

**Important Instructions to examiners:**

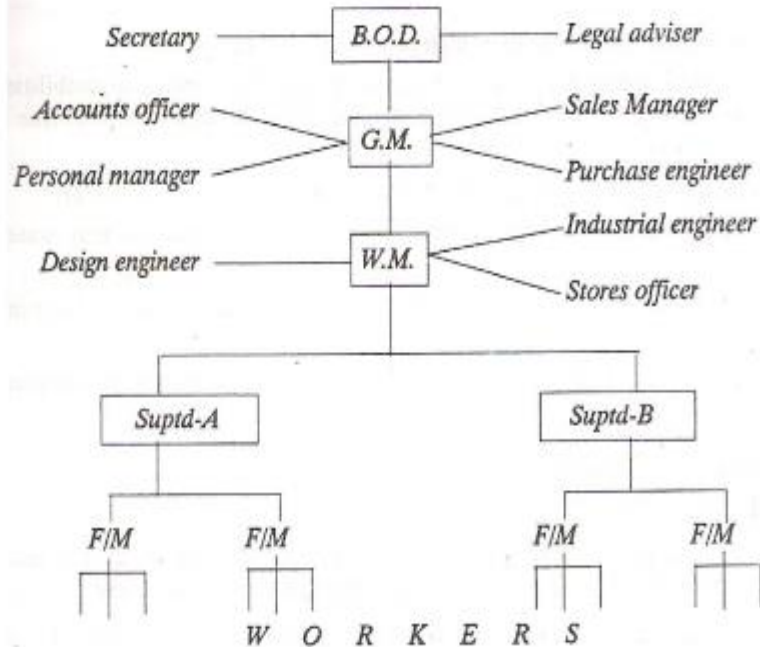
- 1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
- 2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
- 3) The language errors such as grammatical, spelling 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 <b>THREE</b> of the following.	Mark s
i)	What is Globalization? State advantages and disadvantages of Globalization.	
Ans	<p><b>Meaning- Globalization</b></p> <p>International companies seeking local market volume may spread their growth in more than one country. These companies can take advantage of their specialization and expertise in a particular field.</p> <p>Need of Liberalization – FERA its significance customer centric approach cut throat competition quality concern etc.</p> <p><b>Advantages:</b></p> <ol style="list-style-type: none"> <li>1) Scope for expansion for private sector.</li> <li>2) Relaxations as foreign investment.</li> <li>3) Foreign technologies may be inducted.</li> <li>4) Lucid govt policies for license.</li> <li>5) Better product mix for auto component.</li> </ol> <p><b>Disadvantages:</b></p> <ol style="list-style-type: none"> <li>1) Policy may create disparity in income in country.</li> <li>2) May safeguard the interest of multinationals</li> <li>3) International interest may over national interest.</li> <li>4) Freedom to multinationals may create their monopoly.</li> </ol>	<p>02</p> <p>01 any two</p> <p>01 any two</p>

ii)	Describe 'planning' as a function of management.															
Ans	<p>Planning involves the formulation of what is to be done, how, when, and, where it is to be done who is to do it and what results are to be evaluated planning is to lay down companies objective and classify data available and choose best alternate and establish policy.</p> <p>Planning means “ thinking before doing.” The proper planning helps management to utilize the available recourse to optimum level and reduces the wastage of material, idleness of men , machine and capital.</p>	04														
iii)	<table><tr><td colspan="2">Differentiate between administration and management</td></tr><tr><td>Administration</td><td>Management</td></tr><tr><td>1. It is concerned about the determination of objectives and major policies of an organization</td><td>1. It implement the polices and plans laid down by the administration.</td></tr><tr><td>2. Administration is determinative function</td><td>2. Management is an executive function.</td></tr><tr><td>3. It takes major decisions of an enterprise as a whole.</td><td>3. Take decision within the structure of framework set by administration.</td></tr><tr><td>4. It is a top-level activity in an organization</td><td>4. Middle level activity in an organization.</td></tr><tr><td></td><td></td></tr></table>	Differentiate between administration and management		Administration	Management	1. It is concerned about the determination of objectives and major policies of an organization	1. It implement the polices and plans laid down by the administration.	2. Administration is determinative function	2. Management is an executive function.	3. It takes major decisions of an enterprise as a whole.	3. Take decision within the structure of framework set by administration.	4. It is a top-level activity in an organization	4. Middle level activity in an organization.			04
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iv)	Define co- ordination. Sate the need of co-ordination in management.															
Ans	<p><b>Coordination</b> is the act of organizing, making different people or things work together for a goal or effect to fulfill desired goals in an organization. Coordination is a managerial function in which different activities of the business are properly adjusted and interlinked</p> <p>(1)</p> <p><b>Coordination integrate and harmonies the efforts of different people to achieve a common objective.</b></p> <p>The need and importance of coordination can be judged from these points:</p> <div><div>1.</div><div>It encourages team spirit,</div></div> <div><div>2.</div><div>It gives proper direction,</div></div>	<div>01</div> <div>03</div> <div>any</div> <div>three</div>														



