

Q10(a) **Trial Balance:** After posting all journal entries into the ledger, a statement called trial balance is prepared to check the accuracy of postings into the ledger. The Trial Balance checks the arithmetical accuracy of the entries. It is simply a list of the accounts and their balances at any given date. It is used to test the equality of balances because at any time the debits and credits should be equal in value. Besides checking the accuracy of postings into the ledger, the trial balance provides the material for formulating financial statements such as Profit & Loss Account and Balance Sheet.

A Trial Balance discloses the following types of errors:-

- An item posted twice.
- A mistake in posting.
- A mistake in addition.
- An item left from being posted.
- Money values wrongly recorded (Rs. 160/- in place of Rs. 1600/-).

A Trial Balance, however, will not disclose errors of compensation, errors of omission and errors of principle.

Q10(b) **Fixed Cost & Variable Cost:** Cost may be defined as the amount of expenditure incurred on, or attributable to a given thing. Fixed costs are those costs which tend to remain constant irrespective of the volume of output or sales. Examples of fixed costs:

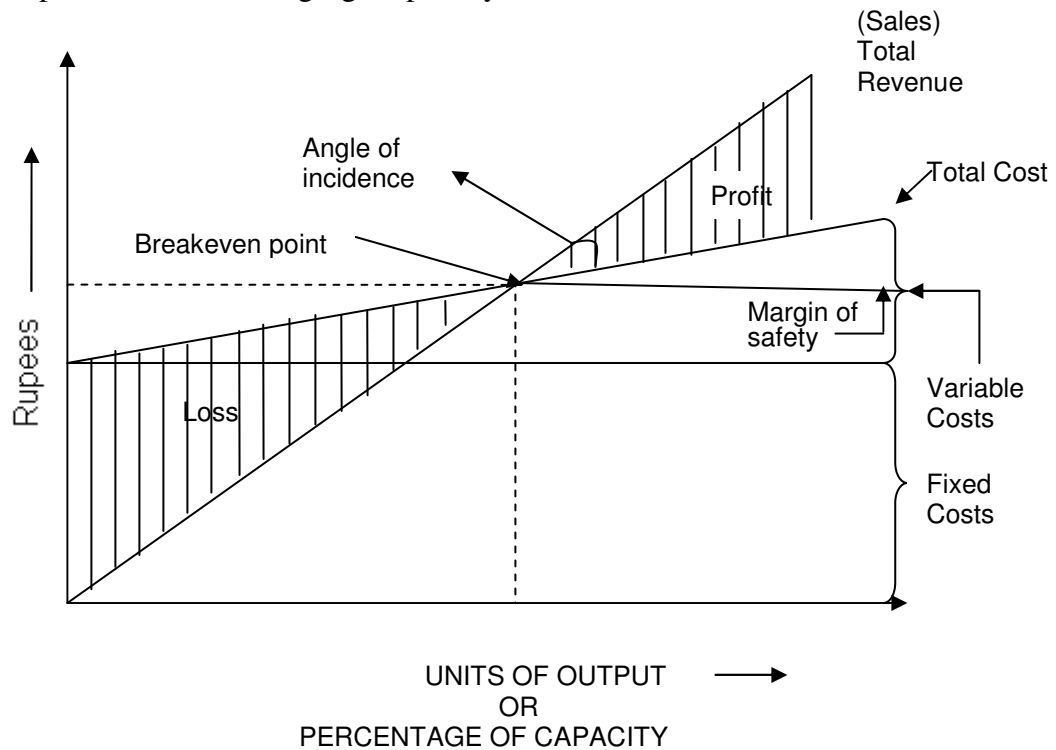
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- \* Staff salaries.
- \* Administration Expenses.
- \* Rent & establishment charges
- \* Depreciation, etc.

Variable costs on the other hand, tend to vary directly with the volume of output. Examples of variable cost are: -

- \* Direct production labour cost
- \* Direct Materials cost
- \* Direct Expenses

Q10(c) **Break Even Analysis:** Break even Analysis implies that at some point in the operations, total revenue equal total cost. Break even analysis is concerned with finding the point at which revenues and costs agree exactly – hence the term ‘Break even point’. The following figure portrays the Break Even Chart.



Break even point is the volume of output at which neither a profit is made nor a loss is incurred. The break even analysis can be carried out algebraically or graphically (as given in the above diagram).

Break even Analysis helps solving the following types of problems:-

- (a) What volume of sales will be necessary to cover
  - a reasonable return of capital employed
  - preference and ordinary dividends, and
  - reserves
- (b) To compute costs and revenues for all possible volumes of output to fix budgeted sales
- (c) To find the price of an article to give the desired profit
- (d) To determine the variable cost per unit
- (e) To compare a number of business enterprises by arranging their earnings in order of magnitude.

The Break Even Point (BEP) can be calculated by using the following relation :-

$$\text{BEP} = \frac{F}{1 - V/P}$$

Where F is fixed cost

V is variable cost per unit or total variable cost and P is the selling price of each unit

Q11(a) **Selling Vs Marketing Concept:** The selling concept is a management orientation that assumes that consumers will normally not buy enough of the company's product unless they are approached with a substantial selling and promotional effort. The marketing concept is a management orientation that holds that the key task of the organisation is to determine the needs, wants and values of a target market and to adopt the organisation to deliver the desired satisfaction more effectively and efficiently than its competitors.

- \* Selling focuses on the needs of the seller whereas marketing focuses on the needs of the buyer.
- \* Selling is preoccupied with the seller's need to convert his goods into cash, whereas marketing lays emphasis on satisfying the needs of the customer by means of the product.
- \* Marketing is another name for selling with the inference that it is a long-haired method.
- \* Marketing is a more expensive way of selling.

Q11(b) **Four 'P's of Marketing:** Marketing may be defined as a human activity directed at satisfying needs and wants through exchange processes. A market is a group of existing and potential buyers or users of a product or service. A vital element in every marketing strategy is the marketing mix. This concept was first propounded by Professor Neil Boden of Harvard University in the 1940s. The mix is defined as the particular group of variables offered to the market at a particular point in time. These variables are principally:-

- \* Product
- \* Price
- \* Promotion
- \* Physical Distribution

The following figure illustrates the market mix, further sub divided as :-

## **PRODUCT**

- Variety
- Quality
- Brand Name
- Packaging

## **PRICE**

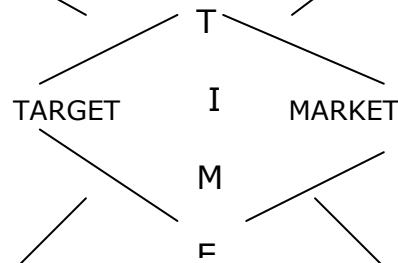
- Basic Price
- Discount
- Credit Terms  
etc

## **PROMOTION**

- Advertising
- Personal Selling
- Sales  
Promotion

## **DISTRIBUTION**

- Channels
- Sales Force
- Coverage
- Transport



The marketing mix is the central part of an organisation's marketing tactics. Once the market situation (customers, competitions, suppliers, middlemen, etc.) have been identified and evaluated and when the decision has been made to penetrate or develop a particular market, then the role of marketing mix is crucial.

\* Marketing Mix is the combination of competitive efforts exerted by a firm to accomplish some sales or profit goal.

\* The firm normally has at its disposal several competitive elements that it can manipulate.

\* The element of time is a vital factor in assessing the particular mix to be offered to the market.

\* By using the marketing mix as a tactical tool of an organisation's marketing plans, it is possible to adopt speedily and profitably to changes in market environment.

\* Thus, the development of the mix to meet conditions at a particular point or period on time is essentially a contingency approach to marketing management.

**Detailed Solutions A-16/C-17/T20 DECEMBER 2003**

- Q1 (a) **C** – Span of Management refers to the **number of subordinates working under a manager**
- (b) **C** - In PERT the expected time estimate is calculated on the basis of **Beta** distribution of time estimates
- (c) **D** - Dual factor theory has been proposed by **Herzberg**.
- (d) **A** - Trade Unions Act 1926 provides that **any seven workers may form an union.**
- (e) **D** - Sales Promotion is resorted **to increase the sale volume.**
- (f) **B** – **Measuring the input of the employee** is not a purpose of Performance appraisal in modern management
- (g) **D** - The important feature of collective bargaining is **give and take**
- (h) **A** – **X** control chart is used with go and not go inspection.

**PART I**

Q2(a) **Steps in Management Planning Process:** Planning can be defined as deciding in advance what is to be done in future. Some of the basic steps involved in planning are:

- Setting objectives-this is the most crucial step in the planning process.
- Establishment of planning premises-it is an identification of the assumptions as to future conditions.
- Development of alternative courses of action – there must be a search by the management for the various alternatives.
- Critical evaluation of the alternative courses of action-going into the plus and minus points of each alternative and find out the net worth of each alternative
- Selection of the best alternative –this decision is based on experience and experimentation
- Formulation of derivative plans – these plans are derived from the major plans.
- Implementation of the plan – this is the most significant step and the plan would have to be communicated to those who are supposed to initiate action.
- Follow – up Action – this implies watching the consequences which arise from the implementation of the plan
- Restarting the planning cycle – new plan must be undertaken to take the place of the accomplished plan as planning is a continuous process.

Q2(b) **Critical Path:** Calculation of Earliest and Latest Values of the events of the given network is as below :-

Event	EOT	LOT
1	0	0
2	6	6
3	5	6
4	9	9
5	16	16

The critical path is 1 → 2 → 4 → 5

Q3(a) **Principles of Organization:** Organization is a mechanism or structure that enables living things to work effectively together. It is defined as the process of grouping the work to be performed, defining and delegating responsibility and authority, establishing relationships for the purpose of enabling people to work most effectively together in accomplishing objectives. Organizing being a universal problem of all business concerns, many principles have been designed as guidelines for successful organizational relationships. A few common principles are:

**(i) Consideration of objectives** – Since the objectives have an important bearing on the organization structure, only those objectives should be taken up and accomplished for which there is real need in the organization.

**(ii) Relationship of the basic components of the organization** – Objectives as decided in step I above determine the work to be performed and the type of work dictates the selection of personnel and physical facilities.

**(iii) Responsibility and Authority** – Responsibility means accountability. It is the obligation of the subordinates to the boss to do a work given to them. Authority means right to command and power to act. Since the top man in the organization cannot do each and everything himself alone, a definite chain of responsibility and authority is provided from the top executive to each employee through several layers or levels between them.

**(iv) Span of control** – Span of control means the number of subordinates that report to an executive or the number of subordinates that an executive can supervise directly. Depending on the conditions of the business enterprise, the span of control can vary from 2 to 20.

**(v) Dividing and grouping work** – Divisionalisation provides a broader perspective, a greater sense of responsibility on the part of the personnel and more clear-cut control over profits. Grouping or departmentation is the process of grouping of activities for specialization. This also helps in coordination which means weaving

together the segments of an organization into a coherent whole in such a way that all parts operate at the most optimum level and produce maximum profits.

