USN ☐☐☐☐☐☐☐☐☐☐   **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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