

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : JUNE/JULY- 2022
SEMESTER - I

Sub.: Advanced Computer Networks (MSC – 105-19)

Date : 04/07/2022

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2-3 lines. (Any 5) (10)

1. State the advantages of virtualization.
2. List the network services.
3. Name the various types of devices used in Computer Networks.
4. List the layers of OSI reference model.
5. List the advantages of peer to peer network.
6. Define WAN.
7. Define Hybrid MESH topology.

Q. 2. Answer the following in short. (Any 4) (20)

1. Explain the working of Peer to Peer Network. State its advantages & disadvantages.
2. Write a note on Bluetooth network.
3. Explain VLAN. State its advantages and disadvantages
4. Explain ARP and ICMP protocols.
5. Explain any one Ethernet frame with diagram.
6. What is Wi-Fi network? Explain its working.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Compare RAID1 and RAID 5 with diagram. State the advantages and disadvantages.
2. Explain use POP3, IMAP, and SMTP email Protocols in detail.
3. Explain Server Virtualization with diagram. State its advantages & disadvantages.
4. What is firewall? Explain packet filtering firewall. State its advantages and disadvantages
5. Explain the TCP/IP model with diagram.