

**Important Instructions to examiners:**

- 1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
- 2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
- 3) The language errors such as grammatical, spelling errors should not be given more Importance (Not applicable for subject English and Communication Skills).
- 4) While assessing figures, examiner may give credit for principal components indicated in the figure. The figures drawn by candidate and model answer may vary. The examiner may give credit for any equivalent figure drawn.
- 5) Credits may be given step wise for numerical problems. In some cases, the assumed constant values may vary and there may be some difference in the candidate's answers and model answer.
- 6) In case of some questions credit may be given by judgement on part of examiner of relevant answer based on candidate's understanding.
- 7) For programming language papers, credit may be given to any other program based on equivalent concept.

| Q. 1A | Attempt any Three | Marks |
|-------|---|---|
| a) | <p>What are the advantages and disadvantages of globalization for Indian industry.</p> <p>Ans:-</p> <p>Advantages:</p> <ol style="list-style-type: none">1) Market size increased2) Competition created Quality awareness among the producers.3) Excellences in output has been increased.4) Collaboration and Business merging increased.5) Employment opportunity increased6) Customer got key importance due to survival approach of the business in the competition.7) Quantum of Export increased an foreign exchange helped to make Indian Economy stronger.8) India , Indian product, Indian attitude got identified in global market.9) Indian culture, Indian traditions got appreciation all over the world.10) Foreign Investor invested huge capital in India's development.11) Scope for expansion for private sector. <p>Disadvantages:</p> <ol style="list-style-type: none">1) Due to global competition small, domestic business units find tremendous competition.2) Traditional trade system faces survival problem.3) As the market is extended all over the word, to satisfy all the customers there is over utilization of resources.4) Due to extreme industrialization , environment is in great trouble.5) Pollution is the outcome of heavy industrial developments.6) Identity of Nationality is collapsed.7) Cultural transformation is disturbing the present system.8) More automation is introduced so labour force is reduced in some factories.9) Cheap product of foreign companies are becoming threat to Indian producers.10) Multinationals are making Indian people habitual of using their products. | <p>Any 4</p> <p>02</p> <p>Any 4</p> <p>02</p> |
| b) | <p>Explain the importance of 'Scientific Management' in an Industrial Concern</p> <p>Ans:-</p> <p>-Scientific Management is the result of applying scientific knowledge and scientific methods to the various aspects of management and the problems that arise from them.</p> <p>-It tries to make the best use of production resources i.e. manpower, machines, materials, money etc..</p> <p>-It discovers the economical and efficient methods of production so as to reduce effort and eliminate wastage of time and motions.</p> | 04 |

