

Thapar Institute of Engineering and Technology
Department of Chemical Engineering, 2nd Year
End-Semester Exam, Dec 2006
CH-006 Chemical Technology I

Time: 3 hr.

M. Marks: 60

Attempt all questions

Q1. a. Discuss production of producer gas. Why is steam added in its manufacture? What are the factors affecting the composition of producer gas?

Q1. b. Describe the oxygen-nitrogen production process.

[6+6]

Q2. a. Describe the nitric acid production by ammonia oxidation process.

Q2. b. Describe production of phosphoric acid by wet process (strong acid process).

[6+6]

Q3. Write notes on following processes (along with flowsheets):

- a. Cement production
- b. Bromine from sea water

[6+6]

Q4. a. Describe production of elemental phosphorous.

Q4. b. Describe production of ammonium nitrate.

[6+6]

Q5. a. Describe urea production from ammonium carbamate.

Q5. b. Describe natural gas treatment process.

[6+6]