

OEC-5-3 - Computer Networks

P. Pages : 1

Time : Three Hours



GUG/W/24/14353

Max. Marks : 80

-
- Notes :
1. All questions carry equal marks.
 2. Assume suitable data wherever necessary.
 3. All questions are compulsory.

1. a) Define Computer Network. Explain uses of computer network. **8**
b) Explain the ISO's OSI Reference Model and the TCP/IP Reference model. **8**

OR

2. a) Explain working of three layers of X.25 protocol. **8**
b) What is ATM in computer network. Explain ATM reference model in detail. **8**

3. a) Explain Pure ALOHA and slotted ALOHA in detail. **8**
b) Write note on CSMA/CD protocol. **8**

OR

4. a) Explain Fast ethernet and Gigabit Ethernet. **8**
b) Describe the frame format of PPP in detail. **8**

5. a) Explain various design issues in Network layer. **8**
b) What do you mean by packet switching. Explain its process and also write its advantages and disadvantages. **8**

OR

6. a) Explain Adaptive routing Algorithm and its types in detail. **8**
b) Write note on Internetworking. **8**

7. a) What are the different transport services provided by the transport layer? **8**
b) Explain UDP in detail. **8**

OR

8. a) Explain TCP in detail. **8**
b) Explain the concept of Socket. **8**

9. a) How does the Domain Name System (DNS) work and what is its role in computer networks? **8**
b) Explain the process of message transfer in SMTP. **8**

OR

10. a) What is DHCP and how is it used in computer networks? **8**
b) Explain the File Transfer Protocol (FTP) and its general model commands. **8**
