



SB-0614

First Year B. Sc. Examination

March / April – 2011

Industrial Chemistry (Vocational) : Paper - I  
(Industrial Aspects of Chemistry)

Time : Hours]

[Total Marks : 70

**Instructions :**

(1)

नीचे दशांशवैक निशानीवाणी विगतो उतरवडी पर अवश्य लभवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
F. Y. B. Sc.

Name of the Subject :  
Industrial Chemistry (Vocational) : Paper - 1

Subject Code No. : 0 6 1 4 Section No. (1, 2,.....): Nil

Seat No. :

Student's Signature

- (2) All sub questions of question No.1 are compulsory.
- (3) Give reaction, flow diagram and neat sketches where necessary.
- (4) Figures to the right indicate full mark of question.

1 Answer the following questions in brief : 15

- (1) Give the ancient chemical names of  $ZnSO_4$  and  $KNO_3$ .
- (2) What do you mean by deionized water ?
- (3) Give the systematic names of :  
(a) Methane and (b) Ammonia.
- (4) Give the characteristics of good fuel.
- (5) Explain : Lamp Black.
- (6) Define Sago starch.
- (7) Define : Positive and Negative catalysis.
- (8) What is gel and gelation ?
- (9) Define : Calorific value.
- (10) Explain : Promoters with examples.
- (11) What is autocatalysis ?
- (12) Which chemical is added to defect any leakage of L.P.G. ?
- (13) Define Gold number.
- (14) What are slags ? Define acidic and basic slages.
- (15) Explain the term mineral and ore.

- 2 (a) Describe 'platforming' fixed bed process, with flow diagram. 4
- OR**
- (a) Discuss the facts suggesting organic origin of petroleum. 4
- (b) State the products of primary distillation of crude petroleum and their use. 4
- OR**
- (b) What are petrochemicals ? Write various chemicals derived from benzene and methane. 4
- (c) Make a chart of petrochemicals obtained from propene. 3
- 3 (a) Write production of coke by using different types of coal gas making retorts. 4
- OR**
- (a) Classify the coal according to its range. 4
- (b) Describe manufacturing of methanol from wood. 4
- OR**
- 3 (b) Give an account of caking and gas making. 4
- (c) Give the preparation and uses of starch. 3
- 4 (a) Write extraction method and applications of chromium. 4
- OR**
- (a) Discuss : Principle of extraction and uses of sodium. 4
- (b) Name important ores of aluminium. Write Hoop's process of purification of aluminium. 4
- OR**
- (b) Explain : Principles of extraction of metals from sulphide ores. 4
- (c) Write a note on refining of crude Zinc. 3

- 5 (a) What is metallurgy ? Explain division of metallurgy. 4
- OR**
- (a) Write a note on reduction smelting. 4
- (b) Discuss the structure of silicates. 4
- OR**
- (b) Write a note on diamond. 4
- (c) Discuss : Application of Ion - Exchange adsorption. 3
- 6 (a) What are homogeneous catalysis ? Explain giving examples. 4
- OR**
- (a) Discuss : Electrophoresis with figure. 4
- OR**
- (b) Explain - Characteristics of catalysis. 4
- OR**
- (b) Write note on : Electro-osmosis. 4
- (c) Explain : The intermediate compound formation theory. 3
-