TILAK MAHARASHTRA VIDYAPEETH, PUNE

MASTER OF COMPUTER APPLICATIONS EXAMINATION: MAY - 2024

SEMESTER - II

Sub: Advanced Computer Network (MCA- 206-22)

Date: 27/05/2024 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 Fault Tolerance?
- 2. What is Virtualization?
- 3. What is a cold spare?
- 4. Explain the working of DHCP.
- 5. Distinguish between TCP and UDP protocol.
- 6. Explain working of switch.
- 7. What is Clustering?

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

(20)

- 1. Define computer network and state its advantages and disadvantages.
- 2. What is client server network? State its advantages and disadvantages
- 3. What is message switching? Explain with diagram.
- 4. What is VPN tunneling? What are its types?
- 5. Write a note on SSL and TLS.
- 6. Explain Application 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 Cloud Computing? Explain IaaS model of Cloud Computing?
- 3. What is IP address? Explain with example subnetting used in Class C.
- 4. Explain type0, type1 and type2 hypervisors with diagrams and examples.
- 5. What is network topology? Explain any one topology in detail with diagram.
