

# CBCS Scheme

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15CS/IS52

## Fifth Semester B.E. Degree Examination, June/July 2018 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. What are the different types of transport services provided by the internet? (08 Marks)  
b. Compose logical note on proxy-server with suitable diagram. (08 Marks)

OR

- 2 a. Discuss how files are distributed in peer-to-peer application. (08 Marks)  
b. Design network application using socket programming with UDP. (08 Marks)

### Module-2

- 3 a. Describe the various fields of UDP segment. Explain how Checksum is calculated. (08 Marks)  
b. Design rdt 2.0 protocol. (08 Marks)

OR

- 4 a. With a neat sketch, explain the TCP segment and its services. (08 Marks)  
b. Explain how connection is established and tear down in TCP. (08 Marks)

### Module-3

- 5 a. Draw IPv6 datagram format, mention the significance of each fields. (08 Marks)  
b. Apply distance-vector algorithm for the following Fig.Q5(b). (08 Marks)

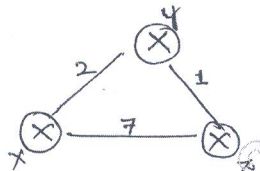


Fig.Q5(b)

OR

- 6 a. Illustrate Routing Information Protocol (RIP) with suitable diagram. (08 Marks)  
b. Explain the spanning tree algorithm. (08 Marks)

### Module-4

- 7 a. Define cellular network. Give the overview of GSM cellular network architecture. (08 Marks)  
b. Explain the two different types of routing approaches to mobile node. (08 Marks)

OR

- 8 a. Explain the following concepts of mobile-IP : i) Agent discovery ii) Registration with home agent. (08 Marks)  
b. Illustrate the steps involved when a base station does decide to hand-off a mobile user. (08 Marks)

### Module-5

- 9 a. Brief out three broad categories of multimedia network applications. (08 Marks)  
b. Discuss the followings : i) Adaptive streaming ii) DASH. (08 Marks)

OR

- 10 a. With general format, explain the various fields of RTP. (08 Marks)  
b. Explain the working procedure of leaky bucket algorithm. (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.