Code: R7100104



## B.Tech I Year (R07) Supplementary Examinations, June 2013

## APPLIED CHEMISTRY

(Civil Engineering)

Time: 3 hours

Max Marks: 80

## Answer any FIVE questions questions carry equal marks

\*\*\*\*

- 1. (a) What is hardness of water? Explain different types of hardness of water and units.
  - (b) Estimate hardness of water by EDTA method.
- 2. Discuss various types of boiler troubles encountered in industry.
- 3. (a) Define corrosion? Explain wet corrosion with suitable diagram and mention important chemical reactions.
  - (b) Write note on galvanic series.
- 4. (a) Discuss different types of chemical conversion coating.
  - (b) Write about metal cladding.
- 5. (a) Differentiate thermoplastics and thermosettings.
  - (b) How to prepare PVC and Teflon and give three important uses of each?
- 6. (a) What is refractory? Give criteria of a good refractory material.
  - (b) Discuss important engineering applications of insulators.
- 7. Explain properties of lubricants.
- 8. Write short note on:
  - (a) Setting and Hardening.
  - (b) Composition of Portland cement.

\*\*\*\*