

III B.Tech I Semester Supplementary Examinations, April/May 2005
DATA COMMUNICATIONS
(Common to Computer Science & Engineering, Information Technology
and Computer Science & Systems Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. In QAM amplitude and phase of the transmitted signal are varied - Justify your answer with a block diagram and constellation diagram.
2. (a) What does ASCII stand for?
(b) Why data cannot be transmitted directly ?
3. (a) How does CRC (Cyclic Redundancy Code) provide error detection? How is the CRC checksum generated?
(b) What circuitry is used to develop the CRC checksum?
4. (a) Why most modems be used in pairs?
(b) How does a modem combine many concepts of communications
(c) What are the functions of a transmitting modem and receiving modem?
5. Write short notes on
 - (a) Multi link procedure
 - (b) information transfer
 - (c) balanced asynchronous class
6. Explain with Block Diagram the CCITT TDM carrier system.
7. (a) What are the other names of statistical time-division multiplexing.
(b) Compare between synchronous and statistical TDM with necessary diagram.
8. What is contention? How is it resolved in modern computer systems? How are overheads reduced by using front end processors?