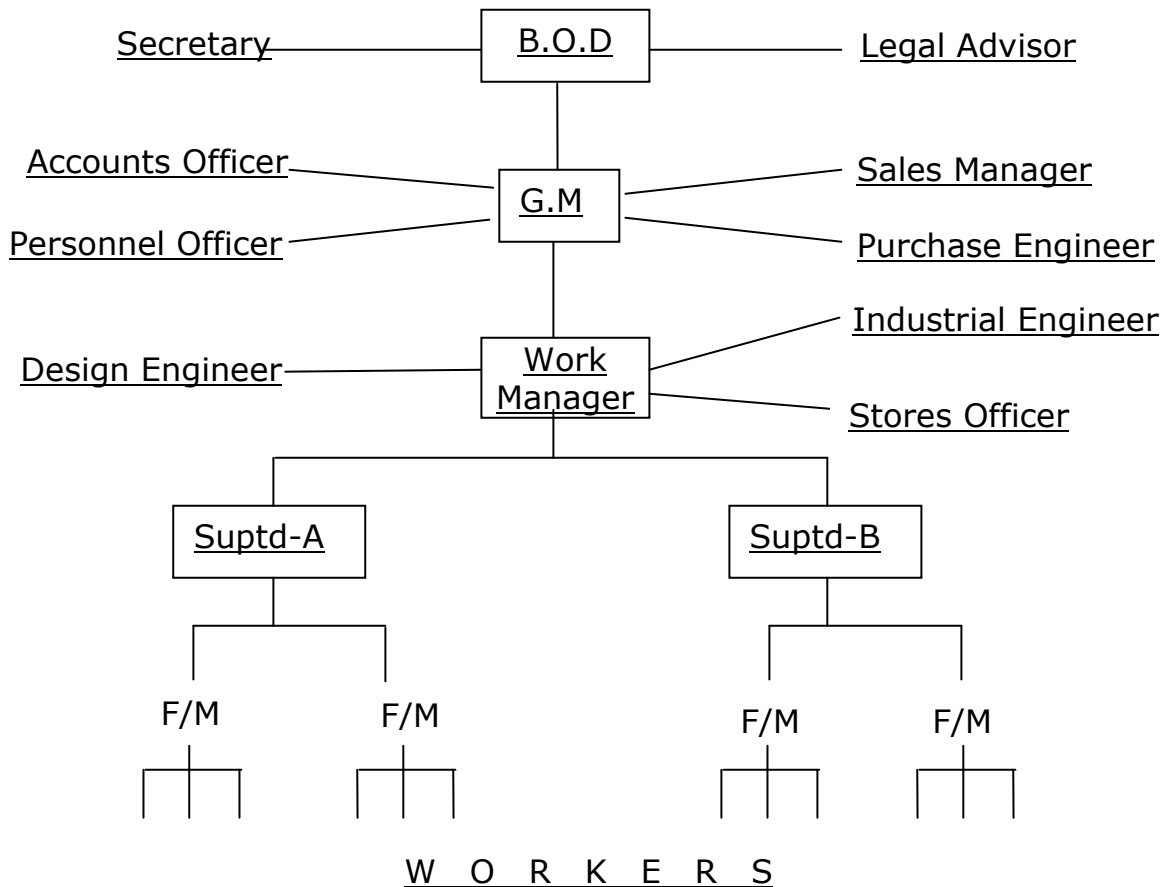
**(vi) Effective Delegation** – Effective delegation is said to exist when an executive instead of doing all the thinking for the unit himself, passes down to his subordinates any task on which they can take decisions themselves and perform it effectively and efficiently.

**(vii) Communication** – Communication serves as a linking process by which parts of an organization are tied together. Good communication is essential and it has to be a two-way communication.

**(viii) Line and Staff functions** – All activities of an organization can be classified into Primary and Supporting activities. Primary or Line activities are those that contribute directly and visibly to the objectives of an organization. Supporting activities or Staff functions are those that aid the line or are auxiliary to the line functions.

**(ix) Balance, Stability and Flexibility** – All units of an organization must be balanced to achieve the goals of the organization more effectively. Organizational stability refers to the capacity to withstand the losses of the key personnel if they leave the organization. Organizational flexibility specifies the capacity to adjust work assignments, personnel and facilities to temporary changes which take place in the volume of work.

Q3 (b) **Line and Staff Organisation:** As the industry grew in size and complexity, the line executives could not perform properly all other functions such as R&D, planning, distribution, legal, public relations etc,. This necessitated the employing of special executives to assist line executives and they were known as Staff since they were recruited to perform staff or specialist functions. The line executives retain supervisory authority and control over the work of their subordinates whereas the staff executives relieve the line executives of certain specialized work and advise them on matters referred to them. The following figure shows the line and staff organization:-



Q4(a) **Managerial Motivation:** Managerial motivation is the means or inducements, which inspire or impel a person to intensify his willingness to use his capabilities and potentialities for achieving goals of the organization which he works. Motivation is the psychological force. What morale does to a work- group, motivation does to an individual. Motivation moves an individual to action. Motivation of workers is very important.

**Factors affecting motivation:**

- **Achievement**-Personal satisfaction in job completion and problem solving
- **Advancement**-Promotion to the higher job/level
- **Growth**-Learning new skills, which will offer greater possibility for advancement.
- **Recognition** – Acknowledgement of a job done well
- **Responsibility & Authority** – This should be in relation to one’s job
- **Work itself** – Actual job content and it’s positive or negative effect on the worker
- **Company Policy and Administration** – Feelings about the adequacy/inadequacy of company organization and management policies and procedures
- **Job Security** – Tenure, company stability or instability

- **Interpersonal Relations** – Relations with superiors, subordinates and peers
- **Salary** – Pay and fringe benefits
- **Status** – Size of office, private secretary, etc.
- **Supervision** – Competency or technical ability of supervision
- **Working Conditions** – Physical Environment
- **Personal Life** – Personal factors that affect the job

Q4 (b) **Leadership:** Leadership is the knack of getting other people to follow you and do willingly the things that you want them to do. It is the ability to persuade others to seek desired objectives enthusiastically. It is the human factor that binds a group together and motivates it towards goals.

“Leadership is the ability of a manager to induce subordinates to work with confidence and zeal.”-**Koontz & O’Donnell.**

“A leader is one who guides and directs other people and gives their efforts the direction and purpose” – **Louise.A.Allen**

In the management literature, every manager is a leader. Leadership is a process of interpersonal influence. It is a mix of inspiration, motivation and communication. It aims at the pursuit of common goals. It is a continuous managerial exercise. It rests on power rather than on the formal authority of the manager. A leader as a manager plays several roles. He stimulates followers towards performance by inspiring them through his charisma and outstanding personal traits. He helps the enterprise in the most efficient and effective attainment of common objectives. A leader is a co-ordinator, expert, philosopher, strategy - designer, exemplar, integrator and representative of his group.

The three relatively distinct leadership styles are:-

- a) **Authoritarian** - leader makes all decisions unilaterally and demands obedience of all subordinates.
- b) **Democratic** - leader discusses and consults his subordinates.
- c) **Free Rain or Laissez-Faire** – leader exercises minimum controls and gives complete freedom to subordinates to decide and act.

Q5(a) **Performance Appraisal:** Performance appraisal, is a systematic and impartial assessment of an employee’s performance on the job, with a view to discovering how well or how worse is the job being performed by him or her; and also unearthing his or her potential for further development.

**Dale Yoder** defines performance appraisal as “all formal procedures used in working organizations to evaluate personalities and contributions and potentials of group members.”

#### **Importance of performance appraisal**

- It is helpful in operational decisions of personal management relating to pay increases, promotions, lay-offs and transfers etc.
- It provides clues to management for effecting improvements in selection procedures and placement of employees.
- On the basis of performance appraisal, the top management can advise/direct the personnel department to design and implement suitable training programmes.
- It guides and stimulates employee development
- It encourages healthy competition among employees.
- It seeks to discover the potential for growth in employees and thus helps management to prepare promising employees to take up challenging jobs in future.
- It attracts good personnel to the organization
- During the process of performance appraisal, the management gets an idea of the difficulties faced by the employees while working on the jobs. Management can take accordingly take appropriate steps to redress their grievance.
- It highlights a need for more competent supervisors, to undertake the task of judging the employees in an objective and intelligent manner.
- Performance appraisal seeks to evaluate employees' performance in a systematic manner.

#### **Performance Appraisal & Individual's Career Progression**

Performance appraisal helps in unearthing the individual's potential for further development and growth in the organisation. It helps the employee in taking up challenging jobs as they come. It helps him in knowing how he is performing on his jobs. It guides and stimulates employee development. It helps him in getting promoted to higher levels in the organization. It provides a feedback to employee for self – control and self – development. Performance appraisal helps him in knowing the type of training programmes to be attended for better job performance and career development.

**Q5(b) Methods of Training of Supervisors:** Foremen or supervisors are above the workers or operative level employees in the organizational pyramid. A supervisor is the key man who interprets management instructions and

directives to the workers and at the same time is responsible for production. He stands between the management and the rank and file level employees.

A supervisor generally has to take care of the following:-

- Selecting and training of workers
- Work production
- Control of quality, quantity and cost
- Discipline, motivation and morale of workers
- Accident prevention
- Maintaining machinery and supplies
- Work method improvement
- Handling labour grievances
- Record keeping

Therefore, training of supervisors should be planned by keeping the above-mentioned points in mind. Following are the methods of training for supervisors:-

**(i) Induction** – It implies introducing or orienting a new employee to the organization. The induction and orientation training aims to get over the settling in period as quickly as possible and with the minimum of emotional upsets being experienced by the new employee.

**(ii) Lecture Method** – Classroom training depends entirely on lectures as the medium of instruction. Lectures can be delivered to as many supervisors as can be accommodated in the room. Lecture is delivered by experts from within or outside the industry. Lecture is a very good medium of training where no reliable books or any other material is available.

**(iii) Written Material** – This method is used to give to the trainees the important information in permanent form for immediate or future use, e.g., Standard practice instructions on how to perform various jobs.

**(iv) Conference** – A conference brings together many people who tend to train themselves and learn together. A conference helps pooling ideas and experiences of different persons and puts them open for discussions to arrive at a feasible solution for the problem at hand. A conference can uproot ideas, change attitudes and develop analytical and questioning ability. The conference should guide, be active, lead, interpret, stimulate and draw out the ideas and opinions of the group engaged in the discussion.

**(v) Training within the industry** – This is basically a supervisory training programme. One of the parts of the programme is the job instruction-training programme, which is concerned, with how much to teach. These courses can be held on the concern's premises with little disturbances or disruption of work. This programme imparts training in Job instruction, Job relation, Job safety and Job methods.

Q6 (i) **Levels of Management:** Industrial management has got the following activity levels:

**1) Top Management:** It includes Board of Directors, Managing Directors, Chief Executive, General Managers, Owners and Share holders.

Top management functions are:-

- a) Setting basic goals and objectives
- b) Expanding or contracting activities
- c) Establishing policies
- d) Monitoring performance
- e) Designing/redesigning organization system
- f) Shouldering financial responsibilities etc.

**2) Upper middle management :** It includes Sales executive (Manager), Production executive, Finance executive, Accounts executive and R and D executive

Upper Middle Management functions are:-

- a) Establishment of the organization
- b) Selection of staff for lower levels of management
- c) Installing different departments
- d) Designing operating policies and routines
- e) Assigning duties to their subordinates, etc.

**3) Middle Management :** It includes Superintendents, Branch managers and General managers

Middle management Functions are:

- a) To cooperate to run organization smoothly
- b) To understand the interlocking of departments in major policies
- c) To achieve coordination between different parts of the organization
- d) To conduct training for employee development
- e) To build an efficient company team spirit

**4) Lower Management:** It includes Foremen, Supervision or charge-hands, Office superintendent and Inspectors etc.

Lower management Functions are:

- a) Direct supervision of workers and their work
- b) Developing and improving work methods and operation
- c) Inspection
- d) Imparting instructions to workers
- e) To give finishing touch to the plans and policies of top Mgt
- f) To act as links between Top Mgt and operating force (workers)
- g) To communicate the feeling of workers to top management.

**Q6(ii) System concept of Organisation:**

a) System is a group of independent but inter dependent elements ( called sub-systems) which act and interact together with a purpose of achieving certain common objectives/goals. An organisation can be called as a system which in turn consists of many sub-systems and sub-sub systems, and so on.

b) Systems concept gives to the industry and to other large business organizations, a systematic approach to get the task accomplished more efficiently, effectively and economically.

c) Systems approach is an organized approach for complex (Military and Industrial) equipment design and the same can be completed in a much shorter duration with comparatively less efforts.

d) Systems concept furnishes a frame of references which tells how to manage the jobs or how to analyse complex phenomena under different environments.

e) Systems approach is more common in the field of physical sciences and engineering because it is comparatively easier to build a model of such systems. However, the systems approach can also be used to solve problems related to business or human values (like fire protection, housing etc.)

**Q6(iii) Understanding of Human Behavior:** Understanding human behaviour is important for any one dealing with human resources. It has also been the subject of large number of researches. Research in human behaviour in industry aims at discovering:-

- a) Causes of behaviour, or
- b) The factors which are correlated with behaviour even though they are not causative.

Individuals differ from one another in dozen ways. Differences are present as regards physical appearance, abilities, education, aptitude etc. Individuals differ and therefore, in industry, they are paid at different rates. One learns with little effort and practice,

whereas, another is not able to pick up so fast. The differences in individuals reflect in their performance and behaviour at work.

Individual differences in behaviour, identified and measured, helps much in right selection, placement and imparting proper training to the individuals. Action on a peculiar behaviour of an individual to a particular situation is seldom spontaneous; it does have a cause behind.

For any given aspect of individual behaviour, there may be many contributing factors. The individuals differ from each other in certain aspects which are termed as individual variables. These individual variables play a major role and influence the performance (behaviour) of an employee at work. These are the physical characteristics, intellectual factors, interest & motivation, temperament, character of an individual, aptitude, personality aspects, education, experience, age and sex. Besides these individual variables there are some situational variables, like physical environment, work space/layout, Design and condition of work, equipment, methods of work, character of the organisation, kinds of training & supervision, types of incentives and social environment which also influences the performance (behaviour) of an employee on a given job.