	<ul style="list-style-type: none"><li>3. It facilitates motivation,</li><li>4. It makes optimum utilization of resources,</li><li>5. It helps to achieve objectives quickly,</li><li>6. It improves relations in the organization,</li><li>7. It leads to higher efficiency and</li><li>8. It improves goodwill of the organization.</li></ul>	
Q1 B	Attempt any ONE of the following	06
i)	State any twelve principles of management suggested by Henry Fayol.	
Ans	<p>Ans. Management Principles developed by Henri Fayol:</p> <ul style="list-style-type: none"><li>1. Division of work      2. Authority and Responsibility</li><li>3. Discipline              4. Unity of command</li><li>5. Unity of direction      6. Subordination of Individual interests to the general interests.</li><li>7. Remuneration.          8. Centralization.</li><li>9. Scalar Chain.           10. Order</li><li>11. Equity                   12. Stability of tenure of personnel</li><li>13. Initiative               14. Esprit de Corps ( Team Spirit )</li></ul>	06  Any 12
ii)	Draw organization structure of line and staff organisation. State advantages and disadvantage of it.	

	<div data-bbox="547 300 1302 942" data-label="Diagram">  <p style="text-align: center;">B.O.D. : Board of Directors G.M. : General Manager W.M. : Works Manager Suptd. : Superintendent F/M : Foreman Line and staff organisation.</p> </div> <p data-bbox="342 1268 699 1310"><b>[Line diagram – 2 marks ]</b></p>	02
	<p data-bbox="313 1409 459 1440"><b>Advantages</b></p> <p data-bbox="362 1476 1382 1560"><b>(1)Specialisation</b>—It is based on planned specialisation, line managers get the benefit of specialized knowledge of staff specialists at various levels.</p> <p data-bbox="362 1581 1352 1717"><b>(2)Encouragement to research and development programmes</b>—The growth of an enterprise depends largely on various research and development programmes. The staff provides this service to the line departments.</p> <p data-bbox="362 1738 1377 1938"><b>(3)Balanced decisions</b>—Line managers may not have specialised knowledge in all areas and due to this line managers may sometimes give wrong orders or pass wrong judgment. The suggestions and advice given by staff manager help them in making rational judgment and balanced decisions.</p> <p data-bbox="362 1959 1382 1990"><b>(4)Less burden on line managers</b>—Staff managers relieve the line managers from the</p>	0 2 any two



