

Code: 9A12302

R09

B.Tech II Year I Semester (R09) Supplementary Examinations December 2015

DATA COMMUNICATION SYSTEMS

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain connectionless protocol with neat sketch.
(b) Define analog modulation. Describe frequency analog modulation.
- 2 Explain the characteristics and compare various types of metallic transmission lines.
- 3 (a) Write short notes on time division multiplexing.
(b) Define sampling rate and explain with neat sketch.
- 4 (a) Explain wave attenuation and absorption.
(b) Compare three modes of propagating electromagnetic waves
- 5 (a) Explain the operation of a telephone set with the help of functional block diagram.
(b) What are the common units for signal and noise power measurements in the telephone industry?
- 6 (a) Distinguish between first-generation and second-generation cellular telephone systems.
(b) Write the formats for forward control channel and reverse control channel.
- 7 (a) Describe discrete bar code and continuous bar code.
(b) Describe Code 39 and Extended code 39.
- 8 (a) Describe the functions of a channel service unit and digital service unit.
(b) Describe the two classifications for voice-band modems.
