

QP CODE

C1047

Enrollment Number:

Name:

B.C.A DEGREE EXAMINATIONS, JULY 2025

Third Semester

B.C.A

B21CA06DC – Communication and Networking

(2024 January admissions)

Time: 3 Hours

Max Marks: 70

Section A

Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.

1. Define gateway.
2. Write any two limitations of PPP.
3. Define encipherment.
4. What is SQL injection attack?
5. What is frame relay?
6. Name any two category of coaxial cable with their impedance.
7. What is a firewall?
8. Write short note on bridge.
9. Define the term protocol.
10. What is IEEE 802.11?
11. What is interior gateway routing protocol?
12. Write about ping.
13. How does bit rate differ from signal rate?
14. Write any two disadvantages of TCP/IP protocol suit.
15. What is a redundancy bit?

(1X10=10)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

16. What is data segmentation? State its use.
17. Write short note on DHCP.
18. Write short note on three way hand shake.
19. Define subnetting. Explain its use.

20. Explain the different types of networks based on geographical area.
21. What are the two propagation modes used for transmitting light through optical fibres?
22. Write note on FTP.
23. Define IP address and MAC address.
24. What is symmetric encryption?
25. Write note on caching DNS servers.

(2X5=10)

Section C

Answer any five of the following questions in one page each. Each question carries 4 marks.

26. Write notes on the role of network administrator.
27. Name the connectors used in fiber optic cables. Why are they important for effective signal transmission?
28. What is network address translation (NAT)? Explain its types.
29. Describe different serial data transmission methods.
30. Explain any two protocols in internet layer.
31. Describe bus and ring network topologies with their configuration, advantage and disadvantage.
32. Write note on CIA triad model.
33. Explain any four features of HTTP.
34. Explain the key concepts of remote login.
35. What is message switching? Explain its advantages and disadvantages.

(4X5=20)

Section D

Answer any two of the following questions in three pages each. Each question carries 15 marks.

36. Describe the OSI model and its role in data communication.
37. Explain different conjunction control methods in detail.
38. Describe in detail any three techniques used for error detection in data communication.
39. What is routing control? Explain its types with advantages and disadvantages.

(15X2=30)