

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER- 1st / 2nd • EXAMINATION – SUMMER • 2014

Subject Code: 110001**Date: 21-06-2014****Subject Name: Chemistry****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	(a) Explain Zeolite process.	7
	(b) Give preparation and use of Nylon-6 6	4
	(c) Explain in brief Thermal Insulator	3
Q.2	(a) What do you mean by air pollution? Write note on Green House Effect.	7
	(b) What is hardness? Differentiate between temporary and permanent hardness. How can we remove temporary and permanent hardness?	4
	(c) What do you mean by Chromatography? Give its principle. Give outline of classification of chromatography	3
Q.3	(a) Discuss Type of Polymerization Reaction with suitable examples.	7
	(b) Explain briefly Non Ferrous Alloy.	4
	(c) Write difference between scale and sludge.	3
Q.4	(a) Explain briefly Galvanic Corrosion.	7
	(b) Discuss type of fuel with suitable example.	4
	(c) What is Refractory? Give classification of refractory with suitable examples.	3
Q.5	(a) Discuss concept, advantages and uses of electro plating.	7
	(b) Give application of Biotechnology in following fields. Agriculture, Medicine, Food quality	4
	(c) Write note on fibres made from natural sources with suitable examples.	3
Q.6	(a) Discuss physical properties of metal. Write note in detail on heat treatment of steel.	7
	(b) What are the characteristics of a good fuel? Give advantages of CNG over LPG.	4
	(c) Give classification of Lubricants with suitable examples.	3
Q.7	(a) Write note on Portland cement. Describe Wet process of manufacture of Portland cement with chemical reaction involved in it.	7
	(b) Explain in brief Waterline corrosion.	4
	(c) What are renewable and nonrenewable energy sources? Explain with suitable examples.	3
