Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

MCA (Sem-3) ADVANCED COMPUTER NETWORKING

Subject Code: PGCA-1925 M.Code: 90798

Date of Examination: 01-06-2023

Time: 3 Hrs. Max. Marks: 70

INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION B & C. have FOUR questions each.
- 3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
- 4. Select atleast TWO questions from SECTION B & C.

SECTION-A

1. Write briefly:

- a) List the applications of Computer Networks
- b) What is Domain Name System?
- c) We have a channel with a 3 MHz bandwidth. SNR value for the channel is 15. Find appropriate bit rate for the channel.
- d) What are the design issues of Data Link Layer?
- e) Define congestion and list the methods used to prevent congestion.
- f) Give any four examples of wireless communication systems.
- g) What are handoff-strategies?
- h) Differentiate adhoc and cellular networks.
- i) Write down the advantages of 2G over 1G.
- j) What do you mean by frequency reuse in computer networks?

1 M-90798 (S112)-1692

SECTION-B

- 2. Write a detailed note on OSI reference model.
- 3. What is transmission media? List the cables used in wired media. Also write down the types and applications of twisted pair cables.
- 4. What is a common concept used in error detection methods? Using a suitable example explain the working of Checksum error detection method.
- 5. What is the application of TCP protocol? Draw the format of a TCP segment and explain various fields contained in TCP header.

SECTION-C

- 6. Write a note on wireless local area networks. Also write down its advantages and disadvantages.
- 7. What is a Ahdoc network? Write and explain the types of Adhoc networks. Also write down their applications.
- 8. What are channel assignment strategies? Differentiate fixed and dynamic channel assignment strategies.
- 9. Write a detailed note of evolution of wireless communication systems.

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

2 | M-90798 (S112)-1692