CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   15CS52

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

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

OR

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

Module-2

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

OR

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

Module-3

5 a. Define routing. What are the goals of routing algorithm? **(05 Marks)**
   b. A host in an organization has an IP address 200·45·34·56 and subnet address mask 200·455·240·0. What is subnet address? **(04 Marks)**
   c. Explain the format of IPv6 headers. **(07 Marks)**

OR

6 a. Explain OSPF. **(06 Marks)**
   b. Find shortest path from noole1 using link state algorithm.

Fig.Q6(b)   **(05 Marks)**
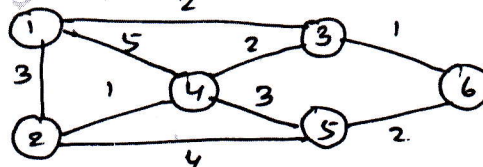   c. Explain RIP(Routing Information Protocol) with its message format. **(05 Marks)**

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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