



DBB-003-001538

Seat No. _____

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

May/June – 2015

I. C. - 502

(Heavy & Fine Chemicals-1 and 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 and Question 2 & 3 each carries 25 marks.

1 Multiple Choice Questions. **20**

- (1) _____ is a detailed list of movable items which are necessary to manufacture a product.
 - (a) Inventory
 - (b) Operational accuracy
 - (c) Repair cost
 - (d) Production scrap
- (2) _____ is a concept used in macroeconomics, national accounts and financial economics.
 - (a) Capital formation
 - (b) Supplies
 - (c) Product
 - (d) Production scrap

- (3) _____ are recruitment consists of transfers and promotion of employees.
- (a) Internal sources (c) External sources
(b) (a) & (c) both (d) None of these
- (4) _____ is horizontal shifting.
- (a) Promotion (c) (a) and (b) both
(b) Transfer (d) None of these
- (5) _____ stage is a part of product life cycle.
- (a) Maturity (c) Market
(b) Supplies (d) Services
- (6) _____ is a technique of locating different machines and plant services within the factory.
- (a) Plant location (c) Plant layout
(b) Plant maintenance (d) Plant regeneration
- (7) _____ is a type of plant maintenance.
- (a) Lighting (c) Premises
(b) Break down (d) All of these
- (8) Which one of the following is not the function of management ?
- (a) Directing (c) Processing
(b) Organizing (d) Controlling

- (9) Unity of command brings _____ in organization.
- (a) Decentralization (c) Harmony
(b) Chaos (d) All of these
- (10) Which one is not the type of planning from the viewpoint of business ?
- (a) Planning for development
(b) Special planning
(c) Planning for current business
(d) Long term planning
- (11) Which one of the following are not characteristics of sound organization ?
- (a) Harmonious grouping
(b) Better communication
(c) Reasonable span of control
(d) Chaos
- (12) Which one of the following is advantage of line organization ?
- (a) Orderly communication (c) Deficiency of safety
(b) Chaos (d) All of these
- (13) Which is / are techniques of direction?
- (a) Autocratic technique (c) Free rein technique
(b) Democratic technique (d) All of these

- (14) Type of Staffing Process includes _____.
- (a) External Recruitment (c) Both (a) & (b)
(b) Internal Recruitment (d) None of these
- (15) Phenol is manufactured by which process?
- (a) Cumene Process
(c) Sulfonation Process
(b) Rasching Process
(d) All of these
- (16) Na_2SO_4 salt is used in _____.
- (a) Paper industries (c) Both (a) and (b)
(b) Dying industries (d) None of these
- (17) Which of the following is use of Iodine ?
- (a) For disinfection
(b) In Photographic Industries
(c) In Pharmaceutical Industries
(d) All of these
- (18) Which chemical is manufactured from spent caustic lye of detergent industry?
- (a) Phenol (c) Acetylene
(b) Glycerin (d) Melamine

(19) Which process is more suitable for manufacturing of Ammonium Nitrate?

- (a) Prilling Method
- (b) Stengel Method
- (c) Bamag Process
- (d) Crystallization Process

(20) Which temperature is suitable in electric arc furnace process for manufacturing of H_3PO_4 ?

- (a) 500 - 550°C
- (b) 1400 - 1450°C
- (c) 500 - 550°F
- (d) 1400 - 1450°F

2 (a) Answer any Three out of Six questions : **6**

- (1) Give flow diagram of Fischer-Tropsch process.
- (2) Give reaction and use of ammonium phosphate.
- (3) Enlist various uses of Nitric Acid.
- (4) Give the definition of capital formation.
- (5) Define : (a) Planning and (b) Staffing.
- (6) Define : (a) Unity of command and (b) Decision making.

(b) Answer any Three out of Six questions : **9**

- (1) Describe inventory classification.
- (2) Give a labelled diagram of Ammonia by Bosch-Harber process.
- (3) Explain properties and uses of glycerol.

- (4) Give properties and uses of Formaldehyde.
- (5) Explain characteristics of management in detail.
- (6) Explain advantages and disadvantages of planning.
- (c) Answer any Two out of Five questions. **10**
- (1) Write any case study for product success.
- (2) Explain manufacturing of Nitric Acid with the help of a flow diagram.
- (3) Write a detailed note on manufacturing of Br₂.
- (4) What is meant by staffing ? Explain in very brief.
- (5) Explain roll of middle level management in organization.
- 3** (a) Answer any Three out of Six questions. **6**
- (1) Enlist various properties of Acetone.
- (2) Enlist various uses of Ammonia.
- (3) Draw labelled diagram of Diaphragm cell.
- (4) Give the importance of maintenance of plant in short.
- (5) Explain any six functions of management in detail.
- (6) Enlist step or procedure of decision making.
- (b) Answer any Three out of Six questions. **9**
- (1) Give block diagram for Boric acid isolation from sea water.
- (2) Draw labeled diagram of manufacturing of Phosphoric acid.

- (3) Give the classification of product on the basis of consumer's intentions.
- (4) Explain Break even analysis.
- (5) Explain types of planning from the viewpoint of time.
- (6) Explain phases of planning.

(c) Answer any Two out of Five questions : **10**

- (1) Describe product life cycle.
 - (2) Explain manufacturing of NaCl from sea water.
 - (3) Give preparation, properties and uses of Zeolites.
 - (4) Explain types of decision making with examples.
 - (5) Explain principles of organization.
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