

B.Tech III Year I Semester (R13) Supplementary Examinations November/December 2017

COMPUTER NETWORKS

(Information Technology)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What is an internet? What is the Internet?
 - (b) What is the propagation time if the distance between the two points is 12,000 km? Assume the propagation speed to be 2.4×10^8 m/s in cable.
 - (c) Distinguish between flow control and error control.
 - (d) What is the working principle of CSMA/CD?
 - (e) List the design issues of network layer.
 - (f) What do you mean by congestion? State general principles of congestion control.
 - (g) List the elements of transport protocols.
 - (h) What do you mean by nesting of TPDU's?
 - (i) What is the purpose of secure shell?
 - (j) What do you mean by client server programming?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 What do you mean by protocol layering? Explain layered network architecture.

OR

- 3 Describe TCP / IP Reference model.

UNIT – II

- 4 Explain how hamming code is used to detect and correct one bit error with an example.

OR

- 5 Compare and contrast HDLC and PPP.

UNIT – III

- 6 Discuss distance vector routing in detail.

OR

- 7 Distinguish between leaky bucket algorithm and token bucket algorithm.

UNIT – IV

- 8 Draw TCP segment header and explain each field.

OR

- 9 What is UDP? Explain its importance and applications.

UNIT – V

- 10 Describe e-mail architecture and services.

OR

- 11 Write short notes on the following:

- (a) WWW.
- (b) TELNET.
- (c) DNS.