Q6(iv) **Job Evaluation:**

**Definition:** Job evaluation is a systematic process of evaluating different jobs of an organization. Depending upon the characteristics and requirements of a job, job evaluation determines its relative worth and attaches a value to it. These relative values of jobs assist in deciding wage rates and salaries for different jobs.

**Objectives of Job Evaluation:**

- a) decides the relative values of different jobs in an organization.
- b) helps to formulate an appropriate and uniform wage structure.
- c) clarifies the responsibility and authority connected with each job.
- d) provides a basis for recruitment, selection, training, promotion and transfer of the employees.
- e) improves employer-employees relationships.
- f) adds to job satisfaction.
- g) minimizes labour turnover, and
- h) describes and evaluates new jobs.

**Procedure of Job Evaluation:**

- a) Identify the job to be evaluated.
- b) Describe and analyse the requirements of the job. Write-down the skill statement and the responsibilities involved

- c) Compare the job with the pre-identified key jobs and decide its level or value (with respect to key jobs)
- d) Use the above information to arrive at a suitable wage structure for the job.

**Method of job Evaluation.** Following are the methods in which job evaluation is done:-

- a) Ranking method.
- b) Classification method.
- c) Factor comparison method.
- d) Point method.

## **PART – II**

Q 7(a) **Factories Act 1948:**

**Objectives and Applicability:** The Factories Act regulates the conditions of work (health, safety, etc) in factories. It safeguards the interests of the workers and it is for the welfare of the factory workers. The act received the assent of Governor General of India on September 23, 1948 and came into force on April 1, 1949. This act was further amended many times. The act is applicable to any factory in which ten or more than ten workers are working. The act has a provision in respect of

- a) Employee health and safety,
- b) Hours of work,
- c) Sanitary conditions and wholesome work environments,
- d) Employee welfare,
- e) Leave with wages, etc.

**Important Terms of the Act:**

**(a) Factory:** A place wherein ten or more persons are working and in which a manufacturing process is going on using electricity, steam, oil, etc.

**(b) Manufacturing Process:** A process for

- making, altering, repairing, finishing, packing, washing, cleaning, or otherwise treating a substance for its use, sale, transport, disposal, etc.
- pumping oil, water, sewage, or
- generating, transforming, or transmitting power, or
- composing types for printing, printing for letterpress, lithography, photogravure or other similar process or book-binding;
- constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels.

**(c) Worker:** Worker means a person employed directly or through any agency, whether for wages or not, in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind of work incidental to or connected with, the manufacturing process or the subject of manufacturing process.

**(d) Adult:** A person who has completed eighteenth year of age.

**(e) Child:** A person who has not completed his fifteenth year of age.

**(f) Power:** Electrical energy or any other form of energy which is mechanically transmitted and is not generated by human or animal agency.

**(g) Machinery:** It includes

- prime movers, engine, motor, etc
- transmission machinery, shaft, wheel, drum, pulley, belt, etc.
- and all other appliances whereby power is generated, transformed and transmitted.

**(h) Occupier of Factory:** A person who has ultimate control over the affairs of the factory and where the said affairs are entrusted to a managing agent, such agent will be considered as the occupier of the factory.

Q7(b) **Workmen Compensation Act 1923:** The important terms in the Workmen Compensation Act 1923 are as below:

a) **Dependents.** Dependent means

- a widow, a minor son, unmarried daughter or a widowed mother, and

- if wholly or in part dependent on the earnings of the worker at the time of his or her death'

i) a widower, a minor brother and unmarried sister

ii) a widowed daughter-in-law and

iii) a minor child of predeceased daughter, etc.

b) **Minor:** A person below 18 years of age.

c) **Partial Disablement:** means disablement of temporary nature and which reduces the earning capacity of a workman.

d) **Total Disablement** : implies such disablement which (temporarily or permanently) incapacitates a workman for all work and he cannot earn at all (for a period or for ever).

e) **Workman:** means a person (other than one whose employment is of casual nature and who is employed otherwise than for the purpose of the employer's trade or business) who is

(i) a railway servant and not permanently employed in any administrative capacity.

(ii) getting wages not exceeding :-

Rs. 500 as per Act of 1923

Rs. 1000 as per Act modified in 1976.

#### Q8(a) **Quality, Quality Control and Total Quality Management**

**Quality:** Quality is defined as fitness of purpose. Quality is a relative term and is generally explained with reference to the end use of the product. For example, a gear used in sugar-cane extracting machine though not of the same material and without possessing good finish, tolerance and accuracy as that of a gear used in the head stock of a sophisticated lathe, may be considered of good quality if it works satisfactorily in the juice extracting machine. Thus, a component is said to be of good quality if it works well in the equipment for which it is meant.

**Quality Control:** Control is a system for measuring and checking (inspecting) a phenomenon. It suggests when to inspect, how often to inspect and how much to inspect. In addition, it incorporates a feedback mechanism which explores the causes of poor quality and takes corrective action. A quality control system performs inspection, testing and analysis to conclude whether the quality of each product is as per laid down quality standards or not. It is called statistical quality control when statistical techniques are employed to control quality or to solve quality control problems.

**Total Quality Management** TQM (Total Quality Management) is a system approach to quality in all spheres of the organisation. TQM means meeting the requirement of internal/external customers consistently by continuous improvement in the quality of work of all employees. Total in QM stands for an overall integrated approach to all aspects of quality, all domains of system including organisation, people, resources, time, hardware/software and even management committees. TQM is a management approach of organisation, centered on quality, based on participation of all its members and aiming at long term success through customer delight and benefits to the members of the organisation and society. TQM sustains on four pillars viz systems, top Management commitment, Team work and Statistical Process control (SPC) Tools. The principal objectives of TQM are :-

(i) Customer Focus viz Customer Delight.

- (ii) Continuous improvement as a culture of the organisation which must be the way of life.
- (iii) Focussed, continuous and relentless cost reduction.
- (v) Focussed, continuous and relentless quality improvement.
- (vi) To create an organisation whereby everyone is working towards making their organisation the best in its business and to capitalize on the sense of achievement and working in a world-class organisation.

**Q8(b) Control Charts:** Control Charts are based on statistical sampling theory, according to which an adequate sized sample drawn, at random from a lot, represents the lot. All processes whether semi-automatic or automatic are susceptible to variations which in turn, result in changes in dimensions of the products. These variations occur either due to chance causes or due to certain factors to which we can assign the causes for such variations. Variation in the diameter of spindles being manufactured on lathe may be either due to tool wear, non-homogeneity of bar stock, changes in machine setting, etc. The purpose of control chart is to detect these changes in dimensions and indicate if the component parts being manufactured are within the specified tolerance or not.

Control chart is a (day-to-day) graphical presentation of the collected information. The information pertains to the measured or otherwise judged quality characteristics of the items or the samples. A control chart detects variations in the processing and warns if there is any departure from the specified tolerance limits. A control chart is primarily a diagnostic technique.

$$\begin{aligned}
 \text{Given } \bar{C} &= 7 \\
 \text{Upper control limit} &= \bar{C} + 3 \sqrt{\bar{C}} \\
 &= 7 + 3\sqrt{7} \\
 &= 7 + 7.94 \\
 &= 14.94 \\
 \text{Lower control limit} &= \bar{C} - 3 \sqrt{\bar{C}} \\
 &= 7 - 3\sqrt{7} = 7 - 7.94 \\
 &= (-) 0.06 = 0
 \end{aligned}$$

**Q9(a) Productivity**

- a) Productivity implies more number of goods (output) from the same amount resources (input)
- (b) Management can play an important role in promotion of productivity. The following are the scope for management in this regard:-
- (i) Material
    - Change of design of component
    - Use of correct process
    - Suitable material handling equipment
    - Storage facilities and proper packaging
    - Use of computers and other sophisticated eqpt
  
  - (ii) Labour
    - Improvement in work methods, through work study techniques
    - Giving motivation apart from pay
    - Provide good, safe working conditions
    - Recognising HR as vital part of the enterprise
    - Education and training of employees
    - Maintenance of good relations with labour unions
  
  - (iii) Plant, Eqpt & Machinery
    - Provisioning improved tools, attachments and devices
    - Ensuring proper maintenance
  
  - (iv) Land & Building
    - Suitable lay out to accommodate more machinery
    - Proper orientation, construction and inside condition of the building.

**Q9(b) Work Study as a Management Tool:** Work study investigates the work done in an organization and it aims at finding the best and most efficient way of using available resources; Work study is a generic term for those techniques particularly 'method study' and 'work measurement'. As a management tool, work study is used for examination of human work in all its contents. This, in turn, leads systematically to the investigation of all factors which effect the efficiency of the situation being reviewed, in order to seek improvements. The objectives of work study for any management are:-

- a) improved working processes and standard procedures.

- b) Better layout
- c) Better productivity
- d) Effective utilisation of men, materials and machinery
- e) Reduced hazards
- f) Helps to decide the time to do a job, manpower required for the job and materials required
- g) Helps budgeting and costing
- h) provides a fair and sound basis for incentives
- i) Helps production planning and maintenance.

As a management tool, work study finds application in all types of industries and organisations providing goods and services and is used in all types of activities in these institutions.

Q10(a) **Preparation and Analysis of Balance Sheet:** Balance Sheet is one of the important financial statements of a company giving its financial status at any given time. It is prepared at least annually but may be done so more often and on specific occasions when the need exists in connection with making decisions concerning large project investments, dividend distribution, etc.

Balance Sheet is a statement of Assets, Liabilities and the Company's Capital ( or net worth) at a specified date. It shows the summary of the sources of the enterprise resources and the investment of these resources in various forms of assets.

Along with the Profit & Loss account, the Balance Sheet is analyzed using certain financial ratios which help to reveal the financial and non-financial health of the enterprise.

In general, there are four categories of ratios each attempting to measure the firm's financial position and performance. These are:-

- a) Liquidity Ratios –which reflect the firm's ability to meet scheduled short term obligations
- b) Activity Ratios – which tell how the firm is managing various classes of assets.
- c) Leverage Ratios –Show how much debt the firm has used to finance its investments.
- d) Profitability Ratios – designed to reflect the profitability of the firm.

Q10(b) **Product Development:** Product Development is an activity which involves design/redesign and fabrication of new or modified product and then testing it to find its usefulness.

The various steps involved in developing a product are:-

- a) Get New Ideas by initiating, adaptation, by invention, from dealers/customers, from public at large.
- b) Separate the good and feasible ideas from amongst many, if need be, by a committee consisting of managers of important Depts connected with product development.
- c) Evaluate ideas technically with regard to method of manufacture, labour and eqpt requirements, cost, performance characteristics, etc
- d) Evaluate ideas from markets point of view viz their acceptability by the customers. First evaluation can be done through cursory survey by salesmen, followed by a proper market survey.
- e) Based on information collected on market and technical aspects, it may be decided finally as to whether to go ahead for production or to forget the idea.
- f) If it is decided to take up the idea and production started, then the following are done viz designing the product, ordering of eqpt, procurement of material, selection and training of workers, establishing control system etc.
- g) While production is on, preparations are done to introduce the product into market and to impress the market with the developed product viz market, advertisement policies, packaging, channels of distribution, price/discount, guarantee, after sales service, etc

Short Notes

- Q11(i) **Inventory Control- its scope and importance:** Inventory control is the scientific method of finding out how much stock be maintained in order to meet the production demands and be able to provide right type of material at right time in the right quantities and at competitive prices.

Inventory control is concerned with achieving an optimum balance between two objectives which are:-

- a) to minimise investment in inventory since it means money kept in store room.
- b) to maximize the service levels to the firm's customers and its own departments.

A good inventory control will aim to :-

- a) Procure material of good quality in time
- b) not to face shortage of material
- c) Avoid delay in production schedules
- d) Achieve production targets

- e) Obtain delivery dates accurately
- f) help industry to build up its reputation and maintain better customer relations.

Q 11(ii) **Line Balancing** :Line balancing means balancing the line between the product lines or assembly lines. It aims at grouping facilities and workers in an efficient pattern in order to obtain optimum or most promising balance of the capability and flow of the production or assembly processes. Tasks are grouped so that their total time is preferably equal to or a little lesser than the time available to each work station – thus reducing the idle time.

Each work station should have the same operating time and the various operations should be sequenced properly. There should be perfect balance between the output rates of the parts and the sub assemblies. However, it is not always possible that the parts reach in a steady stream immediately before sub-assembly. This may be because of the limitation as regards materials, men and equipments or it may be economical to manufacture and supply parts in batches. The flow control section has to cope with such situations and thus, carry big inventories and arrange facilities for storage.

Line balancing problems can be solved through heuristics approaches, linear programming, dynamic programming and using computer method.

