Code No: D-2204/M/BL/AICTE

FACULTY OF ENGINEERING

B.E. (CSE) VI Semester (AICTE) (Main& Backlog) Examination

September/ October - 2022

Subject: Computer Networks

Time: 3 Hours **Max. Marks: 70**

(Missing data, if any, may be suitably assumed)

PART – A **(10 x 2 = 20 Marks)**

Note: Answer all the questions.

1. What are the two types of line configuration?
2. In what situation multiplexing is used?
3. Classify the responsibilities of data link layer.
4. Define single bit error and burst bit error.
5. What is meant by piggybacking?
6. How errors are detected using CRC?
7. What are the fields on which the UDP checksum is calculated? Why?
8. List the services provided by end-to-end services.
9. Define the two types of user agents in the electronic mail system.
10. Distinguish active and passive attack with example.

PART – B

Note: Answer any five questions. **(5 x10 = 50 Marks)**

11. (a) Compare and contrast OSI model with TCP/IP model.
    (b) Distinguish between TDM and FDM.

12. (a) Explain in detail the error detection and error corrections.
    (b) Demonstrate sliding window protocol for data link layer.

13. (a) Write a short notes on packet switching and circuit switching.
    (b) Is the format of a RARP request packet is same as that of ARP request packet? Justify.

14. (a) Explain the TCP transmission policy with the help of a neat diagram.
    (b) Describe about congestion control in frame relay.

15. (a) Discuss how simple mail transfer protocol (SMTP) works? Can multimedia messages be transmitted using SMTP?
    (b) Identify the possible threats for RSA algorithm and list their counter measures.

16. (a) Mention the strengths and weakness of Data Encryption Standard (DES) algorithm.
    (b) Explain the transport layer connection management.

17. Write short notes on:
    (a) Bluetooth
    (b) DHCP
    (c) Subnetting

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