Code No: 45100 **R07** **Set No - 3**

III B.Tech I Semester Regular Examinations,Nov/Dec 2009
DATA COMMUNICATION SYSTEMS
Common to Information Technology, Computer Science And Engineering
Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) List and explain the three satellite orbital patterns?
   (b) What are the optical properties of radio waves? [8+8]
2. (a) Explain vertical redundancy checking?
   (b) Discuss the features of Bell system compatible modem? [8+8]
3. (a) What are the difference between the time domain modulation and the frequency domain modulation.
   (b) What are the different types of network topologies? [8+8]
4. (a) Describe the differences between asynchronous and synchronous protocols?
   (b) Explain the ENQ/ACK line discipline? [8+8]
5. (a) List and describe the four primary constants of a transmission line.
   (b) Explain the different types of rays in fiber optics. [8+8]
6. (a) Describe digital cellular telephone?
   (b) List the advantages and disadvantages of PCSS? [8+8]
7. (a) What is the reference frequency for attenuation distortion?
   (b) What are the steps involved in completing a local telephone call? [8+8]
8. (a) Explain the difference between linear and nonlinear PCM codes.
   (b) Describe the North American Digital Hierarchy. [8+8]

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