

22638

M.Tech 1st Semester (CSE) CBCS Scheme

Examination, December-2017

DATA COMMUNICATION & COMPUTER NETWORK

Paper-MTCSE21C1

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt five questions in all, selecting one from each unit. Question no. 1 is compulsory.

1. Define following : 2.5×8=20
- (a) Transmission modes
 - (b) Switching
 - (c) Routing
 - (d) Addressing
 - (e) Congestion
 - (f) Quality of Service
 - (g) Digital Signature
 - (h) Firewall

Unit-I

2. (a) Explain TCP/IP model in detail. 10
(b) Differentiate between CSMA & CSMA/CD. 10
3. (a) Explain the concept of ALOHA. Also differentiate between pure ALOHA & slotted ALOHA. 10

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- (b) Differentiate between following : $5 \times 2 = 10$
- (i) Digital & Analog Communication
 - (ii) Serial & Parallel Communication

Unit-II

4. (a) Write short note on IPV6 addressing. 10
(b) What is the use of Supernetting ? Explain. 10
5. Explain the working of Link State Routing. How it is different from Distance Vector Routing ? Explain. 20

Unit-III

6. (a) What are different services and features of SCTP ? 10
(b) How to create an SCTP association ? Write about flow control in SCTP. 10
7. Name commonly used application layer protocols and explain any two of them. 20

Unit-IV

8. (a) Discuss the issues involved in Transport layer Security. 10
(b) What is the need of Ciphers ? Discuss its different types. 10
9. Write short note on :
- (a) SNMP 10
 - (b) VPN 10