



QP CODE: 26802596



Reg No :

Name :

IMCA DEGREE EXAMINATION JUNE 2026

Eight Semester

INTEGRATED MCA

CORE - IMCA8C03 - INTERNET TECHNOLOGY AND APPLICATIONS

2020 Admission Onwards

5DBEA8DC

Time: 3 Hours

Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1. Distinguish between the wired LAN and wireless LAN.
2. What is an internet layer?
3. What is internetwork routing?
4. What is Network Address Translation?
5. What are the debugging tools used in ICMP?
6. How the Garbage Collection Timer helps in clearing invalid routs?
7. Explain the working of Dijkstra's Algorithm.
8. What is the advantage of Pruning and Grafting in Reverse Path Multicasting?
9. Write a short note on DNS flags field.
10. Explain the function of Network Virtual Terminal.
11. Describe the facilities provided by IMAP.
12. Briefly describe the Dual Stack Implementation in IPV conversion.

(10×3=30 marks)

Part B

*Answer **all** questions*

*Each question carries **9** marks*

13. a) How can we represent subnetting in a network?

OR

- b) Explain in detail about the various connection devices used in networks.





14. a) Explain in detail about Network Address Translation.

OR

b) Explain in detail about the operations performed by IGMP.

15. a) Comprehends the formation of Shortest Path Tree using Dijkstra's algorithm.

OR

b) Differentiate Unicasting, Multicasting and Multiple unicasting? List out the Applications of Multicasting.

16. a) What is your understanding about Name-Address Resolution? Explain different methods.

OR

b) With a diagram describe the TCP Congestion Policy.

17. a) With a diagram briefly describe TFTP Connection establishment process.

OR

b) In detail explain IPV6 address.

(5×9=45 marks)