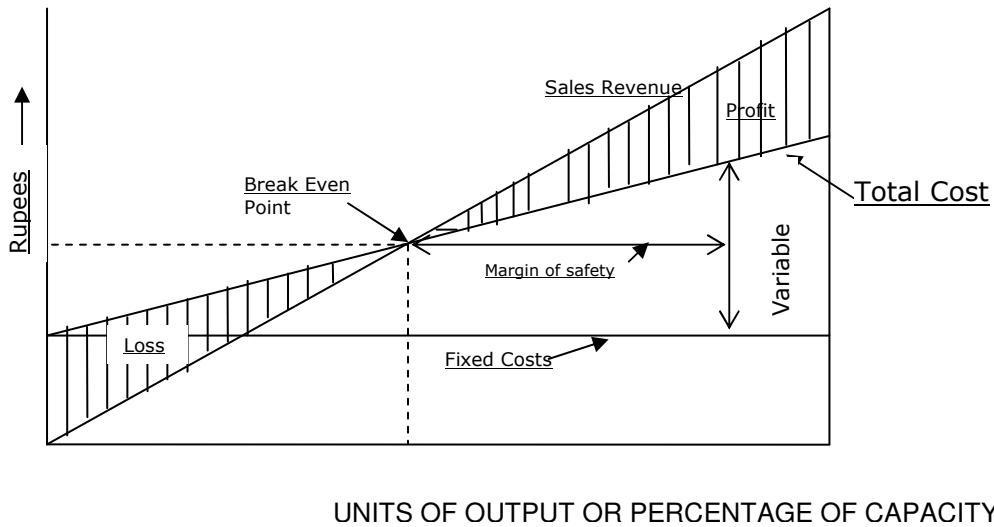
Q 11(iii) **Marketing and Selling**: The marketing concept is a management orientation

that holds that the key task of the organization is to determine the needs, wants and values of a target market and to adopt the organization to deliver the desired satisfaction more effectively and efficiently than its competitors.

The selling Concept is a management orientation which assumes that consumers will normally not buy enough of the Company's products unless they are approached with a substantial selling and promotional effort.

Selling focuses on the needs of the seller, whereas marketing focuses on the needs of the buyers. Selling is preoccupied with the seller's need to convert his goods into cash, whereas marketing lays emphasis on satisfying the needs of the customers by means of the product he wants. Marketing tries to know and understand the customer, as well as, the product or service that fits him and sells itself. Actually Marketing is another name for selling with the inference that it is a long-haired method. Marketing is a more expensive way of selling.

Q 11(iv) **Breakeven Analysis:** Break even analysis implies that at some point in the operations, total revenue equals total cost. Break-even analysis is concerned with finding the point at which revenues and costs agree exactly – hence the term 'Break-even Point'. The following figure portrays the Break Even Chart:-



Break-even point is the volume of output at which neither a profit is made nor a loss is incurred. The break even analysis can be carried out algebraically or graphically.

Breakeven Analysis helps solving the following types of problems:-

- a) What volume of sales will be necessary to cover
  - a reasonable return of capital employed
  - preference and ordinary dividends, and
  - reserves
- b) To computing costs and revenues for all possible volumes of output to fix budgeted sales.
- c) To find the price of an article to give the desired profit.
- d) To determine the variable cost per unit
- e) To compare a number of business enterprises by arranging their earnings in order of magnitude.

The Breakeven point (BEP) can be calculated by using the following relation:-

$$\text{BEP} = \frac{F}{1 - V/P}$$

Where F is fixed Cost

V is Variable cost per unit or total variable cost  
and P is the selling price of each unit.

Q1.

- (a) **A** - Is Useful
- (b) **D** - Ledger Book
- (c) **C** - 75%
- (d) **A** - Normal Distribution of Time Activity - Events
- (e) **B** - Informal Communication
- (f) **D** - All of the Above
- (g) **D** - Perpetual
- (h) **B** - Indirect Cost

### PART-I

Q2(a) **Scope of TQM:** TQM (Total Quality Management) is a system approach to quality

in all spheres of the organisation. TQM means meeting the requirement of internal/external customers consistently by continuous improvement in the quality of work of all employees. Total in TQM stands for an overall integrated approach to all aspects of quality, all domains of system including organisation, people, resources, time, hardware/software and even management committees. TQM is a management approach of organisation, centered on quality, based on participation of all its members and aiming at long term success through customer delight and benefits to the members of the organisation and society. TQM sustain on four pillars viz Systems, Top Management Commitment, Team Work and Statistical Process Control (SPC) Tools.

The principal objectives of TQM are:-

- (i) Customer Focus viz Customer Delight.
- (ii) Continuous improvement as a culture of the organisation which must be the way of life.
- (iii) Focussed, continuous and relentless cost reduction.
- (iv) Focussed, continuous and relentless quality improvement.
- (v) To create an organisation whereby everyone is working towards making their organisation the best in its business and to capitalise on the sense of achievement and working in a world-class organisation.

Q2(b) **Problem of Industrial Marketing in India:** Industrial market consists of all individuals and organisations that acquire goods and services in the production of other products and services that are sold, rented or supplied to others. In India, the major industries making up the industrial market are agriculture, forestry, fisheries, mining, manufacturing, construction, transportation, communication,

public utilities, banking, finance, insurance, computer hardware, automobiles and services.

The problem of Industrial markets in India are :-

- (i) The customer base is small and new markets/customers are less.
- (ii) Market is characterised by high buyer concentration ratio in that few buyers do most of the purchasing. e.g. automobile companies, aircraft industries, fertilizers companies, etc.
- (iii) The demand for industrial goods is ultimately derived from the demands of consumer goods. Therefore, industrial marketer need to closely monitor the buying patterns of ultimate consumer and those of environmental factors that affect them.
- (iv) The total demand for many industrial goods and services is not affected by price changes.
- (v) Most of the industrial buyers are concentrated in specified state and locations in India. Industries like Petroleum, Steel, etc. have greater geographical concentration. This has impact on transportation costs.
- (vi) There is a need for technical advice and continued support after the sales, which is found lacking.
- (vii) Lengthy negotiation on price between manufacturer and customer.
- (viii) Close & constant customer-supplier relationship is required where the product is to be custom built.
- (ix) Stringent Government regulations & stipulations which at time favour or restrict the supplier.
- (x) Existence of stiff competition offered by international players due to opening up of economy and liberalisation policy.
- (xi) Corruption at all levels which influence the buying and selling.
- (xii) Need for more direct personal selling, since advertising, sale promotion and publicity do not play adequate role in industrial marketing.

**Q3. Importance of Training & Education:** Education and training bring employees to a standard where they can carryout industrial tasks efficiently. The increasing rapidity of changes today as compared to earlier periods intensifies the need for study, adaptation and new education and training.

Education improves an employee and he can take up and handle jobs of higher responsibility, whereas, training prepares an individual so that he can accomplish his industrial task efficiently and effectively. Education improves knowledge and training improves the

skill and aptitude. Education and training are complementary to each other.

The training & education of work force differs from that of the middle level managers in content & method.

**(a) Work Force.** At this level the employees are to be familiarised with the organisation, with the job and are given mostly skill training. The methods are :-

- (i) Induction & Orientation Training which aims to get over the problems in the period as quickly as possible and with the minimum emotional upsets.
- (ii) Training by skilled, experienced and old worker to whom the new worker is attached. The new worker watches the experienced worker while he works and then tries to do the same way.
- (iii) On the Job Training where the supervisor explains & demonstrates the job and the new worker tries at out himself.
- (iv) Apprentice Training which has an academic side, as well as, practical one, i.e. a trainee attends certain courses, as well as, receives practical training.

**(b) Middle Level Managers.** The middle level managers need training and education on HRM, Decision Making and Self Development. The methods used are :-

- (i) Under study wherein the managers learn the ways of his superior.
- (ii) Positional rotation which broadens the managers' background in other areas.
- (iii) Assignment to special projects which is a useful & flexible training device.
- (iv) Committee Assignments which help inter-personal interaction, teamship, etc.
- (v) Attending Special Courses conducted at Training Institution to enhance knowledge.
- (vi) Role Playing wherein the trainee is given a strategic position to play in an artificially created conflict situation.
- (vii) Sensitivity Training which develops the managers' awareness and sensitivity to behavioural pattern of one self and other people.
- (viii) Simulation where the trainees are asked to make decision about production, cost, inventories, sales, etc. in a simulated firm & situation.

Q4 (a) **PERT:** Programme Evaluation and Review Technique (PERT) is a technique used for scheduling and controlling the projects where activities are subject to considerable degree of uncertainty in the performance time. Originally it was used by the US Ballistic Fleet Missile Project of the US Government in designing and producing major weapon systems for the US Military Establishment. This is because unlike CPM, which is determinative, the orientation of PERT is probabilistic and its application is mainly for Research and Development projects. PERT is used to evaluate the variance in project duration and also to determine the probability of completing a project by a given date. Unlike CPM, which uses only one time estimate for each activity, PERT uses three time estimates viz., optimistic time, most likely time and pessimistic time. The basic tool used in PERT technique is the network or flow plan. Network consists of a series of related events and activities. The network thus drawn shows how various activities of a project depends on each other and that certain activities have to be completed before the others can start.

Q4 (b) **Lead Time:** Lead Time is the time which takes the stock to reach from Re-order point to minimum stock level. It may be also defined as the time that elapses between the voicing of a need for anything and the time taken to satisfy the need. If one order is placed today and after 40 days it is fulfilled, then 40 days period is the lead time. Hence it shows that order should be placed 40 days earlier. Lead time determines the amount of material to be kept in reserve. As the lead time decreases, the reserve stock also decreases and vice-versa. Therefore, the lead time analysis is very necessary and the attempt should be made to reduce this period.

Lead Time includes :-

- (i) Time to process the enquiries and to place the order.
- (ii) Time to deliver the order to the supplier.
- (iii) Time for the supplier to fulfil the order.
- (iv) Transportation time to reach the purchaser, etc.

Lead time is to be taken into consideration for setting the maximum, minimum and the order quantities for each time.

Q5(a) **Sources of Manpower Recruitment:**

**(i) From within the Company**

Following are the sources of manpower recruitment for any company :-

- By promotion
- By transfer
- Former employees who had good service records when they left.

**(ii) From outside the Company**

- Friends and relatives of present employees duly recommended by them.
- Through press and other advertisements.
- Through employment agencies.
- Through schools, colleges and universities.
- Through labour unions.
- From waiting lists.
- As recommended by Professional bodies and societies.
- Foreign sources.
- From unsolicited applications received, both at the gate and through the mail.
- Through trade associations.
- From Government employment exchanges.
- From labour contractors.
- Through personnel consultants.
- With the help of Notices exhibited at the factory gate.

Q5 (b) **ABC Analysis of Inventory Control:** ABC analysis is the widely used approach for classifying the inventories on the basis of cost and use. This is a type of *pareto analysis* and sometimes also referred to as *Always Better Control* approach.

The inventories are classified into three groups :-

**(i) A-Type Inventory :** These are high value, low volume type of inventories. This means that their annual consumption is very less but these are very costly items. Despite needed less in volume, their annual monetary value is quite high, as these are very costly items. *ABC-analysis* recommends careful control of A-Type inventory. More periodic review is needed. Involvement of higher level of management is recommended in the review process. A small reduction in the safety stock and EOQ will cause substantial saving for the organisation. It has been observed that a small percentage of items (say 10 to 20%) accounts for major percentage (say 70 - 80%) of the total annual monetary consumption in inventories. These are called A-Type inventories.

**(ii) C-Type Inventory :** Majority of the items (say 60-70%) constitute only a minor fraction of the total annual monetary consumption (say 5 to 15%) in inventories. These items are C-Type items. The control needed for these items may not be very stringent. Bulk-purchase decisions may be useful as the item cost is less. Therefore, lesser number of orders may be placed. These items may be under the supervision of lower level of management and only exceptional reports or monthly reports are needed by top management.

**(iii) B-Type Inventory :** Items other than A and C type constitute 20-30% in terms of items and 10 to 25% in terms

of their annual consumption value. These are termed as B-Type inventories. Their control and supervisions are moderate as compared to A or C type inventories.

Q6(a) **Breakeven Analysis:**

**(i) Concept of Breakeven Analysis**

Breakeven analysis implies that at some point in the operations, total revenue equals total cost. Basically, breakeven analysis is concerned with finding the points at which revenues and costs agree exactly – hence the term *BREAKEVEN* (point). The breakeven point is, therefore, the volume of output at which neither a profit is made nor a loss is incurred. The breakeven analysis can be carried out *algebraically or graphically*.