	<p>bothoration of concentrating on the specialised functions like accounting, selection and training of employees, public relations etc. Thus there is a less burden on line managers. Many problems that are ignored or poorly handled in the line organisation, can be properly covered. It is more flexible.</p> <p><b>Disadvantages (any 2, 2 marks)</b></p> <p><b>(1) Confusion</b>—It is very difficult to clearly establish the authority and responsibility relationship between line and staff executives. This creates confusion among them.</p> <p><b>(2) Ineffectiveness of the staff</b>—The role of the staff is purely advisory. Since they do not have the power to get their recommendations implemented, the staff services may prove to be ineffective.</p> <p><b>(3) Conflict between line and staff</b>—There is generally a conflict between line and staff executives, line authorities feel that staff executives do not always give right type of advice and therefore reject even some very good schemes. Line authorities do not want to give an impression to the management that they are in any way inferior to staff. Thus there is conflict between line and staff.</p> <p><b>(4) Increase in cost</b></p>	0 2 any two									
Q2	<b>Attempt any FOUR of the following:</b>	1 6									
a)	State the qualities of good leadership.										
Ans	<p>Qualities That Make good leadership</p> <table> <tr> <td>(1) Honesty</td><td>(2) Ability to Delegate</td><td>(3) Communication</td></tr> <tr> <td>(4) Confidence</td><td>(5) Commitment</td><td>(6) Positive Attitude</td></tr> <tr> <td>(7) Creativity</td><td>(8) Intuition</td><td>(9) Ability to Inspire</td></tr> </table>	(1) Honesty	(2) Ability to Delegate	(3) Communication	(4) Confidence	(5) Commitment	(6) Positive Attitude	(7) Creativity	(8) Intuition	(9) Ability to Inspire	0 4
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(7) Creativity	(8) Intuition	(9) Ability to Inspire									
b)	Differentiate between Public limited and Private limited company.	0									
Ans	<table> <tr> <th>Parameter</th><th>Public Limited Company</th><th>Private Limited Company</th></tr> <tr> <td>Minimum number of members</td><td>Seven</td><td>Two.</td></tr> <tr> <td>Maximum number of</td><td>No maximum limit</td><td>Fifty</td></tr> </table>	Parameter	Public Limited Company	Private Limited Company	Minimum number of members	Seven	Two.	Maximum number of	No maximum limit	Fifty	4 Any 4 point
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Minimum number of members	Seven	Two.									
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	members			
	Issue of Prospectus	Invite public	A private company cannot invite public to subscribe to its shares or debentures  Membership of a private company is restricted to friends	
	Transfer of shares	The shares of a public company are freely transferable to subscribe to its shares.	The transfers if shares are generally restricted by the articles of association of a private company.	
	Commencement of business	It can start only after receiving the certificate to commence business.	A private company can allot shares and commence business after getting the certificate of incorporation from the Registrar of Companies.	
	Number of directors	A public limited company is required to have at least three directors.	A private limited company must have at least two directors	
	Quorum for meetings	Five members constitute a quorum in case of a public company.	The quorum for a meeting of a private company is two	
	Use of the word 'Limited'	The word 'Limited' is used at the end of the name of public company	In case of a private company, the word 'Private Limited' must be used at the end of the name of a company.	
	Legal formalities	More legal formalities	A private limited company is required to observe a less number	
c)	Describe the concepts of 'Delegation of Authority' and 'Span of control'			

Ans	<p><b>Delegation of Authority</b></p> <p>Delegation is the downward transfer of authority from a manager to a subordinate. Most organizations today encourage managers to delegate authority in order to provide maximum flexibility in meeting customer needs. In addition, delegation leads to empowerment, in that people have the freedom to contribute ideas and do their jobs in the best possible ways. This involvement can increase job satisfaction for the individual and frequently results in better job performance. Without delegation, managers do all the work themselves and underutilize their workers. The ability to delegate is crucial to managerial success. Managers need to take four steps if they want to successfully delegate responsibilities to their teams.</p> <p><b>Span of control</b></p> <p>Span of control refers to the number of Subordinates that report to an executive or number of supervisor that executive supervise directly.</p> <p>It depends on a) Condition of Business b) Size of Business c) Type of Product d) Capacity of Executive e) Quality &amp; Skill of Worker &amp; Executive.</p>	02
d	State salient features of Co-operative society. How does it help in development of rural economy?	02
Ans	<p>Salient features of CO-operative society</p> <ol style="list-style-type: none"> <li>1. Open membership</li> <li>2. Voluntary Association</li> <li>3. State control</li> <li>4. In a co-operative society capital is contributed by all the members</li> <li>5. Co-operative societies are managed on democratic lines</li> <li>6. Co-operatives are not formed to maximise profit like other forms of business organisation</li> <li>7. A Co-operative Society is registered under the Co-operative Societies Act.</li> <li>8. Distribution of Surplus</li> <li>9. Self-help through mutual cooperation</li> </ol> <p><b>Development of rural economy</b></p> <p>India is mainly an agrarian society with more than half of its population still residing in the villages. Rural sector is the major contributor to the overall GDP of the nation and hence lack of development in villages means lack of development in India. Cooperative societies are playing significant role in this and share a major credit in the growth of rural sector which along with government and private sectors contribute to the overall economy of India. Cooperatives cover more than 97% of Indian villages, some run by its members and some by the government</p> <p><b>Needs of rural people are served by different forms of private and government</b></p>	02 Any 4