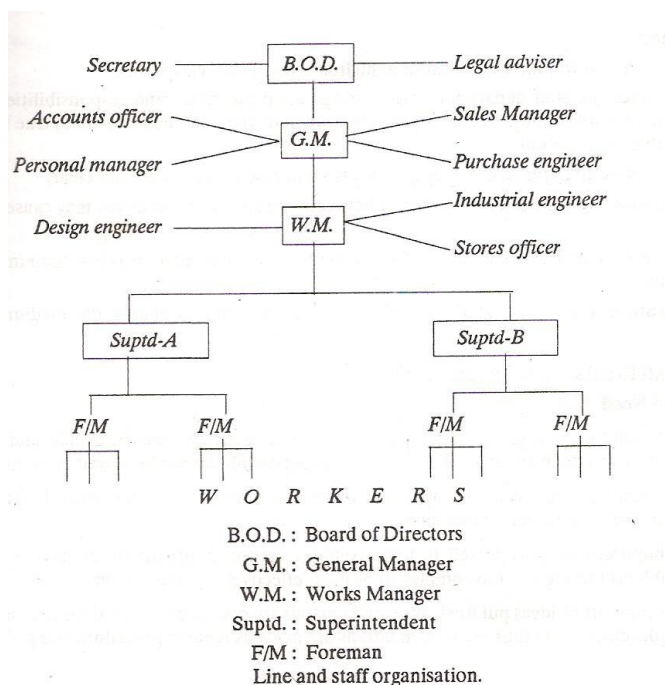
| | | | | | | | | | | | | | | |
|----------------|--|---|------------|----------------|-------|-------------------------------|--------------------|---------------|--|---|----------------|----------------------------|-----------------------------|----|
| | <p>-It investigates work on scientific basis, selecting the best worker for a task and training him further to acquire desired skill, developing co-operative spirit between management and workers.</p> <p>- Thus with use of Scientific Management, greater efficiency is achieved in industrial operations and productivity increased.</p> | | | | | | | | | | | | | |
| c) | <p>Define organization. Write the steps in forming organization</p> <p>Ans. Definition: -Large group of people working together to achieve a set task. -Once target is set it should be guide in proper way. -Organization is mechanism or structure that enables living think to work Effectively together.</p> <p>Steps in Organization</p> <ol style="list-style-type: none"> 1. Determination of Objective 2. Deciding the various activities 3. Grouping of activity 4. Assignment of responsibility to definite person 5. Delegation of authority 6. Provide the physical facility and proper environment | <p>01</p> <p>03</p> | | | | | | | | | | | | |
| d) | <p>State the various causes of accident</p> <p>1. Technical Causes ----- Unsafe conditions - Medical factors - Environmental factors</p> <p>-Technical causes or unsafe conditions reflect deficiencies in plant, equipment, tools, materials handling system, general work environment, etc.</p> <p>2.Human Causes ----- Unsafe acts - Personal factors</p> <p>- Human causes or unsafe acts by the person concerned are due to his ignorance or forgetfulness, carelessness, day- dreaming, etc.</p> | 04 | | | | | | | | | | | | |
| Q1.B | <p>Attempt any ONE</p> <p>a) Compare Management and administration on the basis of i) Level, ii) Main Function iii) Skill required iv) Usage v) Scope vi) Example</p> <table border="1"> <tr> <td></td><td>Management</td><td>Administration</td></tr> <tr> <td>Level</td><td>Middle & lower level function</td><td>Top level function</td></tr> <tr> <td>Main Function</td><td>Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals.</td><td>It is concerned with formulation of broad objectives, plans & policies.</td></tr> <tr> <td>Skill required</td><td>Technical and Human skills</td><td>Conceptual and Human skills</td></tr> </table> | | Management | Administration | Level | Middle & lower level function | Top level function | Main Function | Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals. | It is concerned with formulation of broad objectives, plans & policies. | Skill required | Technical and Human skills | Conceptual and Human skills | 06 |
| | Management | Administration | | | | | | | | | | | | |
| Level | Middle & lower level function | Top level function | | | | | | | | | | | | |
| Main Function | Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals. | It is concerned with formulation of broad objectives, plans & policies. | | | | | | | | | | | | |
| Skill required | Technical and Human skills | Conceptual and Human skills | | | | | | | | | | | | |



| | | | | |
|--|---------|---|---|--|
| | Usage | Management is a doing function because managers get work done under their supervision. | Administration is a thinking function because plans & policies are determined under it. | |
| | Scope | Management decides who should do it & how should be do it. | Administration decides what is to be done & when it is to be done. | |
| | Example | Board of Director , Managing Director ,Chief Executive, General Manager , owners , etc. | Production ,Finance , MarkETING and accounts Executive ,Branch manager etc. | |

b) Explain line and staff Organization. State its merits and demerits.

02



Line and Staff Organisation.

- It is combination of line and Functional organization
- it is horizontal and vertical , both, in structure
- The Line officers make the decisions and issue instructions to subordinates, the staff officers have no authority to issue instructions. But in their decision-making function, the Line officers receive advice and guidance from the Staff Officers.
- Organization will be successful only when there is joint work of 'Managers' and 'Executers.'

Merits:

1. Expert's advice in each function is available immediately.
2. More time is available for line executive.
3. Due to expertise available, Improved production process.
4. Less wastages of material and quality of product is improve
5. No confusion of Authority.

