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07MCA32

Third Semester MCA Degree Examination, May/June 2010
Computer Networks

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1 a. Define computer networks. Explain the internet architectures. **(10 Marks)**
   b. With a neat block diagram, explain OSI architecture. **(10 Marks)**

2 a. Define framing. Explain point-to-point protocol and SONET. **(10 Marks)**
   b. Define piconet. With a neat block diagram, explain piconet networks. **(10 Marks)**

3 a. Differentiate between connection oriented and connection less services. **(08 Marks)**
   b. Define switching. Explain various types of switching. **(12 Marks)**

4 a. Define an internet. With a block diagram, explain IPV4 packet format. **(08 Marks)**
   b. Define routing. Explain distance vector routing. **(12 Marks)**

5 a. Differentiate between TCP and UDP. **(06 Marks)**
   b. With a neat block diagram, explain the state transition for connection establishment and termination. **(08 Marks)**
   c. Explain how TCP manages byte streams. **(06 Marks)**

6 a. Discuss the various problems in resource allocation. **(09 Marks)**
   b. Explain fragmentation and reassembly. **(11 Marks)**

7 a. Define DNS. Explain the hierarchy of name servers. **(10 Marks)**
   b. Explain the manage gateway. **(10 Marks)**

8 Write short notes for the following:
   a. Wi-Max (802 · 11)
   b. Routing for mobile holts
   c. Bridges and LAN switches
   d. Address resolution protocol (ARP). **(20 Marks)**

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