**(ii) Importance and Scope of Breakeven Analysis**

Breakeven analysis helps solving the following types of problems:-

- (a) What volume of sales will be necessary to cover :-
  - a reasonable return on capital employed;
  - preference and ordinary dividends; and
  - reserves.
- (b) Computing costs and revenues for all possible volumes of output of fix budgeted sales.
- (c) To find the price of an article to give the desired profit.
- (d) To determine variable cost per unit.
- (e) To compare a number of business enterprises by arranging their earnings in order of magnitude.

Q6(b) **Leadership:** Leadership is the process of influencing a group in a particular situation at

given point of time and in a specific set of circumstances that stimulate people to strive willingly to attain organisational objectives. There are three distinct styles of leadership. They are :-

**(i) Authoritarian.**

- Leader makes all decisions, conveys and demands implementation.
- All policies are determined by him unilaterally without consulting subordinates.
- Leader remains aloof, exercises tighter control on subordinates.
- This leadership style is not popular, succeeds only in limited areas.

**(ii) Democratic.**

- Leader discusses and consults, invites ideas and suggestions from subordinates and then takes decisions.

- Develops strong team work, encourages subordinates and motivates them.
- This is popular form of leadership and employee morale is kept high.

**(iii) Free Rein or Laissez - Faire**

- Leadership leaves subordinates entirely to themselves for task accomplishment.
- Exercises hardly any control and gives complete freedom to subordinates.
- Leader intervenes least, avoids power.
- This leadership can work only where subordinates are highly educated, brilliant and possess good sense of responsibility.

**PART-II**

Q7(a) **Accounting:** Accounting is an art of recording and classifying data. Here, the data refers to transactions having financial or monetary values. According to this, accounting is only an art and not a science. This contention is held because of the fact that the principles and rules of accounting are not based on general truths and natural laws like any physical or mathematical science. Accounting has its own laws which apply equally well in similar circumstances for similar business transactions.

**Art of recording.** Accounting is an art of recording business transactions in the books of accounts in a systematic manner soon after their occurrence. This is done in a book called 'Journal' and in other subsidiary books of accounts like Cash Book, etc.

**Art of classifying.** Classifying is a process of grouping transactions or entries of one nature in one place. This is done by opening accounts in a book called 'Ledger'. To get the correct idea of net effect of transactions already recorded in a journal or subsidiary books, they are further processed and grouped. Similar transactions relating to a particular account for a given period are brought together. Then they are recorded at one place called ledger, which classifies all transaction under different heads, expenses, persons, etc.

Q7(b) **MIS (Define MIS & its scope):** Management Information System is defined as a formal method of making available to management the accurate and timely information necessary to facilitate the decision making process and enable the organisation's planning, control and operational functions to be carried effectively and efficiently.

The purpose is to aid decision making and not to automate the Decision making process.

Scope of MIS is :-

- to provide timely, relevant, accurate and complete information.

- to provide information to all functional managers viz Production, Finance, Marketing, Personnel, R & D, etc.

- to provide information to all level of management viz Top level, Middle level & Low level managers for making intelligent decisions.

- to provide information for Strategic Planning, Operational Planning and Management Control.

The MIS provides information on the past, present and projected future and on related events inside and outside the organisation. The MIS provides the management the following major services :-

(i) Determination of Information needs.

(ii) Information Gathering.

(iii) Information Processing.

(iv) Information Utilisation.

**Q8(a) Procedure of Job Evaluation:** The procedure for job evaluation is as given below :-

(i) Identify the jobs to evaluate.

(ii) Select the most suitable method or technique of evaluation.

(iii) Identify major job characteristics & then minor ones.

(iv) Inform all concerned workers, supervisors etc.

(v) Build definitions and their measuring scale for comparison.

(vi) Prepare job rating proforma/questionnaires and collect inputs.

(vii) Sort out initial descriptions and establish grades/classes.

(viii) Identify & evaluate key jobs & other remaining jobs. Take into consideration representations of workers in job rating.

(ix) For key jobs/ make inter-company survey.

(x) Transfer rating values in money terms.

(xi) Plot a scatter diagram for the more key jobs & end jobs.

(xii) Bargain on wage structure and finalise.

**Q8 (b) Definition of Time Study & Work Measurement:**

**(i) Time study**

Time study is defined as a work measurement technique for recording the times and rate of working for the elements of a specified job, carried out under specified conditions and for analysing the data, so as to obtain the time necessary for carrying out the job at a defined level of performance.

ILO

## **(ii) Work Measurement**

Work measurement is defined as the application of techniques designed to establish the time for a qualified worker to carry out a specified job at a defined level of performance.

ILO

### **Q9 (a) Delegation Of Authority & Responsibility:**

- Authority implies the right to command and power to act.
- Responsibility is the obligation to whom a duty is assigned, to perform the duty.
- One of the basic principles of management is parity of authority and responsibility. The principle states that in delegating, managers must match responsibility of subordinates with grant of commensurating authority.
- First the subordinate is given a responsibility of achieving certain defined objectives. Then he is given the authority in right amount to achieve these objectives. Mismatch of either one will create imbalance.
- In delegation the manager transfers part of the legitimate authority to a subordinate but without parting with the ultimate responsibility which has been entrusted to him by his own superior.
- Therefore, in the concept of delegation, delegation of authority is more important than responsibility, since responsibility cannot be delegated by a superior as he is still accountable for the original authority vested in him. However, the subordinate to whom the authority is delegated is responsible for exercising the authority to achieve the tasks assigned to him.

### **Q9(b) Creating a Constant Flow of New Products or Continually Updating & Improving the Current Product Line:**

In a product planning activity, it is clear that both existing products and potential products must be included. It follows that the activity itself should deal with the proper balance between old and new products in the product mix.

Product planning is usually linked with the Market Analysis inputs. The inputs will indicate the need for new products or need for new process or updation & improving the current product. Through the prediction of societal, political, ecological, technological and/or economic trends, the anticipated needs can be often determined.

If the company has to survive and grow in a competitive environment it has to keep anticipating the needs. In certain products, regular flow of new products is essential to capture the

market for e.g. Colgate Palmolive bringing-in new toothpaste at regular intervals, Maruti Udyog bring-in new variety of Cars. In certain type of products like TVs, updating & improving the same product with new features, eliminating deficiencies become essential to sell in the market. While both (new products and updating /improving old products) are driven by market needs, the creation of constant flow of new products is more important today in view of the fast changing tastes and preferences of people. The concept of speed-to-market becomes relevant wherein you introduces your new product in the market as fast as possible because it gets very fast percolated in the market. Many software companies, automobile manufacturers, computer hardware firms, pharmaceutical companies are eager to hit the market first with their innovative products, which capture the imagination and need of the customers.

**Q10(a)Marketing:** All organisations are engaged in producing products or services meant for use/consumption by people at large. Needs and wants are part of human characteristics and people tend to look for and get those products and services that satisfy their needs and wants. An organisation comes into being in the environment to satisfy these needs and wants of people. Therefore, for the organisation to survive, it needs to know and understand the customer as well as, the product or service that fits him and sells itself. Marketing results in a customer who is ready to buy himself. Thus, all organisations need marketing to sell their products & services. By marketing the organisation is able to determine the needs, wants and values of a target market and to adapt the organisation to deliver the desired satisfaction, more effectively and efficiently than the competitors. This in turn, helps the organisation to achieve its objectives.

Companies cannot survive to day by simply doing a good job in producing goods and services. They must do an excellent job in marketing these goods and services in the face of stiff competition and technological innovations. Thus marketing becomes as integral post of the organisation.

Marketing involves planning and execution of all aspects and activities of a product or service so as to exert optimum influence on the consumer to result in maximum consumption at the optimum price, and therefore, producing the maximum long term profit for the organisation. Therefore, all organisations need marketing.

**Q10(b)Decision Making Process:** A good decision can only be made as a result of a rational decision making process. The various stages of the said process are :-

**(i) Recognising and defining the problem**

- Recognise & identify the real problem and not the symptoms.

- Define the problem so as to determine the conditions for its solution.

**(ii) Analysing the problem**

- Means classifying it and finding the facts.
- Classification ensures that a decision really contributes to the whole business rather than solve an immediate or local problem at the expense of the whole.
- Facts are necessary to make a sound decision and reduce risk.
- Must define the unknown.

**(iii) Determining the possible alternatives**

- Normally problems have more than one alternative.
- Must consider all possible alternatives for arriving at a solution including competitors' solutions or those used in the past.

**(iv) Evaluating the impact of Alternatives**

- Decision maker must mentally put into effect each alternative and visualise their impact, thus forecast what will happen if a certain forecast is adopted.
- Both qualitative & quantitative factors to be considered.
- Limitations of each alternative to be considered.
- Techniques like marginal analysis, cost effectiveness, cost-benefit analysis can be used.

**(v) Selecting the best solution**

- Best solution is selected by comparing merits & demerits, gains & losses of each alternative.
- Must consider degree of risk, availability of resources, limitations and time required for implementation etc.

**(vi) Implementation**

- Convert decision into action.
- Communicate, ensure subordinates' participation.
- Monitor implementation through feedback.

Q11(a) **Non-monetary Motivation:** The factors leading primarily towards motivation are :-

- |                  |  |
|------------------|--|
| (i) Achievement  | - Personal satisfaction in job completion & problem solving.           |
| (ii) Advancement | - Promotion to higher level/job.                                       |
| (iii) Growth     | - Learning new skills which offer greater possibility for advancement. |
| (iv) Recognition | - Acknowledgement of a job done well.                                  |

- (v) Responsibility & Authority - In relation to one's job.
- (vi) Work itself - Actual job content and its positive/negative effects.

The following are some of the techniques of providing motivation which are non-monetary in nature :-

- (i) Praise workers and give them credit for all good work done by them.
- (ii) Take a sincere interest in subordinate as in individual persons.
- (iii) Promote healthy competition among individual employees.
- (iv) Develop & utilise the appeal of pride in or about work place.
- (v) Delegate a substantial amount of authority.
- (vi) Formulate a suitable suggestion system.
- (vii) Permitting employees' participation in management matters.
- (viii) Providing opportunities for growth & promotion.
- (ix) Promoting good & satisfying inter-personal relations at work & outside.
- (x) Promoting good working conditions.
- (xi) Fair, clear, firm and consistent management policies.
- (xii) Use of punishments judiciously - like reprimand, demotions, etc. (negative motivational techniques).

Q11(b) **Theory 'X' and 'Y'**: These theories are put forward by Douglas McGregor. The theories are based on the management thinking having certain assumptions about human nature and human behaviour.

### **Theory 'X'**

This is essentially a negative approach to human relations in which a supervisor presumes certain the assumptions which are :-

- (a) The average person does not like to work and will avoid it if he can.
- (b) For this reason, most persons must be coerced, controlled, directed or threatened with punishments so that they start putting efforts to achieve goals of the organisation.
- (c) The average human being prefers to be directed, wishes to avoid responsibility has relatively little ambition and wants security above all. Therefore, employees must be punished constantly and threatened with loss of security and other punishments when they do not produce.

### **Theory 'Y'**

This is a positive approach to human relations in which a supervisor integrates the needs of his subordinates with the needs

of Department. It emphasises on satisfying the needs so that the employees willingly commit to the goals of the organisation. The assumptions are :-

- (a) Average human being does not dislike work; given meaningful work, he will try hard to achieve.
- (b) Work is as natural to him as play or rest.
- (c) External threats & punishments are not the only means. Satisfied persons will themselves exert self-control in seeking to attain organisational goals.
- (d) Average man learns, under proper conditions not only to accept but also to seek responsibility.
- (e) Commitment to organisational goals depends upon rewards associated with his self achievement.
- (f) The capacity to exercise a relatively high degree of imaginations, ingenuity & creativity and solution of organisational problems is widely distributed among people.

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- Q.1 (a) **B** - The principle of management that emphasizes the need for teamwork among employees is known as *Esprit de Corps*.
- (b) **A** - Top management level includes Board of Directors, Managing Directors, Chief Executive and General Manager.
- (c) **A** - A combination of short statements that describe both the work to be performed and the essential requirements of the particular job is known as *Job Evaluation*.
- (d) **B** - The *Industrial Disputes Act* aims at settling disputes between Employees and Employer.
- (e) **A** - The sum of *Direct Material Cost*, *Direct Labour Cost* and *Direct Expenses* is *Prime Cost*.
- (f) **D** - *Method study* and *Work Measurement* are components of *Work Study*.
- (g) **C** - Decisions made in accordance with some habit, rule or procedure are called *Programmed Decisions*.
- (h) **B** - *Samples*, *money-refund offers*, *contests* and *competition for consumers* are *Consumer Promotion Tools*.