	<p><b>organizations including partnership firms, co-operatives, companies and charitable trust. Government each year spends lakhs to crores of rupees on rural development.</b> But co-operatives working in rural areas are playing noteworthy role in this.</p>	
e	Describe Maslow's theory of Motivation.	
Ans	<div style="text-align: center;"> <p><b>Maslow's Hierarchy of Needs</b> (original five-stage model)</p> </div> <p>Maslow's hierarchy of needs</p> <ol style="list-style-type: none"> <li><b>Biological and Physiological needs</b> - air, food, drink, shelter, warmth, sex, sleep, etc.</li> <li><b>Safety needs</b> - protection from elements, security, order, law, limits, stability, etc.</li> <li><b>Belongingness and Love needs</b> - work group, family, affection, relationships, etc.</li> <li><b>Esteem needs</b> - self-esteem, achievement, mastery, independence, status, dominance, prestige, managerial responsibility, etc.</li> <li><b>Self-Actualization needs</b> - realising personal potential, self-fulfillment, seeking personal growth and peak experiences.</li> </ol>	01
Q3	Attempt any FOUR of following	16
a)	State the function of Personal Management	
Ans	<ol style="list-style-type: none"> <li>1. Procurement and Maintenance of adequate work- force as regards to both-number and quality of personnel.</li> <li>2. Education and training of present employees.</li> <li>3. Maintaining Satisfactory Personnel Contact and Employee Relationships</li> </ol>	04 Any 4





	<ul style="list-style-type: none"><li>4. Maintaining satisfactory group relationship</li><li>5. Maintaining employees health</li><li>6. Maintaining employees safety</li><li>7. Maintaining employees service activities (employee welfare)</li></ul>	
b)	Explain procedure to be followed for recruitment of engineering supervisor in an organisation	
	<div><b>Vacancy</b><ul style="list-style-type: none"><li>1. Form Selection Committee</li><li>2. Review Position Description</li><li>3. Advertise</li><li>4. Receive Applications, Score Candidate, Short Listings</li><li>5. Notify and Arrange Interviews</li><li>6. Compile Interview Questions</li><li>7. Conduct Interview – Score Candidates</li><li>8. Selection</li><li>9. Check Referees and References</li><li>10. Formally Notify</li></ul></div> <p>Following selection test used for recruitment of Engineering Supervisor.</p> <p>Achievement test or performance test</p> <ul style="list-style-type: none"><li>1) Aptitude test</li><li>2) Intelligence test</li><li>3) Interest test</li><li>4) Dexterity test</li><li>5) Personality test</li></ul>	04
c)	Explain the causes of accidents in industry.	
Ans	Mechanical Factors	02



	<ol style="list-style-type: none"><li>1) Unguarded or improper guarded machines or equipment's.</li><li>2) Unsafe design and construction of building structures.</li><li>3) Improper material handling system.</li><li>4) Improper plant layout.</li><li>5) Untested boilers or pressure vessels.</li><li>6) Violation of prescribed safety practices.</li><li>7) Power lines may be poorly insulated.</li></ol> <p>Environmental Factors</p> <ol style="list-style-type: none"><li>1) Too low temperature to cause shivering.</li><li>2) Too high temperature to cause headache and sweating</li><li>3) Too high humidity to cause discomfort and fatigue.</li><li>4) Defective and Inadequate Illumination.</li><li>5) Poor housekeeping, bad plant layout or arrangement of machines.</li><li>6) High speed of work because of huge work load.</li><li>7) Inadequate rest pauses or breaks between the working hours.</li><li>8) Noise from the nearby machinery</li></ol>	0 2
d)	What are the benefits under Employee's State insurance (ESI) act to the insured person?	
	<ol style="list-style-type: none"><li>1. Medical Benefit</li><li>2. Sickness Benefit(SB)</li><li>3. Maternity Benefit (MB)</li><li>4. Disablement Benefit</li><li>5. Temporary disablement benefit (TDB)</li><li>6. Permanent disablement benefit (PDB)</li><li>7. Dependants' Benefit(DB)</li><li>8. Other Benefits</li></ol>	04
e)	What is the necessity of training and development in an organisation ? Mention different	

	types of training	
Ans	<p>Training and development are very vital in any company or organization that aims at progressing. Training simply refers to the process of acquiring the essential skills required for a certain job. It targets specific goals, for instance understanding a process and operating a certain machine or system. Career development, on the other side, puts emphasis on broader skills, which are applicable in a wide range of situations. This includes decision making, thinking creatively and managing people.</p> <p>Types of Training</p> <div style="display: flex; justify-content: space-between;"> <span>(1) Induction or Orientation Training</span> <span>(2) Job Training</span> <span>(3) Safety Training</span> </div> <div style="display: flex; justify-content: space-between;"> <span>(4) Promotional Training</span> <span>(5) Refresher Training</span> <span>(6) Remedial Training</span> </div> <span>(7) Internship Training</span>	02       02

**Q4. a) Solve any Three of the following:**

**(3x4=12)**

**a) State the objectives of the materials management?**

**Answer:-**

1. To reduce the materials cost
2. To provide the material at right time
3. To provide the material at right quantity
4. To provide the material at right place
5. To trace new sources of supply
6. To reduce the inventory level
7. To maintain the rate of production
8. To gain the bulk discount

**(1 Mark each for any four correct points)**

**b) Explain the types of capitals**

**Answer:-**

### **Types of Capital:-**

- 1) **Fixed capital:** - Assets which are used over and over again for number of years and are commonly termed as Fixed assets. These types of assets are associated with long term investments.

