2072

B.E. (Electronics and Communication Engineering)

Fourth Semester

EC-405: Computer Networks

Time allowed: 3 Hours

Max. Marks: 50

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. I which is compulsory and selecting two questions from each Unit. Use of scientific calculator is allowed.*

x-x-x

I. Attempt all questions: -

a) What is a network?

b) Explain port address.

c) What is DHCP?

d) Explain authentication header.

e) Will Bluetooth and Wireless LAN interfere with each other?   (5x2)

UNIT - I

II.   a) Give the differences between Computer Networks and Distributed Systems.

b) Differentiate between OSI and TCP /IP reference models.   (2x5)

III. a) A network on the internet has a subnet mask of 255.255.240.0. What is the maximum number of hosts it can handle?

b) Explain different ALOHA protocols and compare their performance.   (3,7)

IV. Describe CSMA/CD protocol in Ethernet.   (10)

UNIT - II

V.   a) How transport layer connection is established in TCP? Illustrate with state diagrams.

b) Give the format of TCP header and discuss the relevance of various fields. (2x5)

VI. a) Explain in brief about DNS.

b) Define FTP. Discuss in brief about FTP.   (2x5)

VII. Compare IP4 and IP6 headers and explain how IP6 address is represented?   (10)

x-x-x