

Code: 9A12302

B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2017

DATA COMMUNICATION SYSTEMS
(Computer Science & Systems Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Explain techniques of analog modulation systems with examples.
- 2 (a) Write notes on open-wire transmission lines.
(b) Explain metallic transmission line equivalent circuit.
- 3 (a) Write notes on quantization and the folded binary code.
(b) Explain linear versus nonlinear PCM codes.
- 4 (a) State and explain inverse square law.
(b) Describe diffraction and explain Huygens principle.
- 5 (a) List and describe the two primary categories of signaling.
(b) Explain Ringing signal and Ring-back signal.
- 6 (a) Distinguish between analog cellular phone and digital cellular phone.
(b) Describe second-generation cellular telephone system.
- 7 (a) Explain the terms retransmission and forward error correction.
(b) Describe error correction procedure in Hamming codes.
- 8 Write short notes on:
(a) Asynchronous voice band modems.
(b) High level data link control.
