TB245258J

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024

2022 ADMISSIONS REGULAR

B.VOC S.W.D.SEMESTER V - SKILL

VSD5S06B18 - Computer Networks

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

Part A

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

1. Define Data Communication.
2. Name the User Support Layers in ISO-OSI Model.
3. For n devices in a network, Compute the number of cable links required for a mesh topology?
4. What are the three major classes of guided media?
5. Name different unguided medias for data transmission.
6. Explain the purpose of cladding in an optical fiber.
7. Assuming even parity, find the parity bit for each of the following data unit using simple parity check. a. 10110 b. 11011011
8. Which are the two methods of variable length framing?
9. What is internet?
10. Explain multicast routing ?
11. What is country domains ?
12. What is Remote Logging?

Part B

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

13. Explain Transmission Impairments in detail.
14. Differentiate multiplexer and demultiplexer. Illustrate with a neat diagram
15. Explain the virtual circuit network
16. Find the codeword for the data word 1011using hamming codes.
17. Explain the CSMA/CD in detail.
18. Discuss File Transfer protocol.
19. Explain shortest path routing algorithm?
20. Differentiate static and dynamic web documents.
21. Discuss Diffie – Hellman Cryptosystem.

Part C

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

22. Explain in details of TCP-IP reference Model with a neat diagram.
23. Define 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. Briefly explain congestion control mechanism and congestion avoidances in Network Layer.
25. What is cryptography ? Explain briefly about traditional Cryptography.