

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-III Regular / Remedial Examination December 2010

Subject code: 130505

Subject Name: Chemical Process Industries –I

Date: 13 /12 /2010

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.

- Q.1** (a) Describe mining of Sulfur by Frasch process. **07**
(b) Write the name of various process used for manufacturing of Caustic Soda. Explain detail the mercury cell process for the production of Caustic Soda. **07**

- Q.2** (a) List out major engineering problems in manufacture of ammonia discuss briefly. **07**
(b) Discuss Monte catini solution recycle process for urea production. **07**

OR

- (b) Write short notes on compound fertilizers. **07**

- Q.3** (a) Explain municipal raw water treatment plant with a neat and clean flow diagram. **07**
(b) Write short notes on Reverse Osmosis and its applications. **07**

OR

- Q.3** (a) Explain waste water treatment by activated sludge process. Discuss treated effluent disposal management. **07**
(b) Explain major engineering problems involved in manufacturing of sodium carbonate. **07**

- Q.4** (a) Discuss Lime beneficiation process for cement manufacture. **07**
(b) Write a note on Settling & Hardening of cement. **07**

OR

- Q.4** (a) Explain manufacturing of graphite with neat diagram. **07**
(b) Enlist methods for production of carbon dioxide. Explain any one in detail. **07**

- Q.5** (a) Explain manufacturing of pulp by using Kraft process. **07**
(b) List out the types of paper products. Explain in detail manufacturing of paper. **07**

OR

- Q.5** (a) Discuss manufacturing of glass in detail with neat diagram. **07**
(b) Write a note on types of explosives. **07**
