22147

M. Tech 1st Semester Electronics & Communication Engineering

Examination–May, 2015

Data Communication Network

Paper-MEEC-515

Time : 3 hours　　　　　**Max. Marks : 100**

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt any **five** questions. All questions carry equal marks.

1. (a) Discuss the various transmission impairments ? [10]

   (b) Compare Asynchronous and synchronous way of transmission. [10]

2. (a) Explain Asynchronous transmission of serial data ? [10]

(b) Explain with example why shift register implementation of CRC with result in all Os at receiver if there are no errors ?

[10]

3. (a) Explain Bit oriented and character oriented protocol. [10]

(b) Discuss various flow control principles?

[10]

4. (a) Draw Block diagram of synchronous TDM and explain it in detail. [10]

(b) Draw Analog hierarchy of FDM system ? [10]

5. (a) Compare token ring, FDDI and DQDB technique of computer networks? [10]

(b) Explain Virtual Circuit and data gram of computer communication. [10]

6. (a) Explain protocols of OSI and TCP/IP model ? [10]

(b) Explain protocols of transport layer in detail. [10]

7. Draw the architecture of ISDN and explain its services in detail. [20]

8. Write short notes on : [10×2=20]

(a) CSMA/CD

(b) Physical Interface

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