

D5BCD2302

Reg. No.....

Name:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2025

(Regular/Improvement/Supplementary)

COMPUTER SCIENCE AND MATHEMATICS (DOUBLE MAIN)

GDCS5B08T: COMPUTER NETWORKS AND MOBILE COMPUTING

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)**

1. State the limitations of bridges.
2. Mention the role of DNS.
3. What is multiplexing?
4. Differentiate between routing and forwarding.
5. Comment on IPv6.
6. What is channel assignment in cellular network?
7. List the uses of gateways.
8. Define network topology.
9. What is bit stuffing and byte stuffing?
10. Define flow control.
11. What is public key cryptography?
12. Comment on logical address.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)**

13. Explain link state routing algorithm.
14. List and explain the functions of each layer in TCP/IP model.
15. Write a note on GSM.
16. Explain congestion control mechanism in transport layer.
17. Describe the working of FTP protocol.
18. Give an account on SDMA and CDMA.
19. Compare and contrast between 2G, 3G and 4G technologies.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Explain (a) Packet switching. (b) Circuit switching. (c) Message switching.
21. Explain about RSA algorithm.

(1 × 10 = 10 Marks)