02

01

Any two

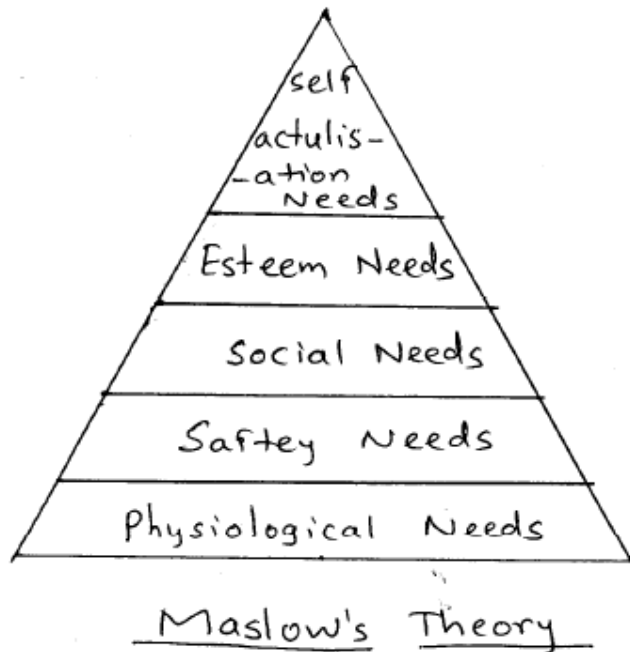


| | | |
|--------------|--|---|
| | <p>Demerits</p> <ol style="list-style-type: none">1. Initial cost /product cost is high due to appointment of highly paid staff specialist.2. Staff specialist forces their decision on line manager.3. Friction, jealousy and ego between line and staff may weaken the organization.4. Too much reliance on staff may develop laziness among line managers and they may lose their initiative, and speed of supervision. | <p>01</p> <p>Any two</p> |
| <p>Q2 a)</p> | <p>List any eight principles of management and Explain them briefly.</p> <p>Ans.</p> <ol style="list-style-type: none">1. Division of work2. Authority and Responsibility3. Discipline4. Unity of command5. Unity of direction6. Subordination of Individual interests to the general interests.7. Remuneration.8. Centralization of Authority9. Scalar Chain.10. Order11. Equity of Treatment12. Stability of Workers13. Initiative14. Esprit de Corps <p>1) Division of Work : Division of work means dividing the work on the principle that different workers are best fitted for different jobs.</p> <p>2) Authority and Responsibility: An executive can do justice with his responsibility only when he has proper authority. Responsibility without authority is meaningless.</p> <p>3) Discipline : No organization can work smoothly without discipline, it is the very core of administration. Discipline is imposed by administration.</p> <p>4) Unity of Command: In order to avoid confusion and conflict, each individual should receive orders and instructions only from one superior and should be accountable to one superior only.</p> <p>5) Unity of Direction: All members of an organization must work together to accomplish common or same objective. Their efforts shall be directed towards one goal.</p> <p>6) Subordination of Individual to General Interest : It means that the common interest of the organization must be given more importance than the interest of the individual</p> <p>7) Remuneration: The persons working in organization should be paid suitably and adequately. Exploitation of employees in any manner must be eliminated.</p> | <p>02</p> <p>Any eight</p> <p>06</p> <p>(Explain any eight)</p> |



| | | |
|----|---|---|
| | <p>8) Centralization of Authority: It means that the authority is in the hands of centre. The degree of centralization is decided by size and complexity of the business.</p> <p>9) Scalar Change: An organization chart should be prepared for better communication and effective co ordination.</p> <p>10) Order: It indicate everyone has its own place in organization. There should be order of right person at right place and right material at a right time , this will only improve the efficiency of organization.</p> <p>11) Equity of Treatment: Manager should have fairness in treatment for all his subordinates.</p> <p>12) Stability of Workers: Security of income and employment is pre requisite of sound organization and management. This will reduce unnecessary labour turn over and increase efficiency by having stable working force.</p> <p>13) Initiative: This principle allows subordinates to utilize their initiative. Initiative is freedom to think, plan and execute.</p> <p>14) Esprit de Corps: The owner and workers happiness lies in making one another happy. Team work is the sole of good management.</p> | |
| b) | <p>What are the contents of partnership deed? State its advantages and disadvantages.</p> <p>Ans.</p> <p>The partnership deed contents are following - (Any Eight)</p> <ol style="list-style-type: none">1) Name of the firm2) Nature of business3) Date of starting partnership4) Duration of partnership5) Money contributed by each partner6) Share of profit and loss7) The basis of the inclusion of any new partners8) Accounts of the firm and authority for signing cheques, bills of exchange etc.9) Salary if any allowed to managing partners.10) The manner in which it can be dissolved. <p>Advantages of Partnership</p> <ol style="list-style-type: none">1. No Overloading of single person.2. Resources arrangement is easier.3. Decision making is more perfect4. Specialized effort helps in business success.5. Less corruption as compared to co-operatives.6. Loss is shared by all partners.7. Wide range of personal contacts. <p>Disadvantages of Partnership</p> <ol style="list-style-type: none">1. Business secrecy is less.2. Business life is less. | <p>04</p> <p>Any 2 2</p> <p>Any 2</p> |



| | | |
|----|--|----------------------------|
| | <p>3. Unlimited liability.</p> <p>4. Difficult to maintain relations in partnership.</p> <p>5. Flexibility is less.</p> <p>6. No transfer of partnership</p> <p>7. Groupism among partners.</p> <p>8. Not suitable for large scale business.</p> | 2 |
| c) | <p>Define Motivation. Explain Maslow's theory of Motivation.</p> <p>Ans: Definition:</p> <ul style="list-style-type: none">- Motivation is the driving force that causes the flux from desire to will in life-Motivation is the drive to satisfy a want.-Motivation is the function of management which energizes people to work better.- Motivation is the act of inspiring people to work in a desired manner in the benefit of the organization. <p>Maslow's hierarchy of needs</p> <div data-bbox="527 1066 1153 1713"></div> | <p>2</p> <p>2</p> <p>4</p> |