Examples: - Land, Machine, Building, Tools, Equipment etc.

**(1 Mark for correct definition and 1 mark for example)**

- 2) **Working capital:** - the capitals which are associated with short term assets such as Cash, short term securities, inventories, accounts receivables etc. Capital required to meet day-to-



day needs and expenditure such as Purchase of raw material, Wages, Storage cost, Advertisement, Transportation, maintenance etc. is referred as working capital. Working capital is required in any business because of the time lag between paying for materials and operating costs and getting the money back again from the customer.

**Types of Working Capital:-**

**A) On the basis of concept**

- 1) Gross Working capital
- 2) Net working capital = Current Assets – Current Liabilities

**B) On the basis of periodicity of requirement**

**1) Fixed / Permanent working capital:-**

- a) Regular Working capital
- b) Reserve margin

**2) Variable working capital:-**

- a) Seasonal working capital
- b) Special working capital

**(2 Mark for correct explanation)**

- c) State the various sources of raising the finance for industry

**Answer:-**

**Sources of Finance:-**

**1) Internal source:-**

- A) Retained equity earnings
- B) Depreciation provisions
- C) Deferred taxation
- D) Personal funds

**[2 Mark]**

**2) External sources:-**

**A) Permanent / Long term source:** - Savings, Loans, Share capital, Debentures, corporate bonds, Public deposits, Taking in partners.

**B) Medium term:** - Bank loans, Hire purchase, Sale and lease back, Equipment leasing, Profit plow back

**C) Short Term:** - Credit facilities, Trade credit

**D) Specialist Earning:** - Industrial financial corporation, State financial corporation, Industrial development corporation, Insurance companies

**[2 Marks]**

- d) State the different types of taxes. Describe Excise Duty.

**Answer:-**

**A) Direct taxes:-**

- 1) Income tax
- 2) Excise tax
- 3) Transfer tax
- 4) Estate tax
- 5) Gift tax



6) Endowment tax

7) Social security tax

[1 mark for any 4 correct points]

**B) Indirect tax**

1) Sales tax

2) Wealth tax

3) Value added tax

4) Fuel tax

5) Consumption tax

[1 mark for any 4 correct points]

**Excise Tax:-**

It is an indirect tax which is levied and collected on the goods / commodities manufactured in India. Generally manufacturer is responsible to pay duty to the government. This indirect taxation is administered through an enactment of the central government. There are four basic conditions for levy of central excise duty,

1) The duty is on goods.

2) The goods must be manufactured.

3) The goods must be manufactured \ produced

4) Such manufacture or production must be in India. [2 Marks for explanation]

**Q4 b) Attempt any one of the following**

**a) Explain production budget including variance report.**

**Answer:-**

Production budget may be prepared by the 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:**

a) Sales budget

b) Factory capacity

c) Budgeted stock requirement

d) Economic lot size

e) Availability of raw material

A production budget finds the cost of producing the estimated volume of salable products. A production budget may be compiled on departmental basis. Production budget is part of manufacturing



budget. Manufacturing budget helps management in keeping production at an even level and in controlling the use of labour, material, machine etc. [2 Marks]

ABC Company Production Budget For the FY 2015				
	Units of Output			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Product X	100	500	550	600
Product X	100	500	550	600

Figure: - Production Budget

[2Mark]

**Variance report:-**

Variance report shows variation or deviation from standard to the actual. The values may increase or decrease. So this report actually find outs predicted output and the actual output. It helps organization to understand the variations in the budgeting and planning. [1 Mark]

ABC Company Variance report For the month December 2015		
	Units of output	
	Standard	Actual
Department X :- Product A	100	88
Department Y :- Product B	200	210
Total A + B	300	298

