2063

B.E. (Electrical and Electronics Engineering)

Fifth Semester

PC-EE-505: 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.*

x-x-x

I.   Attempt the following:-

    a) What are OSI and TCP/IP models?

    b) List out the types of wireless transmission media.

    c) List two advantages of having international standards for network protocols.

    d) What are the functions of network layer?

    e) List the types of error detection methods.   (5x2)

UNIT - I

II.   a) What are the advantages of fiber optics over copper as a transmission medium? Is there any downside of using fiber optics over copper?

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

III.   a) Discuss the various services offered by data link layer.

    b) Discuss in detail about the packet-switched networks.   (2x5)

IV.   a) Differentiate between Connection oriented and Connectionless Services.

    b) What is the need of Framing? Explain byte stuffing and bit stuffing for framing.

                                                                (2x5)

UNIT - II

V.   a) Explain with suitable example the working of a virtual circuit network.

    b) Explain how a distance vector routing algorithm works.   (2x5)

(2)

VI.   a) How does UDP differ from TCP? List the applications of UDP.

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

VII.   a) Discuss about HTML.

       b) Explain dynamic web pages.   (2x5)

x-x-x