- | | |
|---|--|
| <p>4. Esteem needs - self-esteem, achievement, mastery, independence, status, dominance, prestige, managerial responsibility, etc.</p> <p>5. Self-Actualization needs - realising personal potential, self-fulfillment, seeking personal growth and peak experiences.</p> | |
|---|--|

Q.3.A) Attempt any three:**a) Define production budget. State the information on which production budget is based.**

Ans. - 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.
- A production budget finds the cost of producing the estimated volume of salable products.
- A production plan is calculated in terms of the number of units to be produced in each period, Say a month.
- A production budget is the part of manufacturing budget. Manufacturing budget helps Management in keeping production at a level and in controlling the use of labour, material, Equipment etc.

Production budget based upon:

- Sales budget,
- Factory capacity (production & storage),
- Budgeted stock requirements,
- Economic lot size,
- Availability of raw material & labour, etc.

| A.B.C. Co. | | | | | | |
|--------------------------------|-----------------|------|------|-------------------------|-------------------------|-------------------------|
| PRODUCTION BUDGET | | | | | | |
| For the year ending..... | | | | | | |
| | Units of Output | | | | | |
| | Jan. | Feb. | Mar. | 2 nd Quarter | 3 rd Quarter | 4 th Quarter |
| 1. Department-x - Product-x | 4000 | 4000 | 4000 | 13000 | 14000 | 15000 |
| 2. Department-y - Product-y | 2500 | 2500 | 3000 | 9000 | 9500 | 10000 |
| Total x+y | 6500 | 6500 | 7000 | 22000 | 23500 | 25000 |

(2+2 marks)

b) Define EOQ. Draw its graphical representation.

Ans. (2+2 marks)

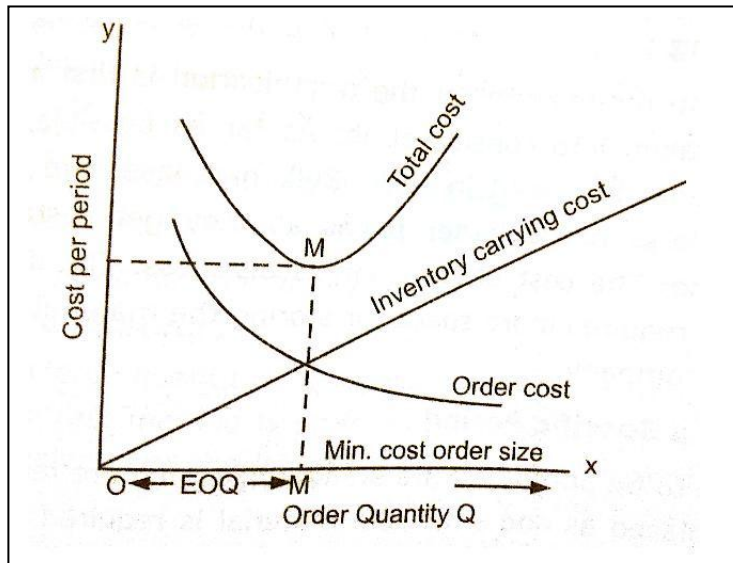
A problem which always remains is that how much material may be ordered at a time. An industry making bolts will definitely like to know the length of steel bars to be purchased at any one time. This length of steel bars is called 'Economic Order Quantity' and an economic order quantity is one which permits lowest cost per unit and is most advantageous.

Before calculating economic order quantity it is necessary to become familiar with terms like maximum inventory, minimum inventory, standard order and reorder point, which are known as quantity standards.

Inventory procurement cost consists of expenditure connected with receiving quotations, processing purchase requisition, following up and expediting purchase order, receiving material and then inspecting it, processing vendors invoice. Procurement costs decrease as the order quantity increases.

Carrying cost, which vary with quantity order, base on average inventory and consist of: interest on capital investment, cost of storage facility, cost of insurance, property tax etc.

