

11-4

TB246286E

Reg. No : .....

Name : .....

**BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2024**  
**2021 ADMISSIONS REGULAR**  
**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)**

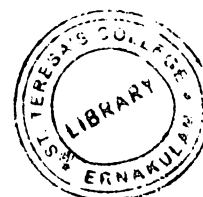
1. Differentiate types of data in Data Communication.
2. Differentiate analog and digital signals.
3. For n devices in a network, what is the number of cable links required for a mesh topology?
4. What do you mean by an Omnidirectional antenna?
5. Name three switching techniques.
6. Name the advantages of optical fiber over twisted-pair and coaxial cable.
7. Find the number of parity bits and positions of parity bits for the following data word using steps of Hamming code - 11110
8. Which are the two methods of variable length framing?
9. Explain EGP?
10. Define static routing.
11. What is Remote Logging?
12. What is Transposition ciphers ?

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Briefly explain communication standards and protocols
14. Explain FDM with a neat diagram.
15. Differentiate circuit switching and packet switching with neat diagrams.
16. Discuss CSMA/CA
17. Explain Stop and Wait ARQ
18. Explain UDP protocol?
19. Explain the Architecture of IP header.
20. Explain the following application layer protocols a. HTTP b. File Transfer Protocols
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. Briefly explain congestion control mechanism and congestion avoidances in Network Layer.
25. Briefly explain Transport layer protocols.