

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 :

1. 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?

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 Adhoc 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 on 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.