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



c) Compare CPM & PERT. (Any four points four marks)

Ans.

| | CPM | PERT |
|---|--|---|
| 1 | A deterministic model with well known activity times based upon past experience. | A probabilistic model with uncertainty in activity duration. |
| 2 | An activity oriented system. | An event oriented approach. |
| 3 | CPM terminology employs words like arrow diagram, nodes, and float. | PERT terminology uses words like network diagrams, events and slack. |
| 4 | The use of dummy activities is not necessary. The arrow diagram thus becomes slightly simpler. | The use of dummy activities is required for representing the proper sequencing. |
| 5 | CPM marks critical activities. | PERT basically does not demarcate between critical and non critical activities. |
| 6 | CPM is employed to those projects where a minimum overall cost is of primary importance. There is better utilization of resources. | PERT finds application in projects where resources (men, machine and specially money) are always made available as and when required. |
| 7 | Suitable for problems in industrial setting, plant maintenance, civil construction projects etc. | Especially suitable in defense projects and R&D where activity times cannot be reliably predicted. |

d) Write the objectives of TQM.

Ans.

Total quality management (TQM) is the optimization and integration of all the functions and processes of a business in order to provide for excited customers through a process of continuous improvement.

Objectives of TQM:



1. Process improvement
2. Defect prevention
3. Priority of effort
4. Developing cause-effect relationships
5. Measuring system capacity
6. Developing improvement checklist and check forms
7. Helping teams make better decisions
8. Developing operational definitions
9. Separating trivial from significant needs
10. Observing behavior changes over period of time

(Any eight points four marks)

B) Attempt any one:

a) Explain the objectives of:

- Excise service tax: Objectives:
 1. The excise tax is collected by Govt. as per policies from manufacturer who produces the product.
 2. It Increases the government revenue.
 3. Developing the stable source of government revenue.
 4. To make the tax system more transparent.
 5. To avoid cascading effect.
 6. To reduce tax evasion practices
 7. To increase in exports.
- Custom duty: Objectives: The custom duty is levied, primarily, for the following purpose:
 1. Restricting imports for conserving foreign exchange.
 2. Protecting Indian industry from undue competition.
 3. Prohibiting imports and exports of goods for achieving the policy objectives of the government.
 4. Regulating exports.
 5. Prevent smuggling.
 6. Facilitate implementation of laws relating to Foreign trade Act, Foreign exchange regulation act, Conservation of foreign exchange etc.

(3 marks each)

b) What are the objectives of purchasing? Explain the steps in purchasing.

Ans. (3+3 marks)

Objectives of purchasing:

- To procure right material.
- To procure material in right quantities.
- To procure materials of right quality.
- To procure from right and reliable source or vendor.
- To procure material economically
- To receive and deliver materials at right place and at right time.

Steps in purchasing:-

- Recognition of need, receipt and analysis of purchase requisition.\
- Selection of possible potential sources of supply.
- Making request for quotation.
- Receipt and analysis of quotations.
- Selection of right source of supply.
- Issuing the purchase order.
- Follow up and expediting the order.
- Analyzing receiving reports and processing discrepancies and rejections.
- Checking and approving vendor's invoices for payment.
- Closing completed orders.
- Maintenance of records and files.

**Q.4. Attempt any four:****a) State the guidelines for effective decision making.****Ans.**

A decision is the conclusion of a process by which one chooses between two or more available alternative courses of action for the purpose of attaining goals. This process is called decision making.

Guidelines for effective decision making:-

- Define the goals.
- Ensure that the decision will contribute to the goal.
- Adopt a diagnostic approach to decision making.
- Involve subordinates in decision making process.
- Ensure successful implementation of the decision.
- Evaluate the results.
- Be flexible and revise the decision which does not yield the desired results.

(any 4 four marks)

b) Compare Private sector and Public sector.**Ans.** (any 4 points four marks)

| | Private sector | Public sector |
|---|--|--|
| 1 | Profit is the main motive. | Service to the country is the main motive. |
| 2 | It benefits the owners | It benefits all. |
| 3 | It is owned and managed by one individual or a group of individuals | It is owned and managed by the government |
| 4 | It has to face tough competition in the market | Generally it is a monopoly concern |
| 5 | A large amount of capital may not be available | A large amount of capital can be available |
| 6 | It leads to economic inequality. i.e. concentration of wealth in the hands of few. | It leads to economic equality. The profits earned are utilized for public welfare. |
| 7 | Large scale business is generally not possible because of limited resources | Large scale business is possible as the government has the huge resources. |
| 8 | Private sector dominates in the production of consumer goods | The public sector dominates in the production of producer goods. |

c) Write the objectives of Workman Compensation Act.**Ans.**

The workmen compensation Act, 1924 is one of the earliest labour welfare and social security legislation enacted in India. It recognizes the fact that if a workman is a victim of accident or an occupational disease in course of his employment, he needs to be compensated.

