

Exam. Code : 208603

Subject Code: 4824

M.Sc. Information Technology

3rd Semester (Batch 2020-22)

NETWORK PROTOCOLS

Paper—MIT-301

Time Allowed—3 Hours] [Maximum Marks—100

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The **FIFTH** question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. Explain the architecture of internet and highlight various properties of internet.
2. Discuss the role of RARP with suitable example. What are the types of RARP servers ? How is RARP different from ARP ?

SECTION—B

3. Explain the primary and backup RARP server with an example of the working of RARP.

4. Discuss the IP datagram connectionless services. Explain how routing is done using IP datagram.

SECTION—C

5. Explain distance vector routing algorithm. What are advantage and disadvantage of distance vector routing ?
6. What are subnet addressing and its need ? How subnets are implemented ?

SECTION—D

7. Discuss the table driven IP routing. Also explain the routing algorithm.
8. Discuss the detecting and reporting of the various network problems through Internet Control Message Protocol (ICMP). How error reporting and detection is done using ICMP ?