**PART I**

Q2(a) **Causes of Organisational Change:** Causes of Organisational changes are as follows :-

**(A) External pressures**

- (i) **Change in Technology and Equipments** - Advancements in technology is the major cause (ie. External pressure) of change. Each technological alternative results in new forms of organization to meet and match the needs.
- (ii) **Market situation** - Changes in market situation include rapidly changing goals, needs and desires of consumers, suppliers, unions etc.
- (iii) **Social and political changes** - Organisational units literally have no control over social and political changes in the country. Relations between government

and business or drive for social equality are some factors which may compel for organizational change.

**(B) Internal pressure**

(i) **Changes in the Managerial Personnel** - One of the most frequent reasons for major changes in the organization is the change of executive at the top. No two managers have the same style, skills or managerial philosophies.

(ii) **Deficiencies in the existing organisation** - Many deficiencies are noticed in the organizations with the passage of time. A change is necessary to remove such deficiencies as lack of uniformity in the policies, obstacles in communication, any ambiguity etc.

(iii) **Certain other factors such as listed below also demand a change in the organization** -

Employee's desire to share in decision- making.

Employee's desire for higher wage rate

Improvement in working conditions, etc.

Q2(b) **Delegation of authority** : Delegation may be defined as the entrustment of responsibility and authority to another and the creation of accountability for performance. The Principles of Delegation are as below:-

(i) **Parity between authority and responsibility** - There should be complete parity between authority and responsibility. If authority is more than responsibility, people will make misuse of their authority and if responsibility is more than authority, the results can never be achieved.

(ii) **Responsibility in terms of results** - To be effective, delegation of authority should always be in terms of exact results of responsibility. In other words, responsibility should be specific on a specific person, because everybody's responsibility is nobody's responsibility.

(iii) **Principle of Unity of Command** - Orders, instructions and guidelines should flow to a subordinate from a single particular executive only in order to avoid confusion, conflicts and duplication of work.

(iv) **Delegation of responsibility** - Authority can be delegated. But, responsibility and accountability cannot be delegated. By delegating authority, an executive does not escape from responsibility, He is, in addition, responsible for the act of his subordinates also.

(v) **Overlapping of responsibilities** - While delegating authority, it must be ensured that duties and responsibilities of subordinates do not overlap.

(vi) **Free flow of information** - In delegation of authority, there should be free two way communication ( as regards exchange of ideas, instructions, guidelines, clarifications, suggestions etc.) between an executive and a sub-ordinate.

(vii) **Delegated authority** - Authority delegated to the subordinate should be adequate, enough and as per the status and position of the subordinate, in order to achieve optimum results.

Q3(a) **Labour Turnover:** Labour turnover refers to the movement of workers into and out of an organisation. Labour turnover may be defined as the time-to time changes in the number of the work force that result from the hiring, release and replacement of employees.

#### **Causes of Labour Turnover**

- (a) Voluntary withdrawals (by the worker) due to :-
- dislike for the present job;
  - better job available elsewhere;
  - conditions at home;
  - ill-health;
  - poor working conditions;
  - bad treatment from the boss;
  - lower wages and excessive hours of work;
  - job being hard and hazardous;
  - poor training and induction;
  - dirty politics prevalent in the industry;
  - partially in making promotions and transfers and due to,
  - ineffective and inefficient management.
- (b) Lay-offs due to seasonal nature of industry, shortage of power, fuel, raw material, etc.
- (c) Discharges due to undesirable activities of the employees, insubordination or they being found unsuitable for the job.

(d) Retirement.

(e) Death.

**Q3(b) Collective Bargaining:** Collective Bargaining constitutes the negotiations between the management and the union with the ultimate objective of agreeing on a written contract covering the terms and conditions of settlement of the disputed issues. Collective bargaining is basically a give-and-take process involving proposals and counter proposals.

The steps involved in collective bargaining process are:-

- (i) Putting up before the management, by the employees, their demands and grievances collectively.
- (ii) Discussing and negotiating with the management representative, with a view to settle the disputed issues.
- (iii) Signing a formal or informal agreement mutually arrived at.

- The mutual agreement may be as regards the following:

- (a) Union security.
- (b) Wages, bonus and other benefits.
- (c) Terms and conditions of employment, Hours of work, Holidays, Safety and health, Promotion, transfer and discharge, etc.
- (d) Grievance procedure.
- (e) Incentives.
- (f) Management responsibilities, etc.

- If either of the party, later on, feels reluctant in abiding by its commitments under the mutual agreement, the other party can employ economic pressures to force that party to meet its obligations.

(iv) In the event of no agreement, various pressures are brought to bear upon the management by the union (such as strikes, picketing, gheraos, etc.) or on union by the management (such as lock-out) to reconcile.

In collective Bargaining both the parties, i.e., management representatives and union officials have a basic obligation to establish a constructive relationship of working harmony in the settlement of disputes and in the advancement of labour-management peace.

Q4(a) **Production and Manufacturing Budget:** A production budget may be prepared by production manager in consultation with his assistants after receiving the sales Budget. A production budget shows the quantity of products to be manufactured. It is based upon :

- (i) Sales budget,
- (ii) Factory capacity (Production and storage),
- (iii) Budgeted stock requirements,
- (iv) Economic lot size, and
- (v) Availability of raw material and labour, etc.

A production budget finds the cost of producing the estimated volume of saleable products. A production plan is calculated in terms of the number of units to be produced in each period, say a month. As far as possible, the production should be planned at a relatively even rate, even though the sales budget indicates a high seasonal sales forecast.

Manufacturing budget needs the following basic budgets or estimates to meet the plans:-

- (i) Production budget outlining the schedule of product units to be manufactured.
- (ii) Direct material budget.
- (iii) Plant (space) and equipment budget.
- (iv) Maintenance budget.
- (v) Manufacturing expense budget (overhead).
- (vi) Labour budget.

Production budget is a part of Manufacturing budget. Manufacturing helps management in keeping production at an even level and in controlling the use of labour, material, equipment, etc.,

Q4(b) **Work Study: Definition of Work Study:** Work Study, as defined by British Standard Institution, is a generic term for those techniques particularly 'Method Study' and 'Work Measurement' which are used in the examination of human work in all its contexts and which lead systematically to the investigation of all the factors which effect the efficiency of the situation being reviewed, in order to seek improvements.

#### **Advantages of work study**

The following are the advantages :-

- (i) Uniform and improved production flow,
- (ii) Higher productive efficiency,
- (iii) Reduced manufacturing costs,
- (iv) Fast and accurate delivery dates,
- (v) Better employee – employer relations,
- (vi) Better service to customers,
- (vii) Job security and job satisfaction to workers,
- (viii) Better working and other conditions, and
- (ix) Higher wages to workers.

Q5(a) **Morale:** Morale is a measure of extent (or level as either high or low) of voluntary cooperation demonstrated by a individual or a work group and of the intensity of the desire to attain common goals. Morale is a mental condition or attitude of (individuals and) groups which determines their willingness to cooperate. Morale is made up of two sets of elements – one set containing those which help to make a person satisfied with his job and a second set containing those (elements) which when, lacking, make him feel dissatisfied.

The word morale generally has an implication of group reactions ie., what motivation does to the individual, morale does to the work group. Morale is an individual attitude in a group endeavour and a group attitude towards the goals of an organization. High morale is the confident spirit of whole-hearted cooperation in a common effort.

### **Factors Affecting Morale**

Factors which tend to lower or improve the employee morale are :

#### 1. Job Factors -

- Nature of job,
- Fatigue and boredom associated with the job,
- Employees interest in the job,
- Job satisfaction,

Confidence on individual members of the group,

Confidence of different members of the group in the leadership at all levels.

Nature of leadership and supervision, i.e., whether the leader/supervisor is just, impartial, helpful, social minded etc.

Working and environmental conditions, i.e., whether they are good and wholesome.

Condition or working equipment.

2. Personal Factors, such as Background, Intelligence, Age, Skill and proficiency, Sex, Training, Mental and emotional condition of employee, Experience, etc.

3. Other factors such as,

- Organisational efficiency, ie.,

- (i) The way the organization is set up, the way the orders are given, the way information is passed up and down, the way things are provided, etc,

- (ii) The way the informal organizations decide and think and work.

- Objects of the organization, i.e., whether they are clear or they confuse the employees.

- Unfair selections and promotions.

- Frustrations resulting from lack of recognition, ie., attaching more importance to junior persons and neglecting seniors.

- Rewards and Incentives.

Q5(b) **Functions of Marketing Management:** The broad functions of marketing management consist of the following :

(i) **Marketing Research:-**

Marketing research includes all research activities involved in marketing problems:-

- (i) gathering, recording and analyzing the utility and marketability of the product;
- (ii) the nature of demand;
- (iii) the nature of competition;
- (iv) the methods of marketing; and
- (v) other aspects of movement of products from the stage of production to the point where they get consumed.

(ii) **Sales Forecasting**

Forecasting is essentially the art of anticipating what buyers are likely to do under a given set of condition. Sales forecast is a commitment on the part of the sales department and each of its divisions of the expected sales likely to be achieved in a given period at stated prices.

(iii) **Advertising**

It is a commercial message to the public, designed to inform potential and established consumers and to encourage sales for the advertiser. Advertising is just as communication is vital to good internal management, so is vital to the earning of profit.

(iv) **Sales promotion**

Sales promotion are intended to educate the consumers better and to bring about an increase in sales and is used more extensively in highly competitive business.

(v) **Packaging**

Packaging is an important activity of a sales promotion department because an attractive package catches fast the attention of the customers and speaks itself to them.

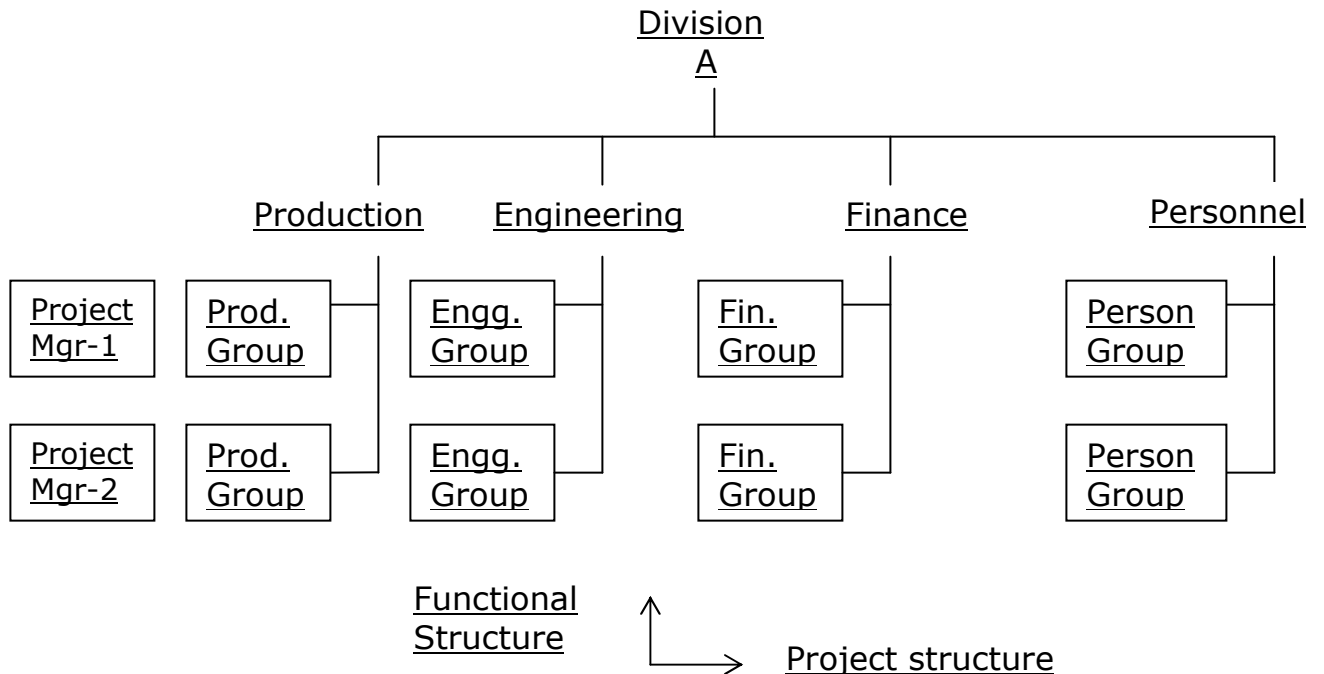
(vi) **Pricing**

The price of the products is the means whereby manufacturers obtain a fair return for their labour and replace/increase their wealth and purchasing power in return for supplying the products. All business enterprises face the task of setting a price for their products or services.

