

2122
B.E. (Electrical and Electronics Engineering)
Fifth Semester
PC-EE-505: Computer Networks

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Part.

x-x-x

- I. Attempt the following:-
- What is a client server model? Give example.
 - List out the two basic types of transmission technology in computer networks. Define each.
 - What are the two distinct components of a subnet?
 - What are the functions of transport layer?
 - List the types of error detection methods. (5x2)

UNIT - I

- II. a) Differentiate between OSI and TCP/IP reference models with diagrams.
b) Differentiate between Connection oriented and Connectionless Services. (2x5)
- III. a) Explain in detail about guided media used for transmission.
b) Discuss in detail about the packet-switched networks. (2x5)
- IV. a) What is the need of Framing? Explain byte stuffing and bit stuffing for framing.
b) Explain Pure Aloha and derive its efficiency. (2x5)

UNIT - II

- V. a) Explain the shortest path algorithm.
b) Explain how a datagram network works. (2x5)
- VI. a) How does UDP differ from TCP? List the applications of UDP.
b) Define FTP. Discuss in brief about FTP. (2x5)
- VII. a) List and Explain the Two Fundamental Cryptographic Principles.
b) Explain dynamic web pages. (2x5)

x-x-x