

Roll No. ....

22638

M. Tech. 1st Semester (CSE)

CBCS Scheme

Examination – February, 2022

DATA COMMUNICATION AND COMPUTER NETWORKS

Paper : MTCSE21C1

Time : Three Hours ]

[ Maximum Marks : 100

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after examination.*

Note : Attempt five questions in all, selecting one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. Write short notes on the following :

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- (a) CSMA
- (b) RARP
- (c) SMTP
- (d) Firewall

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**UNIT - I**

2. Define switching and explain the following : 20
- (i) Packet switching
  - (ii) Circuit switching
  - (iii) Message switching

3. Describe TCP/IP reference model with proper diagram. Also compare it with ISO-OSI reference model. 20

**UNIT - II**

4. Explain the following : 20
- (a) IPv6
  - (b) Global unicast addressing
5. Define routing and explain the following : 20
- (a) RIP
  - (b) Link state routing

**UNIT - III**

6. Describe the following : 20
- (a) Congestion Control
  - (b) TCP services

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7. Explain the following : 20
- (a) SCTP protocol
  - (b) FTP

**UNIT - IV**

8. Explain the following : 20
- (a) SNMP
  - (b) Ciphers
9. Describe the following : 20
- (a) Application Layer Security
  - (b) Network Layer Security

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