

Total No. of Questions : 8]

SEAT No. :

PE4297

[Total No. of Pages : 2

[6582]-70

S.E. (Artificial Intelligence and Machine Learning)

COMPUTER NETWORKS

(2019 Pattern) (Semester - III) (218543)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume Suitable data if necessary.
- 5) Use of Calculator is allowed.

Q1) a) Demonstrate Cyclic Redundancy Check (CRC) method with suitable example. **[9]**

b) What is frames in data link layer? Describe in detail the fixed size framing and variable size framing? **[9]**

OR

Q2) a) Explain CSMA/CD random access technique in detail. **[9]**

b) Describe any two error detection techniques with suitable example. **[9]**

Q3) a) Describe in detail Enhanced Interior Gateway Routing Protocol. **[9]**

b) What is NAT? Explain PAT in detail with example. **[8]**

OR

Q4) a) What is Dynamic Host Configuration Protocol? Explain in detail. **[9]**

b) Explain following terms **[8]**

- i) Distance Vector Routing
- ii) Link State Routing

P.T.O.

- Q5) a)** What is socket? Describe the types of socket with example. [9]
b) Compare : Transmission Control Protocol (TCP) and User Datagram Protocol (UDP). [9]

OR

- Q6) a)** Explain UDP with its header format. [9]
b) Demonstrate Token Bucket algorithms. [9]

- Q7) a)** Describe Domain Name System (DNS) with suitable examples. [9]
b) What is HTTP? Describe Hypertext Transfer Protocol. [8]

OR

- Q8) a)** Demonstrate Post Office Protocol (POP) in detail. [8]
b) Write Short Note on [9]
i) Client Server Paradigm
ii) IMAP
iii) FTP

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