

II B.Tech I Semester(R09) Supplementary Examinations, May 2011 DATA COMMUNICATION SYSTEMS

(Information Technology)

Time: 3 hours Max Marks: 70

Answer any FIVE questions questions carry equal marks

- 1. (a) Briefly describe broadcast and point to point computer network.
 - (b) List and briefly describe the five basic data communications network topologies.
 - (c) Defi ne the following terms: Information capacity, bits, bit rate, band and M-ary encoding.
- 2. (a) Explain how waves are propagated down a metallic transmission line.
 - (b) Briefly describe the construction of an optical filter cable.
- 3. (a) Defi ne companding and explain analog and digital companding.
 - (b) Describe wavelength-division multiplexing.
- 4. Explain about the satellite communication in microwave system.
- 5. (a) Discuss about the call progress tones and signals.
 - (b) Explain the units of power measurements.
- 6. (a) Contrast the similarities and differences between two-way mobile radio and cellular telephone.
 - (b) List and describe the three classifications of AMPS cellular telephone.
- 7. Clearly explain about error detection methods.
- 8. What are the two classifications for voice-band modem? Briefly explain each one.
