

CBCS SCHEME

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15CS52

Fifth Semester B.E. Degree Examination, Jan./Feb. 2023 Computer Networks

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Describe HTTP with persistent and non-persistent connection. (08 Marks)
b. Explain web caching with neat diagram. (08 Marks)

OR

- 2 a. Explain FTP with its commands and replies. (08 Marks)
b. Demonstrate socket implementation using TCP. (08 Marks)

Module-2

- 3 a. Explain Sender's view of sequence numbers and its operation in Goback-N-protocol. (08 Marks)
b. With a neat diagram, explain the TCP segment structure. (08 Marks)

OR

- 4 a. Define Flow Control. Explain how flow is controlled by receiver window and receiver buffer. (08 Marks)
b. Explain 3 way handshake and closing a TCP connection. (08 Marks)

Module-3

- 5 a. What is routing? Explain the structure of a router. (08 Marks)
b. Explain distance vector algorithm. (08 Marks)

OR

- 6 a. List the broadcast routing algorithms. Explain any two of them. (08 Marks)
b. Explain 4 types of hierarchical OSPF routers. (04 Marks)
c. Explain RIP (Routing Information Protocol) with its message format. (04 Marks)

Module-4

- 7 a. Explain components of cellular network architecture. (08 Marks)
b. Define Handoff. Explain the steps accomplishing a handoff. (08 Marks)

OR

- 8 a. Explain direct routing of a mobile node. (08 Marks)
b. Illustrate the steps involved in MobileIP registration with home agent. (08 Marks)

Module-5

- 9 a. With a neat diagram, explain naïve architecture for audio/video streaming. (08 Marks)
b. Explain the diffserv internet architecture. (08 Marks)

OR

- 10 a. Explain Content Distribution Networks (CDN) and its operations. (08 Marks)
b. Summarize the limitations of Best-effort IP service. (08 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.