

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Engineering Semester –III Examination Dec. 2011

Subject code: 330504

Date: 29/12/2011

Subject Name: Chemical Process Technology –I

Time: 10.30 am – 01.00 pm

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. English version is considered Authentic.**

Q-1	(a) Classify chemical Industries.	07
	(b) Write physical, chemical properties & uses of Sulfuric acid.	07
Q-2	(a) Explain manufacturing of Phosphorus by electrical furnace process With figure.	07
	(b) Explain major engineering problem for manufacturing of Sulfuric acid.	07
	OR	
	(b) Write physical properties of Soda ash & Caustic soda.	07
Q-3	(a) Explain Electrolytic process for production of Caustic soda.	07
	(b) Draw only neat & clean flow diagram for manufacturing of soda ash.	07
	OR	
Q-3	(a) Explain manufacturing of lime by hydrated lime process.	07
	(b) Explain major engineering problem for cement industries.	07
Q-4	(a) Differentiate mild steel & stainless steel.	07
	(b) Define Refrigerant, Propellant, Soap & Detergent.	07
	OR	
Q-4	(a) Explain the manufacturing of soap by Saponification.	07
	(b) Explain types of Polymerization.	07
Q-5	(a) Explain manufacturing of Vinyl chloride from Ethylene dichloride with Flow diagram.	07
	(b) Differentiate thermosetting & thermoplastic.	07
	OR	
Q-5	(a) Write a note on hydrogenation of coal.	07
	(b) Discuss Distillation of coal-tar.	07
