



RO-003-001538

Seat No. _____

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

February - 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 labeled 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) _____ is the development of people and not the direction of things. Management is the personnel administration.
- (2) Management is simply the process of decision making and control over the action of human beings for the express purpose of attaining _____ goals."
- (3) _____ is terms as father of scientific management.
- (4) Define planning according to Koontz.
- (5) The Charette procedure is a systematic process for gathering and developing _____ from very many stakeholders.
- (6) Abraham Maslow has proposed _____ theory.
- (7) In EOQ E stands for _____.
- (8) _____ cost = Holding cost + ordering cost.
- (9) Full form of PLC is product life _____
- (10) Total Capital Investment = Fixed Capital Investment + _____ Capital.
- (11) Iodine can be manufactured from sea water.
True/False?

- (12) Ostwald process is used to manufacture _____ acid.
- (13) Write raw materials required for manufacturing of ammonium nitrate.
- (14) Electric arc furnace utilizes low grade of phosphate rock. True/False?
- (15) Diaphragm cell is also known as _____.
- (16) Give any two uses of natural graphite.
- (17) Bromine can be used as disinfectant. True/False?
- (18) Give names of raw materials used for manufacturing of silicon carbide.
- (19) Give any two uses of vinyl chloride.
- (20) 37% solution of formaldehyde is known as _____ solution.

2 (A) Answer any Three :

6

- (1) Define management according to Horold Kanontz.
- (2) Define planning according to Henry Fayol.
- (3) What is predictive maintenance of plant?
- (4) Give properties of ammonium sulphate.
- (5) Draw only diagram of fluorine cell.
- (6) Write any four uses of HF.

(B) Answer any Three :

9

- (1) Enlist types and features of planning.
- (2) Give a note on managerial skills.
- (3) Write a brief note on concept of scientific management.
- (4) Write a note on acrylates.
- (5) Draw only diagram for manufacturing of synthetic graphite.
- (6) Write any two uses of resorcinol.

- (C) Answer any **Two** : **10**
- (1) Write a note on functions of management.
 - (2) What is decision making? Give every step associated with it.
 - (3) Describe product life cycle with diagram.
 - (4) Explain Fischer & Tropsch process with neat diagram.
 - (5) Discuss manufacturing of triple superphosphate with diagram.

- 3** (A) Answer any **Three** : **6**
- (1) What is Tracking System in inventory management?
 - (2) What is holding cost?
 - (3) Give examples of fixed capital.
 - (4) Draw only diagram of mercury cathode cell.
 - (5) Write a brief note on Glauber's salt.
 - (6) Write properties and uses of pyridine.

- (B) Answer any **Three** : **9**
- (1) Give importance of SWOT analysis with example and chart.
 - (2) Explain in detail: Plant layout.
 - (3) Give brief idea on capital formation.
 - (4) Discuss manufacturing of sodium chloride from artificial evaporation.
 - (5) Explain production of ammonium phosphate in detail.
 - (6) Write a short note on sorbitol.

- (C) Answer any **Two** : **10**
- (1) Write a detailed note on concept of inventory management with diagram.
 - (2) Explain Maslow's hierarchy of needs as a theory in detail with diagram.
 - (3) Explain production of carbon black with diagram.
 - (4) Discuss manufacturing of ammonia with neat diagram.
 - (5) Explain manufacturing of glycerin via sweet water.