

1811000701040001
EXAMINATION DECEMBER 2024
MASTER OF SCIENCE (INFORMATION AND
COMMUNICATION TECHNOLOGY) (FIRST SEMESTER)
ADVANCED COMPUTER NETWORK-LEVEL 4

[Time: As Per Schedule]

[Max. Marks: 70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **MASTER OF SCIENCE (INFORMATION AND COMMUNICATION TECHNOLOGY) (FIRST SEMESTER)**
 - b. Name of the Subject : **ADVANCED COMPUTER NETWORK LEVEL 4**
 - c. Subject Code No : **1811000701040001**
2. Sketch neat and labelled diagram wherever necessary.
 3. Figures to the right indicate full marks of the question.
 4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Answer following Questions (Any Six)

18

1. Explain Keepalive timer in TCP.
2. Explain out of band signaling in TELNET.
3. What is round trip time? How is it calculated?
4. When Source Quench message is used in ICMP?
5. Explain limited broadcast and direct broadcast addresses.
6. Explain different addresses used in TCP/IP Model.
7. What is subnet mask? Explain the usage of subnet mask with it's range.
8. What is MTU and when it is required?

Q.2 Answer following Questions (Any Three)

18

1. Explain TCP segment format with each parameter.
2. Explain POP3, MIME, IMAP in detail.
3. What is ARP? Explain cache table, and four different cases of ARP.
4. Explain three way handshaking in TCP.

Q.3 Answer following questions (Any Three)

18

1. Explain working of SNMP protocol.
2. Explain the concept of interdomain and intradomain routing with its protocols.
3. Explain fragmentation in IPV4.
4. SMTP is push protocol (True/False). Justify your Answer.

Q.4 Answer following questions (Any Four)

16

1. What is DNS? Explain recursive and iterative resolution in DNS.
2. Differentiate between persistent and non persistent connection in HTTP.
3. Differentiate between classless and classful addressing
4. Describe four conditions when ICMP error message can not be sent.
5. Explain need and functionalities of RARP.
