

# CBCS SCHEME

15CS52



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## Fifth Semester B.E. Degree Examination, Aug./Sept. 2020 Computer Networks

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- Explain how interaction occurs between web browser and web server using HTTP message. Explain HTTP request message format. (06 Marks)
  - Give the importance of SMTP in the internet mail system. (05 Marks)
  - Explain how client requesting object through web cache. (05 Marks)

OR

- How FTP moves files between local and remote file system? List the commands used in FTP. (06 Marks)
  - Explain POP3 (Post Office Protocol Version 3). (04 Marks)
  - Explain the steps involved in interaction of various DNS servers. (06 Marks)

### Module-2

- Explain stop wait protocol with FSM representation rdt 2.0. (06 Marks)
  - Explain TCP segment structure. (06 Marks)
  - With a neat diagram, explain GO - BACK - N protocol. (04 Marks)

OR

- Explain the steps involved in TCP connection establishment using three way hand shaking. (06 Marks)
  - What do you mean by congestion control? Explain slow start mechanism. (05 Marks)
  - Define flow control. Explain how flow is controlled by receiver window and receiver buffer. (05 Marks)

### Module-3

- Define routing. What are the goals of routing algorithm? (05 Marks)
  - A host in an organization has an IP address 200.45.34.56 and subnet address mask 200.45.240.0. What is subnet address? (04 Marks)
  - Explain the format of IPv6 headers. (07 Marks)

OR

- Explain OSPF. (06 Marks)
  - Find shortest path from node1 using link state algorithm.

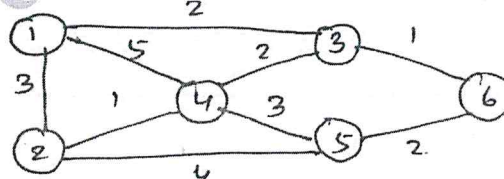


Fig.Q6(b)

- Explain RIP(Routing Information Protocol) with its message format. (05 Marks)

1 of 2

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.

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**Module-4**

- 7 a. Explain 3G cellular data network. (06 Marks)  
b. Write a note on mobile IP. (06 Marks)  
c. Explain in brief how mobility is managed in cellular networks. (04 Marks)

OR

- 8 a. What is handoffs? Explain steps involved when a base station does decide to handoff a mobile user. (06 Marks)  
b. With neat diagram, explain agent advertisement and mobile IP registration. (05 Marks)  
c. Write a note on indirect routing to mobile node. (05 Marks)

**Module-5**

- 9 a. Give the classification of multimedia application. Explain in brief. (04 Marks)  
b. Explain Content Distribution Networks (CDN) and its operation. (06 Marks)  
c. Explain how interaction takes place between client and server for HTTP streaming. (06 Marks)

OR

- 10 a. Define policing. Mention 3 important policing criterias. (05 Marks)  
b. Explain weighted fair queuing. (05 Marks)  
c. Write a note on Diffserv. (06 Marks)

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