



MCQ-003-001538 Seat No. _____

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

May / June - 2018

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 & 3 carry 25 marks each.

1 Answer the following questions : 20

- (1) In product life cycle which stage comes between introduction and maturity stages?
- (2) What is scientific recruiting and training?
- (3) Total Capital Investment =
Fixed Capital Investment + _____.
- (4) "Planning refers to a preview of future activities" this definition is given by Henry Fayol. Is this sentence true or false.
- (5) Enlist factors affecting production planning.
- (6) Give examples of Inventory.
- (7) Enlist product development stages.
- (8) _____ level management have conceptual skills.
- (9) Establishment of standard performance and measurement of actual performance comes under _____ functions of management.
- (10) Supervision, Motivation, Leadership and Communication come under _____ functions of management.

- (11) Define: Hygroscopic substance.
- (12) Write chemical formula of slaked lime.
- (13) Diaphragm cell is also known as _____.
- (14) Priling method is used for manufacturing of _____.
- (15) Enlist major use of thiosulphate.
- (16) Write function of bleaching agent.
- (17) Give the name of coagulating agent.
- (18) Give structure of melamine.
- (19) _____ is used in wool adhesive in dye industries.
- (20) Which fluid is used as body preservative fluid?

- 2 (A) Answer any **Three** : **6**
- (1) Define leadership and motivation.
 - (2) What is differential payment system ?
 - (3) Explain elements of cost accounting.
 - (4) Enlist any four uses of nitric acid.
 - (5) Give in brief: Properties and use of calcium carbide.
 - (6) Write properties and uses of glycerol.
- (B) Answer any **Three** : **9**
- (1) Explain plant location and plant layout with examples.
 - (2) What is PEST and SWOC analysis? Explain with examples.
 - (3) Explain types of plant maintenance with examples of each.
 - (4) Give at least three differences between wet process and electric furnace process.
 - (5) Write source and use of Iodine.
 - (6) Write a short note on Zeolite.
- (C) Answer any **Two** : **10**
- (1) Explain inventory management in detail with inventory control diagram.
 - (2) Explain decision making in detail.
 - (3) Explain functions of management.
 - (4) Explain in detail: Production of phosphoric acid.
 - (5) Explain in detail: Manufacturing of Glauber's salt from anhydrous Na_2SO_4 .

- 3** (A) Answer any **Three** : **6**
- (1) Draw diagram of economic order quantity.
 - (2) Enlist common motivators in an organization.
 - (3) What is scientific task setting?
 - (4) Enlist different methods of production for ammonium nitrate.
 - (5) Explain manufacturing of silicon carbide in brief.
 - (6) Explain manufacturing of acetone from isopropyl alcohol.
- (B) Answer any **Three** : **9**
- (1) Explain Maslow's hierarchy of needs for motivation theory with diagram.
 - (2) Explain types and features of planning with their examples.
 - (3) Explain factors affecting job satisfaction.
 - (4) Give schematic figure for manufacturing of 95% nitric acid, give its uses.
 - (5) Write any two uses of sodium thiosulphate.
 - (6) Write uses, properties and manufacturing reaction of acrylate.
- (C) Answer any **Two** : **10**
- (1) Explain factors involved in product cost estimation.
 - (2) Explain planning in detail.
 - (3) Explain in detail: Manufacturing of ammonium phosphate.
 - (4) Explain in detail: Borax manufacturing.
 - (5) Explain manufacturing of glycerol.
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