

2062
B.E. (Information Technology)
Fourth Semester
PCIT-402: 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 Unit.

x-x-x

I. Attempt the following:-

- a) What is meant by Vulnerable period w.r.t ALOHA?
- b) What is meant by the preamble in 802.3 frame format?
- c) Give two methods of broadcast routing.
- d) What are the two basic mechanisms of congestion control?
- e) What do you mean by encryption and decryption (5x2)

UNIT - I

- II. What are the different layers of the OSI model? Draw a diagram of the OSI model and explain the functions of each layer. (10)
- III. Why are flow control protocols used in Data link layer? Explain the working of the Go-Back-N protocol with the help of a neat diagram. (10)
- IV. Explain the working of IEEE 802.5 along with its frame format. How does IEEE 802.5 differ from IEEE 802.4? (10)

UNIT - II

- V. Define the term "principle of optimality". With the help of a suitable example explain the working of distance vector routing. (10)
- VI. Write down the services provided by TCP and UDP protocols. What is the significance of port address in the transport layer? (10)
- VII. Write notes on the following:-
 - a) Email
 - b) SNMP (2x5)

x-x-x