(vii) **Handling or inquiries and orders from customers.**

(vii) **Servicing.** The continued servicing after sales.

Q6(i) **Matrix Organisation:** Matrix organization is used when an organization has to handle a variety of projects, ranging from small to large. When a pure project structure is superimposed on a functional structure, the result is a matrix structure. The project structure provides a horizontal lateral dimension to the traditional vertical orientation of the functional organization structure as given in the following diagram.



Matrix organization is created by merging (two complementary structures, namely) pure project organization and functional organization. The project teams are composed of persons drawn from the functional departments for the duration of the project. When their assignment is over, they return to their respective departments. During continuation of the project, such persons have two bosses – one, from the functional department and second of the concerned project.

#### **Advantages of matrix organization**

- (i) If effectively focuses resources on a single project, permitting better planning and control to meet deadline.
- (ii) It is more flexible than a traditional functional hierarchy.

(iii) Services of specialists are better utilized as more emphasis is placed on the authority of knowledge than rank of the individuals in the organizational hierarchy.

### **Limitations of matrix organization**

(i) Matrix organization violates the principle of unity of command as a person works under two bosses e.g., project manager and functional boss. This may give rise to conflicts in the organisation.

(ii) Organisation relationships are more complex and they create problems of coordination.

(iii) Since persons are drawn temporarily from different departments, project manager does not have line authority over them.

(iv) Project group is heterogeneous due to which morale of the personnel may be low.

Q6(ii) **Grievances Handling:** Individual employees generally have some complaints called grievances against the working rules of the business enterprise, e.g wages, bonus, working conditions, behaviour of supervisor etc.

A Grievance may be defined as any feeling of discontent or dissatisfaction, whether expressed or not and whether valid or not, arising out of anything connected with the company that an employee thinks, believes or even feels is unfair, unjust or inequitable. A grievance may be :

- (i) unvoiced or stated by the worker,
- (ii) written or unwritten, and

a. valid or ridiculous, and may arise out of something connected with the company, e.g company policy or actions. If the enterprise wants to get maximum out of its employees, an adequate and effective procedure must be deployed by the management to handle and settle grievances of its employees.

The one thing which is very harmful to good relations between workers and management is the feeling among workers that the management does not look into their problems and difficulties. This results in dissatisfaction in the minds of workers and distrust towards management which, in turn, introduces inefficiency and lack of co-operation from the worker's side. Hence, if no systematic way exists for bringing workers complaints or grievances to the surface, they may pile up and explode into an industrial dispute.

A good grievances handling should:

- be simple, easy to understand and to operate
- settle grievances at lower level
- systematically handle the grievances and promptly rectify the condition complained of
- depending upon the nature of grievance, refer it to appropriate authority
- ask the employee to give the complaint in writing
- permit the workers to appeal against the decision taken at lower level and
- the grievance procedure should be made realising the importance of industrial harmony and good labour relations.

Q6(iii) **TQM: Total Quality Management** :TQM (Total Quality Management) is a system approach to quality in all spheres of the organisation. TQM means meeting the requirement of internal/external customers consistently by continuous improvement in the quality of work of all employees. Total in QM stands for an overall integrated approach to all aspects of quality, all domains of system including organisation, people, resources, time, hardware/software and even management committees. TQM is a management approach of organisation, centered on quality, based on participation of all its members and aiming at long term success through customer delight and benefits to the members of the organisation and society. TQM sustains on four pillars viz systems, top Management commitment, Team work and Statistical Process control (SPC) Tools. The principal objectives of TQM are :-

- (i) Customer Focus viz Customer Delight.
- (ii) Continuous improvement as a culture of the organisation which must be the way of life.
- (iii) Focussed, continuous and relentless cost reduction.
- (v) Focussed, continuous and relentless quality improvement.
- (v) To create an organisation whereby everyone is working towards making their organisation the best in its business and to capitalize on the sense of achievement and working in a world-class organisation.

Q6(iv) **Workers' Participation in Management:** Worker's participation in management can be in any shape, from establishing work-committee to auto-management by the employees. The aim of

management is to get work through others. Workers, if they are permitted to participate and involve themselves in some of the decisions relating to work situation, etc., perhaps more effectively the company objectives can be achieved.

**Objective or Necessity.** The objective or the necessity of permitting workers to participate in management can be:

- (i) To achieve industrial peace and harmony.
- (ii) To develop internal motivation in the workers.
- (iii) To boost the morale of employees.
- (iv) To raise the levels of the employee production, productivity and product quality.
- (v) To satisfy workers by making them feel that they have their voice in the management.
- (vi) To give workers a better understanding of their role in the working of industry.
- (vii) To develop better mutual understanding so that the workers do not resist a change for the betterment of the concern(e.g., introduction of work study, etc.)
- (viii) To minimize the number of grievances and therefore, industrial disputes .
- (ix) To make managing of the subordinates easy.

**Types of Worker's Participation** - Worker's participation in management may take many forms, e.g

- (a) Formal participation – consist of some plan for labour management cooperation.
  - (i) Ascending participation – where elected representative of workers participate in management decisions at higher levels.
  - (ii) Descending participation – where workers participate in planning and deciding their own work in shop floor.
- (b) Informal participation – It is more typically at the work group level, where the foreman develops the opportunities for

the group of workers to take part in a problem solving or decision making process.

## **PART II**

Q7(a) **Skills required of a Successful Manager:**The skills required of a successful manager, whether he is working in a industry, business organization, an educational institute or a hospital etc. can be classified as follows: -

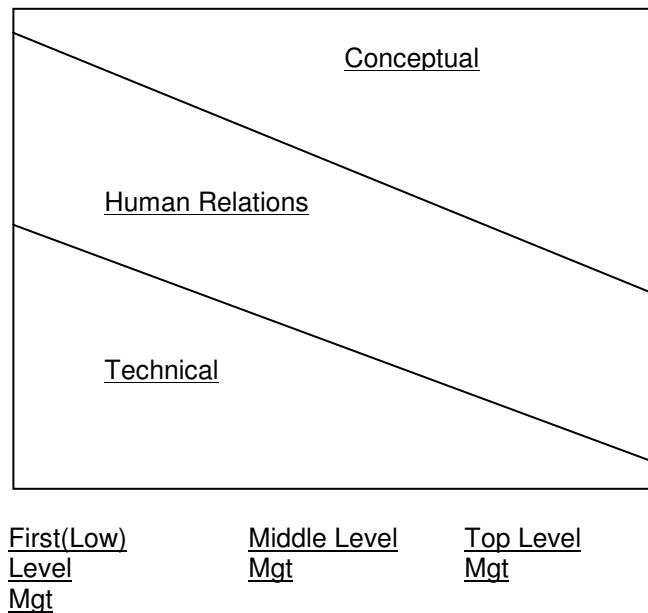
- (a) Technical Skills.
- (b) Conceptual Skills.
- (c) Human Relations Skills.

Technical skill refers to the proficiency in handling methods, processes and techniques of a particular kind of industrial/business operation. It is essential for a manager to know which technical skill should be employed in a particular work. Technical skill is essential for lower level management.

Conceptual skill is the ability to see the organization as a whole, to recognize inter-relationships among different functions of the business and external forces, and to guide effectively the organizational efforts. It is critical in top executive positions. It is easier to learn technical skill than the conceptual skill. Conceptual skills are decision-making skills (ability of the person to take timely and accurate decisions) and organizational skills(they help fix different people at different jobs).

Human Relations skill refers to the ability to work effectively with others and build cooperative work groups to achieve organizational goals. Communicating skills (ability to pass on information to others effectively) and motivating skills (inspiring people to do what you want them to do) are the two Human Relations skills.

Need for skills at different levels of Management is shown below in the diagram:-



Q7(b) **Different types of Decisions:** Decisions may be of different types. Some of the important types of managerial decisions are explained below :-

(i) **Programmed and Non-Programmed decisions**

Programmed decisions are those made in accordance with some habit, rule or procedure. Non-Programmed decisions are those that deal with unusual or exceptional problems.

(ii) **Major and Minor Decisions**

Decision with regard to financial outlay can be major or minor. A decision related to the purchase of a CNC machine costing several lakhs is a major decision and purchase of a few reams of typing paper is a minor (matter or )decision.

(iii) **Routine and Strategic Decisions**

Routine decisions are of repetitive nature, do not require much analysis and evaluation, are in the context of day-to day operations of the enterprise and can be made quickly at middle management level. Strategic decisions relate to policy matter, are taken at higher levels of management after careful analysis and evaluation of various alternatives, involve large expenditure of funds and slight mistake in decision making is injurious to the enterprise.

(iv) **Organizational and Personal decisions**

A manager makes organizational decisions in the capacity of a company officer. Such decisions reflect the basic policy of the company. They can be delegated to others. Personal decisions relate the manager as an individual and not as a member of an organization. Such decisions cannot be delegated.

(v) **Individual and Group decisions**

Individual decisions are taken by a single individual in context of routine decisions where guidelines are already provided. Group decisions are taken by a committee constituted for this specific purpose. Such decisions are very important for the organization.

(vi) **Policy and Operative decisions**

Policy decisions are very important, they are taken by top management, they have a long-term impact and mostly relate to basic policies. Operative decisions relate to day-to-day operations of the enterprise and are taken at lower or middle management level.

(vii) **Long-term, Departmental and Non-Economic decisions**

In case of long term decisions, the time period covered is long and the risk involved is more. Departmental decisions relate to a particular department only and are taken by departmental head. Non-economic decisions relate to factors such as technical values, moral behaviours etc.

Q8(a) **Functions and Objectives of Trade Unions:** The functions of trade unions are :-

(i) The provision of friendly services such as a place for leisure pursuits, information about jobs existing in other factories, games and outings, etc.

(ii) The provision of social services such as insurances against old age, unemployment, strike, pay, payment for hospital fee, legal services etc.

(iii) Wage bargaining, i.e collective wage bargaining with the employers.

(iv) Safeguarding the job of the workers.

(v) Political activities, i.e. the political pressure for reform, e.g. trade union legislation works to protect the union and the workers from such industrial abuses as delay in payment of wages, excessive hours of work, poor working conditions, etc.

- (vi) To develop cooperation with employers.
- (vii) To arouse public opinion in favour of labour.
- (vii) To secure some shares in profit and in the control of the enterprise.

The Objectives of trade unions are :-

- (i) To take labour out of the competitive process; because if a number of workers freely compete for a job, the employer will definitely offer them less wages.
- (ii) To negotiate at all levels with employers over wages and conditions of work.
- (iii) To protect the workers in their inalienable right to higher and better life.
- (iv) To make workers to take part in union activities and to obey union rules and decisions.
- (v) To protect and promote the interests of the workers.
- (vi) To provide legal assistance to workers (i.e. union members) in connection with work affairs.
- (vii) To improve economic status of workers.
- (viii) To protect the jobs of the workers against lay off, retrenchment, etc.

Q8(b) **Advantages and Limitations of Budgets:** The advantages and limitations of budget are as follows:-

**Advantages :-**

- (i) Policy, plans and actions taken are all reflected in the budgetary control system. There is a formal recognition of the targets which the business hopes to achieve.
- (ii) Not only departmental programmes are developed, over expenditures in departments are also curtailed and controlled.
- (iii) Budgeting makes for better understanding, coordination and harmony of action in a business enterprise, because all departments take part in budget preparation.
- (iv) The targets, goals and policies of a business enterprise are clearly defined.

(v) Deviations from predetermined plans are brought to notice through variance analysis and corrective action is stimulated by reports, statements and personal contacts.

(vi) It provides management with a guide of daily activities; thus helps determining performance and efficiency of each department, thereby leading to improvement.

(vii) It informs management the progress made towards achieving the predetermined objectives.

(viii) It facilitates financial control.

(ix) Total capital required and price of an item(product) can be estimated in advance.

(x) Budgetary control builds morale when operated in a truly managerial spirit, i.e., it should not acquire merely a clerical outlook (or approach).

### **Limitations :-**

(i) Since budget is based on estimates, i.e., estimated sales, estimated costs, estimated business conditions, etc. it may need periodic revisions because estimates may not come out to be cent percent true.

(ii) A budget may not work if the idea of budgeting is not sold properly to different sections of the business. Only the persons working in different sections can make an established budget, a success. Thus, it should be a cooperative budgeting.

(iii) A budget cannot work until the desire to make it work is established in the minds of persons working in the different sections of a business concern.

