

# CBCS SCHEME

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17CS52

## Fifth Semester B.E. Degree Examination, Feb./Mar. 2022 Computer Networks

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- a. Explain the working of HTTP along with its required and response message format. (10 Marks)  
b. Explain the P2P architecture for file sharing. (10 Marks)

OR

- a. Explain the working of SMTP. Also explain mail access protocols. (10 Marks)  
b. Explain the services offered by DNS along with DNS record and message format. (10 Marks)

### Module-2

- a. Explain the working of Go – Back – N protocol. (08 Marks)  
b. Draw and explain the FSM for sender site and receiver site of rdt 2.0 protocol. (08 Marks)  
c. Explain UDP segment structure. (04 Marks)

OR

- a. Draw TCP segment structure and explain its field. (07 Marks)  
b. Explain three way handshaking procedure used by TCP. (05 Marks)  
c. Explain how TCP handler congestion. (08 Marks)

### Module-3

- a. Explain IPv6 packet format. (06 Marks)  
b. Explain the working of OSPF routing protocol. (07 Marks)  
c. Explain any two broad cast routing algorithm. (07 Marks)

OR

- a. Explain the structure of a router. (10 Marks)  
b. Write link state algorithm, consider the following networks with the indicated link costs. Apply link state routing algorithm to compute the shortest path from 'u' to all other nodes in the network.

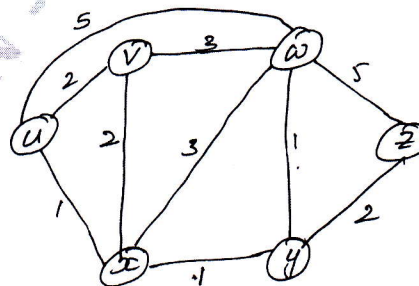


Fig.Q6(b)

(10 Marks)

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.

**Module-4**

- 7 a. Explain three phases of mobile IP. (10 Marks)  
b. Illustrate the two different approaches for routing to a mobile node. (10 Marks)

OR

- 8 a. Explain 3G cellular networks architecture. (10 Marks)  
b. What is handoff? Explain the steps involved in accomplishing handoff. (10 Marks)

**Module-5**

- 9 a. Explain the working of CDN. (10 Marks)  
b. Explain three different ways of streaming stored video. (10 Marks)

OR

- 10 a. Explain the various packet scheduling mechanism. (08 Marks)  
b. Explain the leaky bucket policing mechanism. (08 Marks)  
c. Explain the properties of audio. (04 Marks)

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