

D 26608

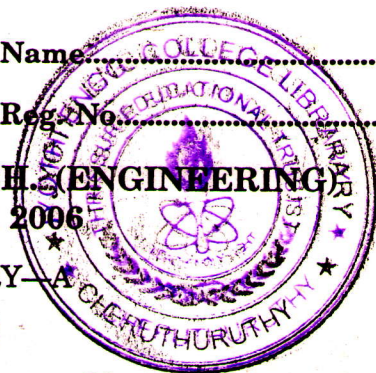
Name.....

Reg. No.....

COMBINED FIRST AND SECOND SEMESTER B.TECH. (ENGINEERING)
DEGREE EXAMINATION, DECEMBER 2006

EN 2K 104 (A)—ENGINEERING CHEMISTRY—A

(Common to AI, CS, EE, EC, IT and IC)



Time : Three Hours

Maximum : 100 Marks

Answer all questions.

1. (a) With a help of neat diagram, explain the different types of voids in crystal structure.
(b) Explain the terms ferroelectricity and piezoelectricity.
(c) Calculate the pH of a buffer solution containing 20 ml of 0.2 N acetic acid and 10 ml of 0.2 N NaOH ; if the K_a value of acetic acid is 1.75×10^{-5} .
(d) What is the role of salt bridge in e.m.f. measurements ?
(e) Write short note on power generation pollution.
(f) How is corrosion products classified on the basis of pilling bedworth rule ?
(g) Give the significance of Aniline point, Cloud point and Flash point of the lubricants.
(h) Distinguish between Polyethylene and Bakelite.
(8 × 5 = 40 marks)
2. (a) Suggest a suitable method to prepare semiconductors. What are its applications ?
Or
(b) Write short note on Frankel and Scotty defect.
(15 marks)
3. (a) Explain any two applications of e.m.f. measurements.
Or
(b) Write a note on construction and working of a Ni/Cd cell.
(15 marks)
4. (a) Discuss the Chemistry of chrome plating with a neat diagram.
Or
(b) Give an account of acid rain and Greenhouse effect.
(15 marks)
5. (a) How is natural rubber isolated from latex ?
Or
(b) Explain the mechanism involved in the preparation of HDPP.
(15 marks)

[4 × 15 = 60 marks]