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10MCA32

Third Semester MCA Degree Examination, June 2012
Computer Networks

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. With a suitable diagram, explain OSI network architecture. Compare it with TCP/IP. (10 Marks)
b. Elaborate on design issues for the layer. (05 Marks)
c. What is multiplexing? Explain the working of FDM and STDM with their limitations. (05 Marks)
- 2 a. What is encoding? Explain the different encoding schemes with wave forms. (10 Marks)
b. What is framing? What are the different types of framing approach? (10 Marks)
- 3 a. Explain ARQ stop and wait algorithm with time lines showing various scenarios. (10 Marks)
b. Discuss physical properties, frame format and experience with IEEE 802.3. (10 Marks)
- 4 a. Define switching. Explain various types of switching. (12 Marks)
b. Discuss the spanning tree algorithm for a particular LAN. (08 Marks)
- 5 a. Discuss distance vector routing algorithm with a suitable example. (10 Marks)
b. Explain IPV4 header with a suitable diagram. (10 Marks)
- 6 a. What do you mean by subnetting? (05 Marks)
b. Explain CIDR. (05 Marks)
c. Explain TCP header format with a suitable diagram. (10 Marks)
- 7 a. Discuss DNS in detail. (10 Marks)
b. Discuss the issue that affects the QOS of VOIP. (05 Marks)
c. Explain briefly how SMTP plays a role in transferring Internet e-mail. (05 Marks)
- 8 Write short notes on:
a) UDP
b) WiMAX(802.10)
c) Routing for mobile hosts.
d) ARP. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.