

M.Sc. Semester-I (CBCS Scheme) Examination
COMPUTER SOFTWARE (NEW)
1 MCSW4 : COMPUTER NETWORKS

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) All questions are compulsory.

(2) Give suitable diagram wherever necessary.

1. (a) Draw the layered architecture of TCP/IP model. Describe its services. 8
- (b) What are the different modes of Data Transmission ? Explain serial mode of Data Transmission. 7

OR

2. (a) What is Packet Switched Network ? Explain the working of circuit switched and message switched. 8
- (b) Describe the various Guided communication media. 7
3. (a) Explain various types of HTTP connections. 7
- (b) What is FTP ? Explain the FTP commands with examples. 6

OR

4. (a) What is DNS ? Explain services and working of DNS. 7
- (b) What is SMTP ? Explain. 6
5. (a) Explain the transport layer services with examples. 7
- (b) What are Sockets ? Explain. 6

OR

6. (a) Describe connectionless transport UDP protocol in detail. 7
- (b) Describe the services provided by UDP. 6
7. (a) Describe the working of RIP. 6
- (b) State and explain IPV₆ Internet protocol. 7

OR

8. (a) Write short notes on :
 - (i) BGP
 - (ii) OSPF. 7
- (b) Explain the services provided by network layer. 6

9. (a) Describe the characteristic of point to point protocol. 7
- (b) Write short notes on :
- (i) HUB
- (ii) SWITCHES. 6

OR

10. (a) Explain parity checking and longitudinal redundancy checking techniques. 7
- (b) Write short notes on :
- (i) ATM
- (ii) X.25. 6
11. (a) What is digital signature ? Write the procedure for creating a digital signature. 7
- (b) Write short notes on :
- (i) MIB
- (ii) SNMP. 6

OR

12. (a) What is Network Management ? Describe the various areas of network management. 7
- (b) What is symmetric key cryptography ? Explain with neat and clean diagram. 6