



## Engineering Chemistry - II (Old) (1100)

P. Pages : 2

Time : Three Hours

Max. Marks : 50

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Use of non - programmable electronic calculator is allowed.
6. Figures to the right indicate full marks.

1. Solve **any two** from following.

- a) Define Isomerism. Explain different types of structural isomerism with example. **5**
- b) What are the electrophiles ? Explain types of electrophiles with suitable example. **5**
- c) Explain the inductive effect. Give any two applications of inductive effect. **5**

2. Solve **any two** from the following.

- e) Give the preparation, properties and uses of polychloroprene. **5**
- f) Differentiate between thermosoftening and thermosetting plastics. **5**
- g) What do you mean by polyamides ? Explain nylon 6,6. **5**

3. Solve **any two** from the following.

- h) Explain the determination of Net calorific value of vapourisable liquid fuel. Draw neat diagram. **5**
- i) Write note on water gas. **5**

- j) Give the characteristics of good fuel. Differentiate between solid and liquid fuel. 5
4. Solve **any two** from the following.
- k) Write a note on control of air pollution. 5
- l) Define water pollution. Give causes and effects of water pollution. 5
- m) Write short note on Acid Rain. 5
5. Solve **any one** of the following (X or Y)
- x) i) Explain hyperconjugation effect. Give any two applications of hyperconjugation effect. 5
- ii) Give the preparation, properties and uses of polytetrafluoroethylene. 5
- y) i) What are nucleophiles ? Give different types of nucleophile with example. 5
- ii) Give the preparation, properties and uses of polycarbonate. 5

\*\*\*\*\*