Q9(a) **Important provisions of Factory Act, 1948:**The important provisions of Factories Act, 1948 are as follows:-

a) **Health:** The following are the important provisions for employee health:-

- (i) Cleanliness
- (ii) Disposal of Wastes and Effluents
- (iii) Ventilation and Temperature
- (iv) Dust and Fumes
- (v) Artificial Humidification
- (vi) Overcrowding
- (vii) Lighting
- (viii) Drinking Water
- (ix) Latrines and Urinals

(x) Spittoons

b) **Safety:** The provisions with regard to safety are:-

- (i) Encasing and fencing of machinery
- (ii) Work on or near machinery in motion
- (iii) Employment of young persons on dangerous machines
- (iv) Hoist and lifts
- (v) Lifting machine, chains, ropes and lifting tackles
- (vi) Pressure plants
- (vii) Floors, stairs and means of access to different places
- (viii) Pits, sumps, openings in floors, etc.,
- (ix) Excessive weights
- (x) Protection of eyes
- (xi) Precautions against dangerous fumes
- (xii) Explosive or inflammable dust, gas, etc.
- (xiii) Precautions in case of fire

c) **Welfare:** Provisions related to welfare are as below:-

- (i) Washing facilities
- (ii) Facilities for sitting
- (iii) First aid appliances
- (iv) Canteens
- (v) Shelters, rest-rooms and Lunch-rooms
- (vi) Creches
- (vii) Welfare officers

d) **Working Hours:** The provisions with regard to working hours deal with the following:-

- (i) Weekly hours
- (ii) Weekly holidays
- (iii) Daily hours
- (iv) Intervals for rest
- (v) Extra wages for over-time
- (vi) Restriction on double employment
- (vii) Register of adult workers
- (viii) Restrictions on employment of women

e) **Employment of Young Persons:** The provisions are as below:-

- (i) Prohibition of employment of young children
- (ii) Non-adult workers
- (iii) Certificate of fitness
- (iv) Working hours for children
- (v) Register of child workers

Q9(b) **Barriers to Successful Communication:** A barrier to successful communication does not permit the transmission of accurate and full information at the receiving end. A communication barrier breaks down, obstructs, delays,, distorts and tends to give another colour to the information by the time it reaches the destination.

Various barriers to successful communication are:-

- (i) More levels in the organisation structure through which an information has to pass.
- (ii) Long and ill-structured channels of communications.
- (iii) heavy work-loads at certain levels in the organisation structure.
- (iv) Attitude – either not to hear or to hear what one expects to hear.
- (v) Prestige and superiority complex.
- (vi) Sender and Receiver having different perceptions.
- (vii) Sender unable to symbolize the information correctly.
- (viii) Prejudiced and biased attitude of the receiver.
- (ix) Receiver unable to get the information (subject to different meanings) clarified.
- (x) Receiver ignoring conflicting information.
- (xi) Receiver tending to evaluate information from his own angle.
- (xii) Receiver emotionally upset.

Q10(a) **Industrial Management:** Industrial Management involves guidance, leadership and control or efforts of a group of individuals toward some common goals of the industry.

The Industrial Manager is involved in the following functions:-

- (i) design products that will find acceptance in competitive markets;
- (ii) devise methods of producing such products efficiently;
- (iii) explore reliable sources for obtaining materials and supplies;
- (iv) attract funds;

- (v) build plants, recruit and train employees with a wide variety of talents.
- (vi) devise systems for coordinated efforts; and
- (vii) inspire confidence and activate all the resources (facilities) into a viable going concern.

However, the job of industrial Manager becomes still more difficult due to

- (i) change in market;
- (ii) change in technology;
- (iii) change in attitude and feeling of people; and
- (iv) change in government regulations, etc.

Though industrial management involves all aspects of management, its peculiarity with reference to the industry, makes it unique in its characteristics and job content.

Q10(b) **Objectives and Characteristics of Organisational Development (OD):**

**Objectives of OD**

- (i) Improvement in the performance of the organisation.
- (ii) Improvement in the ability of the organisation to adapt to its environment, and
- (iii) Improvement in inter-personal and inter-group behaviour to secure team work.

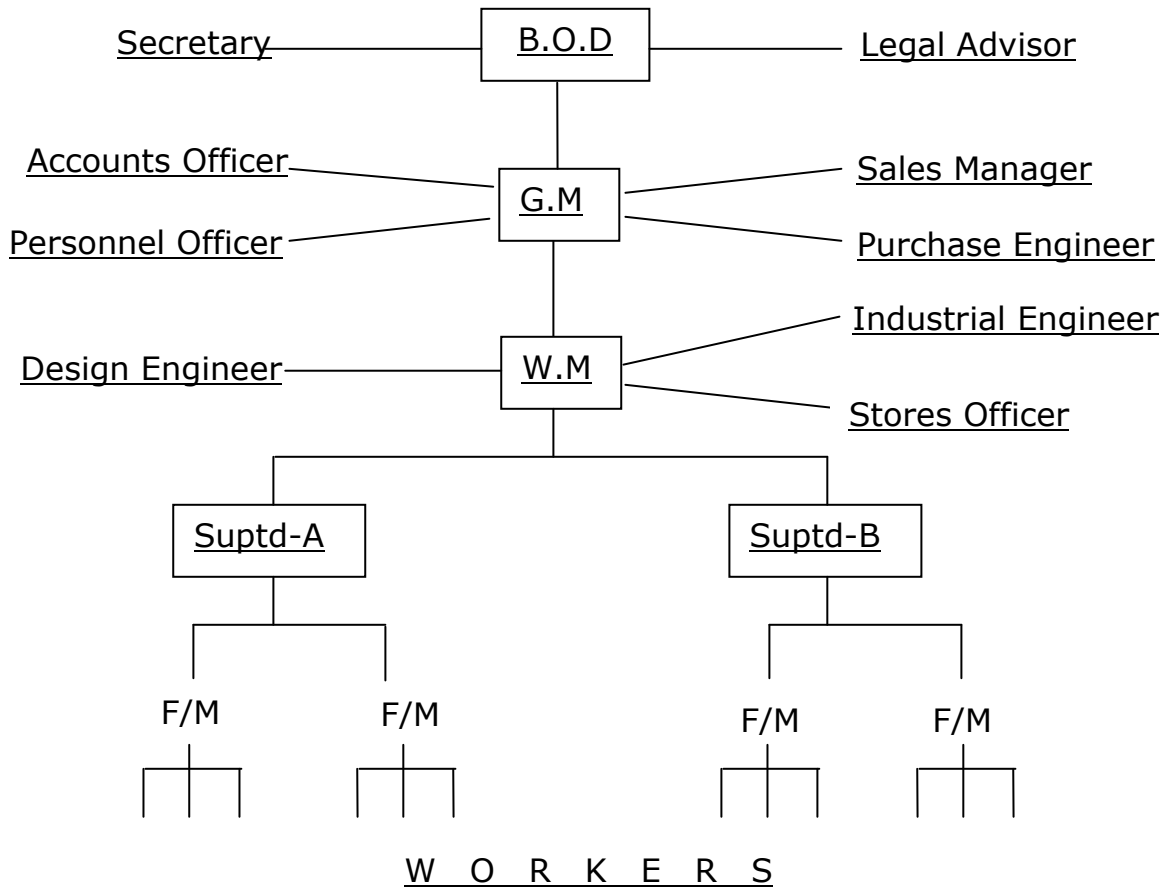
**Characteristics of OD**

- (i) Organisational development is an educational strategy for bringing a planned change.
- (ii) It is related to real problems of the organisation.
- (ii) Laboratory training methods based on experienced behaviour are primarily used to bring change.
- (iv) Organisational Development uses change agent (or consultant) to guide and effect the change. The role of change agent is to guide groups towards more effective group processes rather than telling them what to do. Change agents simply assist the group in problem solving processes and the groups solve the problems themselves.
- (v) There is a close working relationship between change agents and the people who are being changed.

- (vi) Organisational Development seeks to build problem-solving capacity by improving group dynamics and problem confrontation.
- (vii) Organisational Development reaches into all aspects of the organisation culture in order to make it more humanly responsive.
- (viii) Organisational Development is a long term approach (of 3 to 5 years period) and is meant to elevate the organisation to a higher level of functioning by improving the performance and satisfaction of organisation members.
- (ix) Organisational Development is broad-based and describes a variety of change programmes. It is concerned not only with changes in organisational design but also with changes in organisational philosophies, skills of individuals and groups.
- (x) Organisational Development is dynamic process. It recognise that the goals of the organisation change and hence, the methods of attaining them should also change.
- (xi) Organisational Development utilizes system thinking. It is based on open, adaptive systems concept. The organisation is treated as an interrelated whole and no part of the organisation can be changed without effecting other parts.
- (xii) Organisational Development is research based. Change agents conduct surveys, collect data, evaluate and then decisions are taken.
- (xiii) Organisational Development uses group processes rather than individual process. It makes efforts to improve group performance.
- (xiv) Organisational Development is situational and contingency oriented.
- (xv) Organisational Development and Management Development are complementary rather than conflicting.

Q11(i) **Line and Staff Organisation:** As the industry grew in size and complexity, the line executives could not perform properly all other functions such as R&D, planning, distribution, legal, public relations etc,. This necessitated the employing of special executives to assist line executives and they were known as Staff since they were recruited to perform staff or specialist functions. The line executives retain supervisory authority and control over the work of their subordinates whereas the staff executives relieve the line executives of certain specialized work and advise them on matters referred to them.

The following figure shows the line and staff organization



Q11(ii) **Managerial Leadership:** Effective managing requires leadership. It is seldom possible to segregate the behavioural functions of *managerial leadership* and *leadership*. It is because, every act of influence on a matter of organizational relevance is in some degree an act of leadership.

A *manager* organizes, directs and controls various activities of the enterprise directed towards specific ends. A *leader*, on the other hand, inspires confidence and trust in his subordinates, gets maximum cooperation from them and guides their activities in organized effort.

Specifically, *managerial leadership* is behaviour that elicits voluntary follower behaviour beyond that associated with required performance on a job. Leadership is "the influential increment over and above mechanical compliance with the routine directives of the organization".

A manager's leadership behaviour is what makes the difference between effective and ineffective organizations. *Managerial leadership* combines the skills of a manager and the qualities of a leader.

The concept of managerial leadership is important because the term itself suggests the necessity of bringing together the

managerial and leadership roles for the more effective task performance, organizational effectiveness and human satisfaction.

The managerial leader, then, is generally evaluated on both *formal task* accomplishment and *informal* basis of personal and group goal accomplishment.

Q11(iii) **Effects of Indiscipline:** The indiscipline in industry brings in certain adverse effects. These are as below:-

**a) Increase in the following factors:-**

- i) **Absenteeism.** Absenteeism on the part of employees which can be willful/deliberate and sometimes organised.
- ii) **Accidents.** Accident due to casual attitude of employees and at times willful/deliberate.
- iii) **Sick Leave.** Employee may feign sickness and take sick leave.
- iv) **Labour Turn-over.** The employees leaving the organisation due to disciplinary procedures and adverse organisational environment.
- v) **Grievances and frustrations.** The grievances and frustrations amongst the employees are bound to result in organised resistance to companies policies.
- vi) **Waste and Scarp Rate.** These could be due casualness in working and at time due to willful/deliberate acts on the part of employees.

**b) Decrease in the following factors:-**

- i) **Production.** The quantum of output in products or services may decline due to indifferent attitude of employees or due to their deliberate actions.
- ii) **Product Quality.** The reduction in quality could be again due to deliberate actions on the part of employees or due to their indifferent attitude.
- iii) **Employee Morale.** Due to the indiscipline environment/ atmosphere, the morale of employee would become low.

Q11(iv) **Cost Benefit Analysis:** Cost-benefit analysis is a mathematical technique for decision-making. It is a quantitative technique used to evaluate the economic costs and the social benefits associated with a particular course of action. In this technique, an effort is made to identify all costs and benefits, not only those that may be expressed

in rupees, but also the less easily calculated effects of a given decision.

In general, this technique (which is fairly complicated) is advocated for use in decisions on public projects, in which social costs and social benefits, as well as, actual out-of-pocket costs should be taken into account. What counts as a benefit or loss to one part of economy – to one or more persons or groups-does not necessarily count as a benefit or loss to the economy as a whole. And in cost-benefit analysis we are concerned with the economy as a whole, with the welfare of a defined society and not any smaller part of it. But cost-benefit analysis may also be applicable to a single company, for in many cases, it is advisable to place a value on costs and benefits that are not ordinarily expressed in rupees.

Some what similar to cost-benefit analysis is the cost-effectiveness analysis, which is an analysis to determine the least expensive way of reaching an objective or of obtaining the greatest possible value from a given expenditure.