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M. E. IIIrd Semester (ECE)
Elective-III Examination – January, 2012
COMPUTER COMMUNICATIONS
Paper : MEEC-611

Time : Three hours]   *[Maximum 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 examination.

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

1. (a) Discuss the design issue of data link layers. What are the various protocol that comes under data link layer and their associated function.

    10

    (b) What is Internet protocol. Explain in brief.   10

2. (a) What is Cryptography. Describe the various encryption standard for implementing security over the network.   **10**

   (b) Differentiate between FDM and TDM. Also explain their respected advantages and disadvantages.   **10**

3. (a) How ATM differs from Frame Relay ? List briefly various ATM services.   **20**

   (b) What is Connection Management ? Explain also the concept of File transfer and occur management.   **10**

4. (a) Explain OSI Layer and its functions.   **10**

   (b) What is X.25 ? Describe its features and also explain its architecture.   **10**

5. (a) Explain the Pre-requisites for Inter-connection network. **10**

(b) What is Structure Cabling ? Explain in terms of cable layering methods. **10**

6. (a) Explain the various media for Network Communication. **10**

(b) Explain BUS topologies (IEEE 802.3) in terms of standard, specification and frame format. **10**

7. (a) Write short on any of *two* the following : **10**

(1) Fibre optics network,

(2) Application Layer Protocol,

(3) TDM and TDMA,

(4) Segmentation.

(b) What is M/M/S/N queuing model. Explain. **10**

8. (a) Explain with block diagram. What is synchronous TDM ? 10

(b) Discuss sliding window Flow Control in data link control. 10