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MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : JANUARY- 2023
SEMESTER - I
Sub.: Advanced Computer Networks (MSC – 105-22)

Date : 09/01/2023	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. Define TCP/IP Protocol.

2. State the advantages of Packet Switching.

3. List the advantages of the STAR topology.

4. Define Computer Network. List its various types.

5. State the advantages of RAID 10

6. State the advantages of cloud computing.

7. What is VPN?

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

1. Explain the working of router.

2. Explain Ethernet Frame with diagram.

3. What is Backup? Explain its various types.

4. Explain ARP and ICMP protocols.

5. What is Wi-Fi network? Explain its working.

6. Write a note on Gateway.

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

1. Explain Network Virtualization with diagram. State its advantages & disadvantages.

2. Explain the working of application layer, presentation layer and session layer of OSI Reference Model in detail.

3. What is proxy server? What are different types of proxy servers? State its advantages and disadvantages. Give various examples of it.

4. Explain use POP3, IMAP, and SMTP email Protocols in detail.

5. What is transmission media? Explain co-axial media.