Master of Computer Application (MCA-III) Fifth Semester (Old)
5MCA2 - Paper-II : Advance Computer Network

P. Pages : 2

Time : Three Hours

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Max. Marks : 80

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Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and labelled diagram and use supporting data wherever necessary.
3. Avoid vague answers and write specific answers related to questions.

1. Either

a) What do you mean by Data Transmission? Explain Analog and Digital Data Transmission in detail. **8**

b) Explain following in detail **8**
   i) Transmission Impairment
   ii) Error Detection Technique.

OR

c) Explain following in detail **8**
   i) Flow Control
   ii) Error Control

d) Explain Interfacing in detail also explain Data link control protocol in detail. **8**

2. Either

a) What do you mean by Circuit Switching. Explain different communication Networks in detail. **8**

b) Explain following terms in detail: **8**
   i) Control signaling.
   ii) Packet switching.

OR

c) Explain the term Virtual Circuits and Data Grams in detail. Also explain Traffic control in detail. **8**

d) What do you mean by Topology? Explain different types of topologies in detail. **8**

3. Either

a) What do you mean by Layered Approach? Explain OSI Model in detail. **8**

b) Explain following in detail: **8**
   i) TCP/IP protocol suite
   ii) System Network Architecture.

OR

c) What is Internetworking? Explain connection oriented and connection less Internetworking in detail. **8**

d) Explain following in detail. **8**
   i) Bridges and Routing.
   ii) Router Level Protocol.

4. Either

a) Explain Transport services and Network Services in detail. **8**

b) What are ISO Transport standards? Explain Light weight Transport protocol in detail. **8**

OR

c) What do you mean by OSI session services? Explain OSI session protocols in detail. **8**

d) What is ISDN? Explain ISDN protocols and Broadband ISDN in detail. **8**

5. Solve all the questions.

a) Write a note on synchronous Time Division Multiplexing. **4**

b) Write short note on Medium Access control protocols. **4**

c) Discuss in short about connectionless internet protocol. **4**

d) Write short note on Transmission structure of ISDN. **4**

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