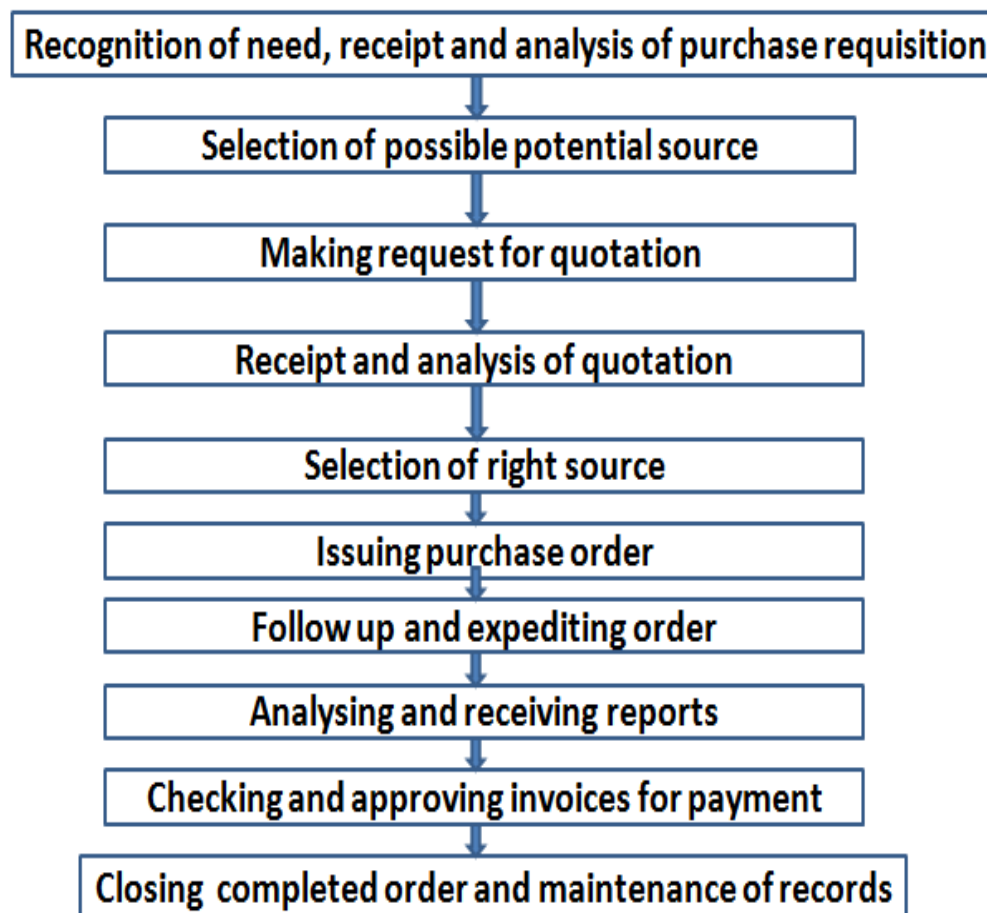
Figure: - Variance Report

[1 Mark]



b) Give the purchase procedure of any machine in an industry.

**Answer:-**



(\*\*Note: - Answer must consider name of any machine included in steps)

[1 Mark each for correct 6 steps and its sequence]

**Q5. Attempt any TWO of the following**

**(2x8=16 Marks)**

- a) Describe the concept of ABC analysis in inventory control with the help of graphical representation. State its advantages and disadvantages.

**Answers:-**

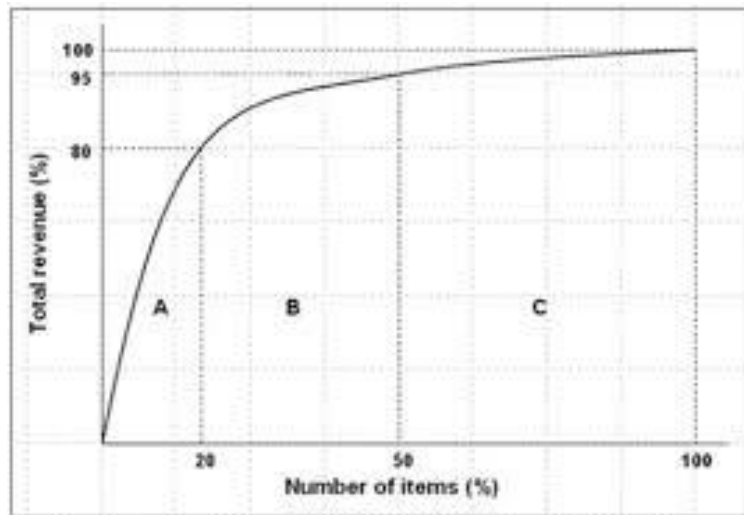
**ABC Analysis:-**

It is a technique which is used to classify the items in store into A, B and C class items based on demand of the stock. If the stock on hand of a particular items becomes less than or equal to its reorder level immediately an order is placed for its economical quantity.

