

OR

- (p) Discuss the functions of scientific management in industry. 6
- (q) Explain — Inventory control. 4
- (r) Which precautions are taken in hazardous chemical processes ? 6



AQ - 1006

Third Semester M. Sc. (Part-II) (CBCS) Examination

INDUSTRIAL CHEMISTRY

Paper - XII

Special Paper - II

(Industrial Chemistry : Process Economics and Industrial Management)

P. Pages : 4

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) Attempt all questions.
- (2) Explain with neat labelled diagrams wherever necessary.
- (3) All questions carry equal marks.

1. (a) Explain the manufacture of bicarbonates. 6
- (b) How bleaching powder can be prepared ? 4
- (c) Discuss the manufacture of H_2SO_4 with flow diagram. 6

OR

- (p) Explain synthesis of calcium carbides. 6
- (q) How HCl can be prepared ? 4
- (r) Discuss manufacturing of nitric acid. 6

2. (a) Discuss the production, hazards and uses of CO_2 . 6
- (b) Give the uses of :—
- (i) phosgene gas
- (ii) Acetylene gas. 4
- (c) What are nitrogeous fertilizers ? Discuss in detail. 6

OR

- (p) Give Hazards and uses of :—
- (i) SO_2
- (ii) Hydrogen. 6
- (q) How ammonium salts are manufactured ? 4
- (r) What are superphosphates ? Explain its synthesis and uses. 6
3. (a) Discuss different types of cements. 6
- (b) What are the compositions of glass and discuss their properties. 4
- (c) Explain preparation of ceramics. 6

OR

- (p) How cement can be prepared ? 6

- (q) Write a note on — lead glass. 4
- (r) Give applications of ceramics. 6

4. (a) Describe different methods of determining depreciation. 6
- (b) Discuss competitive and monopoly markets. 4
- (c) What is the economics involved in selecting alternatives ? 6

OR

- (p) What are the factors involved in project cost ? 6
- (q) Which methods are used for estimating capital investment ? 4
- (r) Write in detail :—
- Break even point. 6

5. (a) Explain the concept of scientific management in industry. 6
- (b) Discuss different fire fighting equipments. 4
- (c) Which control measures are taken for handling toxic chemicals ? 6