Objectives of the Workmen's compensation Act:

- Provide workmen and/or their dependents some relief or to consider compensation payable by an employer to his workmen in case of accidents arising out of and in the course of employment and causing either death or disablement of workmen as a measure of relief and social security.
- Provide for payment by certain classes of employers to their workmen compensation for injury by accident.
- To enable a workmen to get compensation irrespective of his negligence.
- It lays down the various amounts payable in case of an accident, depending upon the type and extent of injury. The employer now knows the amount of compensation he has to pay and is saved of many uncertainties to which he was subject before the act came into force.

(any 4 four marks)



d) Explain the concept profit and loss account.

Ans.

- Income statement or Profit and loss account/statement is an account of revenues and expenses for a specified period of time.
- The profit and loss account reports the results of operations of a given period.
- The account starts with a report of the income for the period, from which are deducted all the costs incurred as a result of operations.
- The net figure is the profit or loss for the period.

| A.B.C. Co. Profit and Loss Account Month Ended March 31, 1977 | |
|---|-----------|
| Revenues: | |
| Sales..... | Rs.50,000 |
| Expenses: | |
| Cost of goods sold..... | Rs.25000 |
| Selling expenses..... | Rs.8000 |
| Administrative expenses..... | Rs.10000 |
| Total Expenses..... | Rs.43,000 |
| Income tax..... | Rs.5,000 |
| Net Income (or Net profit)..... | Rs.38,000 |

(4 marks)

e) List the modern techniques of material management. Explain in brief ERP.

Ans.

Modern techniques of material management:

1. Just in time (JIT)
2. System Applications and Products (SAP)
3. Enterprise Resource Planning (ERP)
4. Supply chain material management (SCMM)
5. kanban system etc.

Enterprise Resource planning (ERP): It is a business management software-usually a suite of integrated applications-that a company can use to store and manage data from every stage of business, including:

- Product planning, cost and development
- Manufacturing
- Marketing and sales
- Inventory management
- Shipping and payment

ERP provides an integrated real time view of core business, using common databases maintained by a database management system. ERP system track business resources-cash, raw materials, production capacity-and the status of business commitments: orders, purchase orders and payroll. The applications that make up the system share data across the various departments (manufacturing, purchasing, sales, accounting etc.) that entered the data. ERP facilitates information flow between all business functions, and manages connections to outside stakeholders.

(2+2 marks)

f) Explain the concept of Break Even Analysis and its significance.

Ans.

Concept of BEA:-

- Revenue and cost can be studied by directing attention to total revenue and total cost. Breakeven analysis implies that at some point in the operations, total revenue equals total cost. Basically, breakeven analysis is concerned with finding the point at which revenues and costs agree exactly-hence the term BREAK EVEN (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.

Significance of Break even analysis: - Breakeven analysis helps solving the following types of problems:

- What volume of sales will be necessary to cover
 - i. A reasonable return on capital employed,
 - ii. Preference and ordinary dividends and
 - iii. Reserves.
- Computing costs and revenues for all possible volumes of output to fix budgeted sales.
- To find the price of an article to give the desired profit.
- To determine variable cost per unit.
- To compare a number of business enterprises by arranging their earnings in order of magnitude.

(2+2 marks)

Q.5 Attempt any Two

a) i) What are the different types of capitals?

Ans:-

- 1) Fixed capital:- Long term assets such as land, machinery, building etc.
- 2) Working capital:- Funds required for day to day needs and expenditures such as raw material, payments, maintenance etc.

which are further classified as:-

- | | |
|--------------------------|-------------------------------|
| a) Gross working capital | c) Permanent working capital |
| b) Net working capital | d) Temporary working capitals |

[2 marks for each correct point]

ii) State the sources of finance and explain how Balance Sheet is prepared.

Ans:-

Sources of finance:-

- 1) Internal sources:-
 - a) Retained earnings
 - b) Depreciation provisions
 - c) Deferred taxes
 - d) Personal savings
- 2) External Sources:-
 - a) Bank savings
 - b) Loans
 - c) Corporate bonds
 - d) Share bonds
 - e) Public deposits
 - f) Share capital

[1 marks for any two internal and 1 mark for any two external sources]

Balance sheet: - It is a statement showing the financial status of the company at any given time. It is a statement of assets, liabilities and capital at a specified date. It prepared at least annually.