**A:** -Items are high valued items but are limited or few in numbers. They need careful and close inventory control.

**B:** -Items are medium valued items and their number lies between A and C. Such items need moderate control. They are more important than C-Items and also required careful storages and handing.

**C:** -Items are low valued but maximum number of items. These items do not need in any control rather controlling them is uneconomical. They are generally produced just before they finish. [2 Marks]



**Figure:- Graphical Representation of ABC analysis**

**[2 Marks]**

**Advantages:-**

- 1) It helps in segregating the items from one another
- 2) It tells how much valued the item is
- 3) It indicates controlling the item to what extent in the interest of organization
- 4) ABC analysis simplifies the controlling the inventory level as focusing on specific item can be possible
- 5) It reduces the cost of maintaining the records for number of items.

**[1/2 mark each for any 4 correct point]**

**Disadvantages:-**

- 1) Standardization is necessary in terms of products \ raw material
- 2) Only costly items get more importance
- 3) Periodic review or reports become difficult if only ABC analysis is focused
- 4) It may not match with market dynamics with varying situations
- 5) Low cost components are unfocused which may be out of stock if market fails to serve

**[1/2 mark each for any 4 correct point]**

**b) (i) Explain following techniques of material management**

- 1) JIT
- 2) ERP

**Answer:-**





- 1) **JIT:-** Just in time refers to the producing the part/component only when it is required. According to Just in time approach material is made available when it is demanded for further activities.

**The main objectives of JIT are:-**

- 1) To reduce inventory level
- 2) To eliminate unwanted costs associated with inventory
- 3) To satisfy customer requirement
- 4) To ensure production flow
- 5) To optimize lead time

**Just in time assures**

- 1) Right material
- 2) At right place
- 3) At right cost
- 4) At right time
- 5) At right quantity

**[2 Marks for correct explanation]**

2) **ERP:-**

Enterprise resource planning (ERP) is business management software—usually a suite of integrated applications—that a company can use to collect, store, manage and interpret data from many business activities, including:

- a. Product planning, cost
- b. Manufacturing or service delivery
- c. Marketing and sales
- d. Inventory management
- e. Shipping and payment

ERP came to represent a larger whole that reflects the evolution of application integration beyond manufacturing. ERP Software Packages List:-

- 1) Adaxa Suite 2) ERP 5 3) ERPNEXT 4) FEDENA 5) SQL LEDGER 6) WEBERP

**[2 Marks for correct explanation]**

**(ii) Define EOQ. State advantages of EOQ Model.**

**Answers:-**

**EOQ:-**

The Economic Order Quantity (EOQ) is the number of units that a company should add to inventory with each order to minimize the total costs of inventory such as holding costs, order costs, and shortage costs.

Where,  
Q = Economic order quantity



$$EOQ = \sqrt{\frac{2 * U * P}{C * I}}$$

**Advantages of EOQ model:-**

- 1) It avoids stock out of material
- 2) It considers buffer stock
- 3) It ensures committed delivery dates
- 4) Effect of Price fluctuation and shortage of material is avoided
- 5) EOQ supports standardization

[2 Marks for definition and 2 Marks for advantages]

**c) State the provisions in factory act regarding**

- i) Health
- ii) Welfare
- iii) Safety
- iv) Working hours

**Answer:-**

**(i) Health Provisions:-**

- 1) Cleanliness
- 2) Ventilation and temperature
- 3) Artificial humidification
- 4) Overcrowding Lightening
- 5) Drinking water
- 6) Bathrooms

[1\2 Mark each for any 4 correct points]

**(ii) Welfare:-**

- 1) Washing facility
- 2) Sitting facility
- 3) First aid appliances
- 4) Canteens
- 5) Shelter
- 6) Rest rooms
- 7) Lunch rooms

[1\2 Mark each for any 4 correct points]

**(iii) Safety**

- 1) Safety guards for machines



- 2) Devices for power cut in case of emergency
- 3) Casing of machines
- 4) Hoists and lifts
- 5) Protection for eyes
- 6) Precautions against fire
- 8) Precautions against fumes or gases [1\2 Mark each for any 4 correct points]

**(iv) Working hours:-**

- 1) No adult worker shall be allowed to work in factory for more than 48 hours in a week
- 2) No adult worker shall be allowed to work in factory for more than 9 hours in a day
- 3) No adult worker shall be allowed to work in factory on weekly holidays
- 9) When worker work for more than 9 hours a day or 48 hours a week he shall be entitled to wages at the rate twice his ordinary rate of wage.

