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# 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?

b. Compose logical note on proxy-server with suitable diagram.

(08 Marks)

#### OR

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

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.

b. Apply distance –vector algorithm for the following Fig.Q5(b).

(08 Marks)

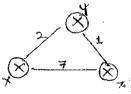


Fig.Q5(b)

# OR

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

#### 7. C. A.

# Module-4

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)

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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)