It is prepared by considering assets, capitals and liabilities. Assets are written on left side and liabilities are written on right side of balance sheet. Assets contains Cash in hand, cash in bank, Inventory, debtors etc. and liabilities contains Expenses, Overdrafts, mortgage, bills payables etc.

Finally total of both liabilities and assets is carried out to match both of them.

[2 marks for explanations]

b) i] State the meaning and objectives of inventory management

Ans:-

Inventory management:-

Inventory Management can be defined as the scientific method of finding out how much stock should 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 in right price.

Objectives:-

- 1) To reduce inventory carrying cost
- 2) To decide how much stock should be maintained
- 3) To get bulk buying discounts
- 4) To support production
- 5) To meet customer delivery commitments
- 6) To reduce lead time

[2 mark for definition and 2 marks for any four objectives]

ii] Explain ABC analysis

As the sizes of the industry increases, the number of items to be purchased also increases.

Purchase and control of all items at a time and in a bulk much before their use, irrespective of their usage value, price or procurement problems, blocks and involves a lot of money and man hours, and is therefore uneconomical. ABC analysis helps segregating the items from one another and tells how much valued the item is and controlling it to what extent is in the interest of the organization. **[1 mark]**

ABC analysis furnishes the following information:

1. **A-Items** are high valued but are limited or few in number. They need careful and close inventory control. Such items should be thought of in advance and purchased well in time. A detailed record of their receipt and issues should be kept. And proper handling and storage facilities should be provided for them. A-items are generally account for 70-80 % of total inventory cost and they constitute about 10 % of the total items. **[1 mark]**
2. **B-Items** are medium valued and their number lies in between A and C items. Such items need



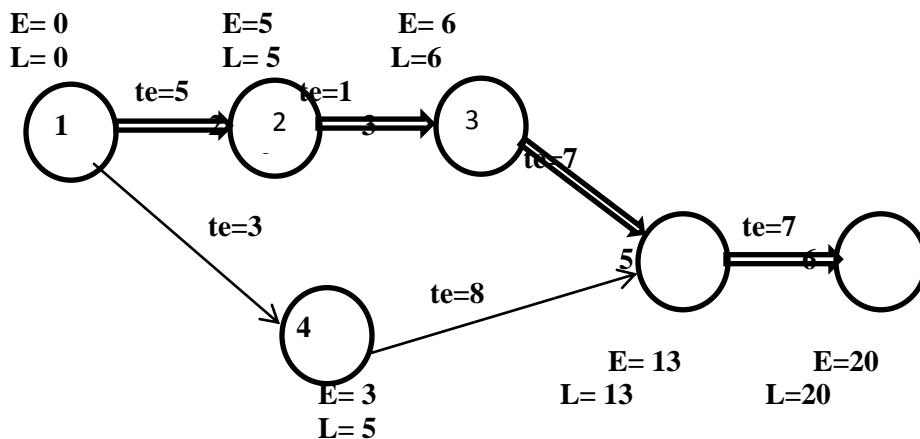
moderate control. They are more important than C-items. These items stock of up to 3 months may be kept. These items also require careful storage and handling. B-items are generally account for 20 to 15 % of total inventory cost and they constitute about 15 to 20 % of the total items. [1 mark]

3. **C-Items** are low valued, but maximum numbered items. These items do not need any control, rather controlling is uneconomical. These are the least important items such as clips, all pins, washer, rubber bands etc. they are generally procured just before they finish. No records are normally kept and a safety stock of 3 months or even more can be purchased at an instant. C items generally account for 10 to 5% of total inventory cost and they constitute about 75% of the total items. [1 mark]

c) Problem:-

Ans:-

i) Network diagram:-



[1 mark for correct diagram and 1 mark for critical path]

| Activity | t0 | tm | tp | te=t0+4tm+tp / 6 |
|----------|----|----|----|------------------|
| 1-2 | 2 | 5 | 8 | 5 |
| 2-3 | 1 | 1 | 1 | 1 |
| 3-5 | 0 | 6 | 18 | 7 |
| 5-6 | 7 | 7 | 7 | 7 |
| 1-4 | 3 | 3 | 3 | 3 |
| 4-5 | 2 | 8 | 14 | 8 |

[2 marks for expected time calculation]

