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MASTER OF COMPUTER APPLICATIONS (MCA)
EXAMINATION : JUNE - 2025
SEMESTER - II

Sub : Advanced Computer Network (MCA24-202/MCA206-22)

Date : 04/06/2025

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 DHCP.
2. Name any two protocols in the Data-link Layer.
3. Define Fast Ethernet.
4. Define Network Protocol
5. Define Fast Ethernet.
6. Explain the role of NIC in a network.
7. What is firewall?

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

1. Differentiate between coaxial and fiber optic cables
2. Write a short note on IEEE 1394 (FireWire).
3. Explain client-Server model.
4. List and explain TCP and UDP port numbers.
5. Differentiate between TCP and UDP
6. What is subnet masking?

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

1. Discuss application layer protocols like HTTP, FTP, and DNS.
2. Discuss different types of internet connections like DSL, ISDN, and Satellite.
3. Compare the OSI model with the TCP/IP model.
4. Compare IPv4 and IPv6. Describe IP addressing and subnetting in detail.
5. Explain DHCP and its working.
