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]