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MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : MAY - 2024
SEMESTER - I
Sub.: Advanced Computer Networks (MSC - 105-22)

Date : 03/06/2024   **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. What is Clustering?

2. What is Desktop Virtualization?

3. What is hot spare?

4. Explain the working of WINS.

5. Explain the working of ICMP protocol.

6. Explain working of Router.

7. Distinguish between TCP and UDP protocol.

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

1. Define the term "Network". Explain any one topology in detail with diagram.

2. What is peer-to-peer network? State its advantages and disadvantages

3. What is Packet switching? Explain with diagram.

4. What is Cloud Computing? State its characteristics.

5. What is VPN? Explain its working with diagram.

6. Explain Circuit Level Gateway with diagram.

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

1. Explain the working of all seven layers of OSI model.

2. What is an IP address? Explain the classes of it with appropriate examples.

3. What are the functions of proxy server? State the advantages and disadvantages of Proxy Server.

4. Explain service models used in Cloud Computing?

5. Explain working of RAID1 and RAID5 with diagrams. State its advantages and disadvantages.