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

- 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
- 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)

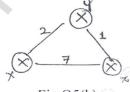


Fig.Q5(b)

#### 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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2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.