

R07

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  
All questions carry equal marks

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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.

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