PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2022
(Second Semester)

Branch – **COMPUTER SCIENCE**

ADVANCED COMMUNCATION NETWORK

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (5 x 1 = 5)

1. The IP address and the physical address are necessary for a quantity of data to travel from a source to the _____ host.
   a) Source   b) Sender
   c) data link   d) destination

2. PIM-DM is a source-based tree routing protocol that uses RPF and pruning/grafting strategies for _____
   a) multicasting   b) unicast
   c) distance vector protocol   d) link state protocol

3. There are several tools that can be used in the Internet for _____
   a) searching   b) Error
   c) Error detection   d) debugging

4. An ARP packet is encapsulated directly into a _____ frame.
   a) data link   b) bit
   c) byte   d) data

5. To make the change of address transparent to the rest of the Internet requires a _____ and a foreign agent.
   a) WAN   b) LAN
   c) home agent   d) MAN

SECTION - B (15 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks   (5 x 3 = 15)

6 a Explain about the network layer functions.
                          OR
   b Explain routers.

7 a Compare static with dynamic routing tables.
                          OR
   b Explain the multicast distance vector routing.

8 a Explain the message format.
                          OR
   b Explain the ICMP package.

9 a Explain the proxy ARP.
                          OR
   b Describe about the ARP package.

10 a What are the function of home agent and foreign agent in mobile IP? Explain.
                          OR
    b Explain the aspects of registration in three phases.

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a Discuss about the layers in OSI model.

OR

  b Explain about the TCP/IP protocol suite.

12 a Explain the unicast routing protocol.

OR

  b Discuss about the multicast link state routing: MOSPF.

13 a Discuss about the error reporting messages.

OR

  b Explain the checksum.

14 a Explain the packet format.

OR

  b Examine the seven steps involved in an ARP process of operation.

15 a Explain the mobile hosts.

OR

  b Discuss about the data transfer in mobile IP

Z-Z-Z   END