

II B.Tech II Semester Supplementary Examinations, Nov/Dec 2005

DATA COMMUNICATIONS

(Electronics & Computer Engineering)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) What are the advantages of QPSK. [5]
(b) Find the probability of error of QPSK. [6]
(c) For different inputs find correlator output . [5]
2. (a) What is a Data Communications Code? What are some of the other names for Data Communications Code? [5]
(b) Which Data Communications Code is the most powerful? Why? [5]
(c) What are the three types of characters used in Data Communications Code? [6]
3. (a) Which error detection technique is the simplest? Explain. [8M]
(b) Which error detection technique is the most reliable? Explain [8M]
4. (a) What are the characteristics of a serial interface. [10M]
(b) Define Baud rate.Explain [6M]
5. (a) Explain the meanings of control characters of bisync protocol. [6M]
(b) Explain with relevant diagrams, the data transfer phase of the bisync protocol. [10M]
6. (a) What is a data communications multiplexer? What savings does it offer?[8M]
(b) What is a concentrator? How does it operate? What advantages does it have compared to a MUX? What disadvantages? [8M]
7. What is the difference between Asynchronous time-division multiplexing and synchronous time-division multiplexing? Which one is more efficient one? Justify your statement? [16M]
8. Give two configurations of cluster controllers and explain their operation. What do you understand by fast and polite selection? [16M]
