



JW-003-001538

Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

October – 2019

**IC - 502 : Heavy & Fine Chemicals - 1 &
Management**

Faculty Code : 003

Subject Code : 001538

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

- (1) All the questions are compulsory.
- (2) Figures to the right indicate maximum marks.
- (3) Draw labelled diagram wherever necessary.
- (4) Assume suitable data.
- (5) Question-1 carries 20 marks.
- (6) Question-2 and 3 carry 25 marks each.

1 Answer the following questions :

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1. To _____ is to forecast and plan, to organize, to command, to co-ordinate and to control.
2. There are mainly _____ managerial skills according to Professor Robert Katz.
3. _____ has given concept of scientific management.
4. According to Koontz planning is deciding in advance - what to do, when to do and _____ to do. It bridges the gap from where we are and where we want to be
5. _____ can be regarded as the cognitive process resulting in the selection of a belief or a course of action among several alternative possibilities.
6. According to Henry Fayol "_____ refers to a preview of future activities."
7. _____ is a theory in psychology proposed by Abraham Maslow.
8. Give full form of EOQ.
9. Total cost = _____ + Ordering cost.

10. Full form of PLC is Product _____ Cycle.
11. Write the raw materials used for manufacturing of ammonia.
12. Give two uses of nitric acid.
13. Nelson cell is also known as _____.
14. Common salt is also called _____.
15. The molecular formula of Glauber's salt is _____.
16. Cumene process is used to manufacture _____ from benzene.
17. Give any two properties of melamine.
18. Sorbitol is also known as _____.
19. Zeolite acts as adsorbent. True/False ?
20. Give molecular formula of borax.

- 2** (a) Answer any three : **6**
- 1) Define management according to G. R. Terry.
 - 2) What is breakdown maintenance of plant ?
 - 3) What is lead time in inventory management ?
 - 4) Write a brief note on 2-butane-1, 4-diol.
 - 5) Enlist raw materials required for manufacturing of triple superphosphate.
 - 6) Write industrial applications of calcium carbide.
- (b) Answer any three : **9**
- 1) Give detailed idea on managerial skills.
 - 2) Write a brief note on concept of scientific management.
 - 3) Enlist functions of planning, explain any three in brief.
 - 4) Draw only diagram of mercury cathode cell.
 - 5) Write properties and uses of resorcinol.
 - 6) Write a brief note on acetone.
- (c) Answer any two : **10**
- 1) Explain functions of management in detail.
 - 2) Discuss decision making process step by step.

- 3) Explain Maslow's hierarchy of needs is a theory in detail with diagram.
 - 4) Explain Bosch and Harber process for manufacturing of ammonia.
 - 5) Describe manufacturing of carbon black with neat diagram.
- 3** (a) Answer any three : **6**
- 1) What is ordering cost ?
 - 2) Give examples of indirect cost.
 - 3) What is differential payment system ?
 - 4) Write a brief note on pyridine.
 - 5) Give uses of ammonium phosphate.
 - 6) Draw only diagram of fluorine cell.
- (b) Answer any three : **9**
- 1) Give example of PEST analysis.
 - 2) Explain in detail : Plant location.
 - 3) Explain job satisfaction in detail.
 - 4) Draw only diagram for manufacturing of phosphoric acid by wet process.
 - 5) Write properties and uses of ammonium sulphate.
 - 6) Write only reaction for manufacturing of phenol by Dow-toluene air oxidation process.
- (c) Answer any two : **10**
- 1) Write detailed note on concept of inventory management with diagram.
 - 2) Explain product classification in detail.
 - 3) Discuss manufacturing of nitric acid via Ostwald's process.
 - 4) Explain manufacturing of vinyl chloride with neat diagram.
 - 5) Discuss manufacturing of glycerin via spent lye.
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