

II B.Tech I Semester Supplementary Examinations, May 2005
INORGANIC CHEMICAL TECHNOLOGY
(Chemical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. What do you mean by alternative processes? Write the competitive processes available for the manufacture of any component of your choice.
2. Distinguish between hard, demineralized and soft water. Explain how the demineralized water is handled. Give the materials of construction used.
3. (a) How chromite bricks are manufactured? What are their applications?
(b) Give an account of the properties of dolomite refractories.
4. (a) What are the raw materials used in the manufacture of Portland cement? Give their composition and proportions.
(b) Write an account of setting and hardening of cement.
5. Explain in details the physico chemical principles involved in the caustic soda by diaphragm cell method.
6. (a) What are the different sources for production of CO_2 .
(b) Discuss any one process in detail with a neat flow diagram.
7. (a) What are all the processes available for production of Ammonium nitrate and briefly discuss them.
(b) Discuss the major engineering problems faced in Ammonium nitrate manufacture.
8. Draw a neat flow diagram depicting the various details for the production of sulphuric acid by the contact process?
