

Code: EC6T5

III B.Tech - II Semester – Regular Examinations – May 2017

**COMPUTER NETWORKS
(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1.

- a) What is a peer – to – peer process?
- b) Write the advantages of optical fiber over twisted-pair and coaxial cables.
- c) Why does ATM uses small and fixed length cells?
- d) Explain in detail the operation of slotted Aloha.
- e) Define piggybacking and write its uses.
- f) Discuss the drawbacks of flooding.
- g) Compare virtual circuit and datagram subnets.
- h) Explain the features of UDP.
- i) Briefly explain the token bucket congestion control algorithm.
- j) What is e-mail?
- k) Write the structure of DNS.

PART – B

Answer any *THREE* questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain different types of transmission media in physical layer. 8 M
- b) Explain various network topologies in detail. 8 M
3. a) For the data 1010110110110001 send using a Generator Polynomial x^4+x^2+1 . 8 M
- b) Explain the parameters to be considered in Flow control? 8 M
4. a) Explain Dijkstra's shortest path routing algorithm with example. 8 M
- b) Differentiate between multicasting and broadcasting. 8 M
5. a) Give the Functions of Transport Layer. 8 M
- b) Explain the TCP connection management. 8 M
6. a) What is meant by DNS ? Describe the Name server & Resource Records of DNS. 8 M
- b) State and explain working of the built-in HTTP request methods. 8 M