[1\2 Mark each for any 4 correct points]

**Q6. Attempt any two of the following**

**(8x2=16Marks)**

**a) i) Define Quality circle and quality assurance**

**Answer:-**

**i) Quality Circle:-**

It is basically a small group of employees who volunteer to meet regularly to undertake work related projects and evolve recommendations to improve efficiency in the selected functional area. Members are not selected / nominated in quality circle. An ideal size of group is 8 to 10 members.

**[2 Marks]**

**ii) Quality Assurance:-**

A system of activities whose purpose is to provide assurance to the customers by the company and to show the evidence that the overall quality control is in fact being effective. All those planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy given requirements for quality is termed as quality assurance.[2 Marks]

**ii) Differentiate between CPM and PERT**

**Answer:- [1 Mark each for any correct 4 Points]**

Sr. No.	CPM	PERT
1	CPM is a critical path method	PERT is a Program Evaluation and Review Technique
2	This technique is activity based	This technique is event based
3	CPM is a deterministic tool	PERT is a probabilistic tool

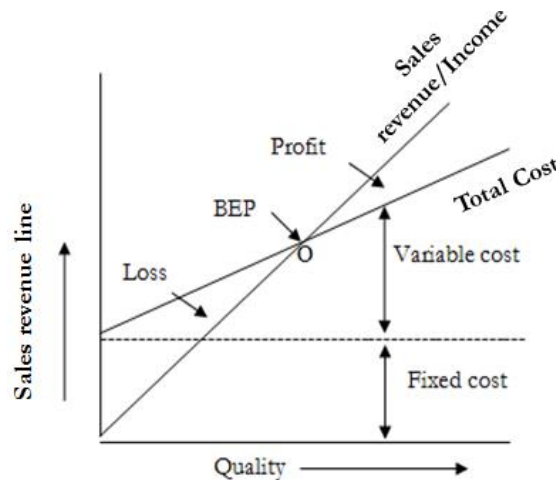


4	CPM does not considers uncertainties	PERT considers uncertainties
5	CPM allows explicit estimate of cost and time	PERT basically used for planning and controls time
6	CPM is best suited for routine and those projects where time and cost estimates can be accurately calculated	PERT is more suitable for R&D related projects where the project is performed for the first time and the estimate of duration are uncertain

b) Describe the concept of break even analysis with the help of break even chart. State the significance of Break Even Point(BEP).

Answer:-

Break even analysis (CVP – Cost volume profit) is the major tool for profit planning. It provides a better perspective and graphical representation of the behavior of firms profit in relation to changes in input. These charts are useful to predict probable profit at various levels of output. [2 Mark]



[2 Marks for correct graph]

Where, BEP = Breakeven point

V = Variable cost

P = Selling price / Unit (Total sales value)

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

[2 Mark for formula]

Significance of BEP:-

The breakeven point is the volume of output at which neither a profit is made nor a loss is incurred. This analysis helps to find the price of an article to give the desired profit, to determine variable cost per unit, to compute costs and revenues for all possible volumes of output. Also it has impact on profit as,



1) If BEP lowered then Profit Increases

2) If BEP Rising then Profit Decreases

**[2 Marks]**

c) Draw typical formats of following financial statements showing their main components

i) Balance sheet

ii) Profit and loss accounts

Answer:-

i) Balance Sheet

Liabilities	Rs.	Assets	Rs.
Capital		Cash in hand	
Drawings (-)		Building	
Net Profit (+)		Plant and machineries	
Bank Overdraft		Debtors	
Creditors		Reserve for bad debtors	
Outstanding Expenses		Furniture	
Rent		Closing stock	
Wages		Prepaid insurance	
Salaries			

**[4 Marks for format including any 4 corrects points in both side]**

ii) Profit and loss accounts

Expenses

Income

Particulars	Rs.	Particulars	Rs
To gross Loss b/d (bought down)		By gross Profit b/d	
To salaries		By sundry receipts	
To director's fees		By commission (Received)	
To audit Fees		By transfer fees (Received)	
To bank charges		By interest on investment	
To bad debts		Securities	
To advertising		By net loss c/d	
To interest on loans			
To Net Profit			

**[4 Marks for format including any 4 corrects points in both side)**