

Code: R7100305

R7

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

ENGINEERING CHEMISTRY

(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Determine chlorides present in water using potassium chromate.
(b) What is hardness of water? Discuss the different types of hardness of water.
- 2 (a) Explain ion exchange process with diagram.
(b) What are the disadvantages of ion exchange process?
- 3 (a) Explain the concentration cell corrosion with neat sketch.
(b) Discuss about control of corrosion.
- 4 (a) Explain different types of surface clearing methods.
(b) Write note on sheradizing and chromizing.
- 5 (a) Discuss the different methods of moulding of plastics.
(b) What is vulcanization? Explain the process of vulcanization.
- 6 (a) What are the characteristics of insulating materials?
(b) What are the criteria of good refractory materials?
- 7 (a) Explain the boundary and hydrodynamic lubrication.
(b) What is flash point and fire point?
- 8 (a) Explain the analysis of flue gas by Orsat's apparatus.
(b) Explain classification of fuels.
