

2041
B.A./B.Sc. (General) First Semester
Industrial Chemistry
Paper - A: Industrial Aspect of Chemistry

Time allowed: 3 Hours

Max. Marks: 75

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- a) Write names of ores of iron.
- b) Define Gels.
- c) Define Colorific value of fuel.
- d) Write disadvantages of Coal.
- e) What is meant by catalytic poisoning?
- f) What is difference between Cellulose and starch?
- g) Give composition of Natural Gas.
- h) Write structure and molecular formula of furfural.
- i) Define microemulsions.
- j) What is meant by Adsorption Isotherm?

(10x1½)

UNIT – I

- II. a) Write in detail about coal distillation.
- b) Discuss various types of coal with their structure. (7,8)
- III. a) Explain in detail about Petroleum and its composition.
- b) Explain Hydroforming and reforming. (8,7)

UNIT – II

- IV. a) Explain Viscose manufacturing process with a neat flow diagram.
- b) Define and explain basic metallurgical operations. (8,7)
- V. a) Write a note on pulverization and roasting.
- b) Write in detail about alcohol based chemicals. (8,7)

P.T.O.

UNIT – III

- VI. a) Write different types of Zeolites and their uses.
b) Discuss physicochemical extraction of lead. (8,7)
- VII. a) Discuss physicochemical extraction of Aluminum.
b) Write in detail about different forms and structure of silicates. (8,7)

UNIT – IV

- VIII. a) Write a note about industrial importance of Micelles and Aerosols.
b) Explain phase transfer catalysis in detail. (8,7)
- IX. a) Explain Homogeneous catalysis with its types.
b) What is meant by emulsion? Discuss different types of emulsions and their respective importance in industry. (7,6)

x-x-x