Project duration:-

Path: - 1-2-3-5-6= 20 days {Critical path}

[2 marks for project duration]

{For slack calculations scheduled completion time is considered as 19 days}

| Activity | Start | | Finish | | Total slack |
|----------|----------|--------|----------|--------|-------------|
| | Earliest | Latest | Earliest | Latest | |
| 1-2 | 0 | 0 | 5 | 5 | 0 |
| 2-3 | 5 | 5 | 6 | 6 | 0 |
| 3-5 | 6 | 6 | 13 | 13 | 0 |



| | | | | | |
|-----|----|----|----|----|---|
| 5-6 | 13 | 13 | 20 | 20 | 0 |
| 1-4 | 0 | 2 | 3 | 5 | 2 |
| 4-5 | 3 | 5 | 11 | 13 | 2 |

[2 marks for slack calculations]

Q.6 attempt any FOUR of the following

a) Name eight areas of major industries in India

Ans:-

- 1) Automobiles
- 2) Cement
- 3) Text
- 4) Handicrafts
- 5) Electronics and IT
- 6) Drugs and pharmaceutical
- 7) Food processing
- 8) Sugar
- 9) Khadi
- 10) Petrochemicals

[1 marks each for any two point { 4 marks for eight points}]

b) Define personnel management. State its function

Ans:-

Personnel Management:-

Planning, staffing, organizing, procurement, development and maintenance of employees in the organization is called as personnel management.

Functions:-

- 1) Procurement and Maintenance of adequate work- force as regards to both- number and quality of personnel.
- 2) Education and training of present employees.
- 3) Maintaining Satisfactory Personnel Contact and Employee Relationships
- 4) Maintaining satisfactory group relationship
- 5) Maintaining employees health
- 6) Maintaining employees safety
- 7) Maintaining employees service activities (employee welfare)

[1 mark for definition and 3 marks for any three functions]

C) State the different benefits provided in ESI Act.

Ans:-

1) Sickness benefit:-

- It is the form of periodical payment to any insured person
- Sickness is certified by a duly appointed medical practitioner or another person having qualification as prescribed in regulations

2) Maternity benefit:-

- An insured woman employee is entitled payment in case of confinement or miscarriage or sickness arising out of pregnancy birth of child or miscarriage



3) Disablement benefit:-

- An insured person suffering from disablement as a result of injury in course of employment (i.e employment injury) is entitled for disablement benefit

4) Dependents benefits:-

- Where insured person dies of employment injury, dependents' benefit shall be payable

5) Medical benefit:-

- An insured person whose condition demands medical treatment is entitled to receive medical treatment and medical benefit

[1 Mark each for any four correct points]

d) Write the objectives and functions of financial management.

Ans:-

Objectives:-

- 1) To Raise the funds
- 2) To allocate the funds properly
- 3) To maximize profits
- 4) To maximize wealth of company
- 5) To fulfill social responsibility
- 6) To maximize profit of shareholders
- 7) To avoid misuse of funds

Functions:-

- 1) Understanding and estimation of capital requirement
- 2) Choosing sources of funds
- 3) Allocation of funds
- 4) Investment of funds
- 5) Financial controls
- 6) Management of cash

[2 marks for any Two points]

e) Explain in brief 'SAP'

Ans:- SAP is the acronym for Systems, Applications and Products in data processing. It is an extremely complicated ERP system and runs on a fourth generation. SAP is the solution of an enterprise resource planning (ERP). It is used for the planning the entire resources of an organizations. SAP material management is a module used for procurement, handling and inventory management.

SAP is important material management software which provides following benefits

- 1) Standardization and codification
- 2) Order tracking
- 3) Online supplier interaction
- 4) Fast Purchase order processing
- 5) Less documentation

[2 marks for explanation and 2 marks for benefits]

f) Define:



i) Quality ii) Quality circle ' iii) Quality assurance iv) Six-sigma

Ans:-

- 1) Quality:- “ Fit for purpose” , or “Meeting customer expectation” or “The totality and characteristics of a products or service that bears its ability to satisfy stated needs”
- 2) Quality circle:- A group of employees of the same work areas with different involvement in different activities in an organization that meets voluntarily and regularly to identify. Analyze and resolve work related problems.
- 3) Quality Assurance:- The process of verifying or determining whether products or services meet or exceed customer requirements.
- 4) Six Sigma:-
Six Sigma is statistically based process improvement methodology which extremely focused on manufacturing processes to avoid variation.

[1 Mark for each point]