Code No: E-5995/N/AICTE

FACULTY OF ENGINEERING

B.E. CSE(DS) VI - Semester (AICTE) (Main) (New) Examination, September /October 2023

Subject: Computer Networks

Max. Marks: 70

Time: 3 Hours

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) Define Line configuration.
   b) Compare synchronous and asynchronous transmission.
   c) How cyclic redundancy check is working?
   d) Define piggybacking.
   e) Differentiate between circuit switching and packet switching.
   f) What is meant by process to process communication?
   g) Define message authentication.

2. a) Explain TCP/IP model with neat diagram.
   b) Compare Time division, Frequency division and wave division multiplexing.

3. a) Illustrate Selective Repeat ARQ protocol and Sliding window protocol with neat Diagram.
   b) What is meant by collision? Compare CSMA/CD and CSMA/CA with example?

4. a) Compare IPv4 Header format and IPv6 Header format with diagram.
   b) Explain about Token bucket congestion control algorithm with neat diagram.

5. a) Explain about the elements of transport protocol in detail.
   b) Describe about congestion and quality of service.

6. a) Discuss in detail about DES encryption and decryption.
   b) Write short Notes on (i) Blue tooth (ii) DNS

7. a) Explain about Dynamic Host Configuration protocol (DHCP).
   b) Describe about multi-cast routing protocols.

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