

Code :07A5EC13b

RA

III B.Tech II Semester(R07) Regular & Supplementary Examinations, April/May 2011
DATA COMMUNICATION SYSTEMS
(Information Technology)

(For students of R05 regulation readmitted to III B.Tech II Semester R07)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

1. (a) Explain the layered network architecture in detail.
(b) Define modulation. Explain different analog modulation techniques in detail.
2. (a) Mention the characteristics of electromagnetic waves.
(b) What is optical communication system? Explain the advantages and disadvantages of digital transmission.
3. (a) Define pulse modulation. Describe predominant methods of pulse modulation.
(b) Explain frequency division multiplexing and wave length division multiplexing.
4. (a) Write a note on electromagnetic polarization and electromagnetic radiation.
(b) Mention the optical properties of radio waves.
5. (a) Explain the basic purpose of call progress tones and signals.
(b) Draw the block diagram of a telephone set and explain.
6. Describe first generation analog cellular telephone systems.
7. Write a detailed note on Error detection and Error correction.
8. Explain asynchronous and synchronous data link protocols in detail.
