

Code: R7100305

R07

B. Tech I Year (R07) Supplementary Examinations, December 2012

**ENGINEERING CHEMISTRY**

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Explain break - point chlorination.  
(b) How do estimate dissolved oxygen in water?
- 2 (a) Compare lime - soda and zeolite process.  
(b) Discuss the internal treatment of water.
- 3 (a) Explain factors influencing corrosion.  
(b) Discuss the cathodic protection.
- 4 (a) What is paint? What are constituents of paints and explain their functions?  
(b) Write note on Galvanization.
- 5 (a) Distinguish between thermo and thermo setting resins.  
(b) Give note on following about preparation and uses:
  - (i) PVS
  - (ii) Teflon
  - (iii) Nylon
- 6 (a) What is refractory? How do you classify refractory materials?  
(b) What are the characteristics of refractory material?
- 7 (a) What are the functions of lubricants?  
(b) Explain the mechanism of:
  - (i) Thick film lubrication
  - (ii) Thin film lubrication
- 8 (a) Explain ultimate analysis of coal.  
(b) Discuss the preparation of synthetic petrol by Bergius process.

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