

# CBCS SCHEME

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15CS/IS52

## Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019 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 HTTP messages. (08 Marks)  
b. Explain web caching with diagram. (08 Marks)

OR

- 2 a. Explain FTP with its commands and replies. (08 Marks)  
b. Explain SMTP. (04 Marks)  
c. Explain DNS resource record. (04 Marks)

### Module-2

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

OR

- 4 a. Explain 3 way handshake and closing a TCP connection. (08 Marks)  
b. Explain the causes and costs of congestion. (08 Marks)

### Module-3

- 5 a. With diagram explain router architecture. (08 Marks)  
b. Explain IP fragmentation. (08 Marks)

OR

- 6 a. Explain distance vector algorithm. (08 Marks)  
b. Explain 4 types of hierarchical OSPF routers. (04 Marks)  
c. Compare link state with distance vector algorithm. (04 Marks)

### Module-4

- 7 a. Explain components of a cellular network architecture. (08 Marks)  
b. Explain direct routing of a mobile node. (08 Marks)

OR

- 8 a. Explain steps of handoff a mobile user. (08 Marks)  
b. Explain HLR, VLR, home address, care-of-address. (08 Marks)

### Module-5

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

OR

- 10 a. With diagram, explain interaction between client and server using RTSP. (08 Marks)  
b. Explain how streaming from streaming server to a media player is done. (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.