

Code No: **RT41042**

R13

Set No. 1

IV B.Tech I Semester Supplementary Examinations, February - 2019

COMPUTER NETWORKS

(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

PART-A (22 Marks)

1. a) Explain in detail about the MAN. [3]
- b) Describe Broad Band ISDN. [3]
- c) Discuss about the Ethernet Cabling. [4]
- d) What is Multicast Routing? Explain. [4]
- e) Explain about the TCP Timer Management. [4]
- f) What is the significance of network security? [4]

PART-B (3x16 = 48 Marks)

2. a) Describe the TCP/IP Reference model in detail. [8]
- b) Explain the limitations of Arpanet. [8]
3. a) Differentiate Narrow band and broad band ISDN. [8]
- b) Describe Light Wave Transmission. Explain its advantages and disadvantages. [8]
4. a) What are the design issues of Data Link Layer? Explain. [8]
- b) Explain in detail about the Simplex Stop and Wait protocol. [8]
5. a) Illustrate shortest path routing algorithm with suitable example. [8]
- b) Explain the general principles of congestion prevention policies. [8]
6. a) Draw and explain the header format for a user datagram protocol. [8]
- b) Discuss about the ATM AAL Layer protocol. [8]
7. a) List and Explain the Two Fundamental Cryptographic Principles. [8]
- b) Explain briefly about the MPEG standard to compress videos. [8]