

Code No: E-5775/N/BL/AICTE

FACULTY OF ENGINEERING
B.E. (CSE) V - Semester (AICTE) (Backlog) (New) Examination, September /October 2023

Time: 3 Hours

Subject: Computer Networks

Max. Marks: 70

Note: (i) First question is compulsory and answer any four questions from the remaining six questions. Each questions carries 14 Marks.
(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
(iii) Missing data, if any, may be suitably assumed.

1. a) What are the services of Network layer?
b) What is meant by Socket.
c) Define the Principle of Optimality.
d) Define Error and list out various types of errors.
e) What is piggy Backing
f) What is the significance of SNMP?
g) List out all the techniques for encryption.
2. a) State the differences between ISO-OSI and TCP/IP Network model.
b) Explain with neat diagram Time division and frequency division Multiplexing
3. a) Explain in detail functions of Data link Layer, explain various line discipline algorithms.
b) Describe in detail with neat diagram various categories of Error control protocols
4. a) Draw a neat diagram of TCP header. Explain each field.
b) Explain the concept of congestion. Write in detail token bucket algorithm
5. a) Define Quality of Service. Discuss in brief various QoS improving Techniques.
b) Explain in detail various elements of transport layer protocols and its functions.
6. a) With neat diagram explain RSA Encryption Algorithm, What is public key in RSA algorithm.
b) List the elementary socket system calls used in connection-oriented communication and explain their function.
7. a) Write short notes on DNS,SNMP and EMAIL
b) Discuss the concept involved in pure ALOHA and Slotted ALOHA.