

B.E DEGREE EXAMINATIONS: DEC 2014

(Regulation 2009)

Second Semester

ELECTRONICS AND COMMUNICATION ENGINEERING

CHY104: Chemistry For Circuit Engineering

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Wavelength of UV region
 - a) 200 – 400 nm
 - b) 200 – 800 nm
 - c) 400-800 nm
 - d) 300 – 700 nm
2. H₂ – D₂ lamps used for
 - a) IR spectroscopy
 - b) UV-Vis spectroscopy
 - c) Raman Spectroscopy
 - d) X-Ray diffraction spectroscopy
3. Mica is the mineral compound of silicates
 - a) Iron
 - b) Copper
 - c) Aluminum
 - d) Arsenic
4. Nanomaterials possessing the size in between
 - a) 1 – 100 nm
 - b) 1 – 100 micro meter
 - c) 1 – 100 cm
 - d) 101- 150 nm
5. _____ is the material that resist the flow of electric current
 - a) Insulator
 - b) Semiconductor
 - c) Conductor
 - d) Encapsulator
6. Bismuth is used for
 - a) High temperature Soldering
 - b) Low temperature Soldering
 - c) High pressure Soldering
 - d) Lowpressure Soldering
7. The thickness of IC is
 - a) 2.5 mm
 - b) 0.25 mm
 - c) 0.25 cm
 - d) 2.5 cm

23. a) Elaborate the properties and applications of semiconductors in microelectronics. (10)
(OR)
b) Discuss the various types of magnetic materials. (4)
24. a) (i) Explain the thin film process in fabrication of IC. (10)
(ii) Write note on Photolithography. (4)
(OR)
b) (i) Write in detail about CMOS. (10)
(ii) Briefly account on etching. (4)
25. a) (i) Describe desalination process. (8)
(ii) Explain the factors influencing corrosion. (6)
(OR)
b) (i) How is corrosion prevented through sacrificial anodic protection? (8)
(ii) Specify and elaborate the disadvantages of hard water in industries. (6)
