TB256472B

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025

2018, 2019, 2020, 2021 ADMISSIONS SUPPLEMENTARY

SEMESTER VI - CORE COURSE (COMPUTER APPLICATIONS)

CA6B11B18 - Computer Network

Time : 3 Hours **Maximum Marks : 80**

Part A

I. Answer any Ten questions. Each question carries 2 marks **(10x2=20)**

1. For n devices in a network, what is the number of cable links required for a mesh topology?
2. Differentiate analog and digital signals.
3. List out any two routing methods of Network layer.
4. Which are the unidirectional antennas ?
5. Name the different types of multiplexing.
6. List out different guided transmission media.
7. Explain the concept of slotted Aloha?
8. Perform XOR operations on the following set of data a. 1011 and 1100. b. 1100001 and 100001
9. Explain Traffic shaping ?
10. Explain EGP?
11. Explain URL with an example.
12. What is telnet ?

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. What is network Topology ? Explain different topologies in detail with neat diagrams
14. Explain the datagram network .
15. Differentiate circuit switching and packet switching with neat diagrams.
16. Explain Stop and Wait Protocol?
17. Define Hamming Distance
18. Explain the token bucket algorithm in congestion control ?
19. Define the terms Unicasting, Multicasting, Broadcasting.
20. Explain Email system in detail ?
21. Explain the following application layer protocols. 1. SMTP 2. FTP

Part C

III. Answer any Two questions. Each question carries 15 marks **(2x15=30)**

22. Discuss different types of Networks each with neat diagram.
23. What is CRC ? Given the dataword 1010011010 and the divisor 10111. a. Show the generation of the codeword at the sender site. b. Show the checking the codeword at the receiver site.
24. Explain in detail different Connecting Devices.
25. Discuss design issues of Application layer.