M.C.A DEGREE EXAMINATION, NOVEMBER 2022

Second Semester

MASTER OF COMPUTER APPLICATION

CORE - MCACT203 - COMPUTER NETWORKING WITH TCP/IP

2020 Admission Onwards

C79A63DC

Time: 3 Hours

Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1.   List different functions of Physical layer in OSI model

2.   Explain flow control mechanisms in datalink layer?

3.   What is Scatternet

4.   What are Virtual circuits and Virtual Paths?

5.   What is the use of TTL field in IPV4 datagram

6.   Explain about DHCP

7.   Describe an autonomous system

8.   Which are the numbering systems used by TCP

9.   Define SYN flooding attack.

10.   Discuss multiplicative decrease.

11.   Mention and explain any three Common options used with the telnet command

12.   Describe the Email Format?

(10×3=30 marks)

Part B

*Answer **all** questions*

*Each question carries **9** marks*

13. a) 13a) Explain the ARQ Protocols

    OR

    b) 13b) Explain about the various transmission media with example?

14. a) 14a) Describe ATM Protocol architecture

    OR

    b) 14b)Briefly Explain the frame format of Wireless LAN

15. a) 15a) Discuss about error reporting messages of ICMPV4?

    OR

    b) 15b) Discuss about neighbour discovery messages of ICMPV6.

16. a) 16a) Explain congestion control mechanism offered by TCP.

    OR

    b) 16b) Explain TCP's two options for Connection Termination?

17. a) 17a) Discuss about various Email architecture

    OR

    b) 17b) Explain SMTP and POP Protocols?

(5×9=45 marks)