

20U426

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Name: .....

Reg.No: .....

**FOURTH SEMESTER B.Sc./B.C.A. DEGREE EXAMINATION, APRIL 2022**

(CBCSS - UG)

(Regular/Supplementary/Improvement)

**CC19U BCS4 A13 /CC19U BCA4 A13 - DATA COMMUNICATION AND OPTICAL FIBERS**

(Computer Science / Computer Application - Core Course)

(2019 Admission onwards)

Time : 2.5 Hours

Maximum : 80 Marks

Credit : 4

**Part A** (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Explain www.
2. Explain line configuration.
3. Explain modem.
4. Explain Distortion.
5. Write down the applications of multiplexing.
6. What are the advantages of GSM?
7. What are the link access procedures.
8. Define Ethernet.
9. Explain message switching.
10. list down the benefits of ISDN.
11. Explain optical fibre communication.
12. Expalin optical detectors.
13. Define Ray theory.
14. Define single mode fibre.
15. Draw the diagram of total internal reflection.

**(Ceiling: 25 Marks)**

**Part B** (Paragraph questions)

Answer *all* questions. Each question carries 5 marks.

16. Write about Composite Signals.
17. Different methods for Digital signal transmission.
18. What is Multiplexing and Explain different types of Multiplexing?
19. Write about Time Division Multiplexing.
20. Define token ring with diagram.
21. Explain Circuit Switched Network.
22. Write down the advantages and disadvantages of optical fibre communication.
23. Explain LASER diodes.

**(Ceiling: 35 Marks)**

**Part C** (Essay questions)

Answer any *two* questions. Each question carries 10 marks.

24. Basic concepts of data communications, Explain in detail.
25. With neat diagram explain the different types of Network topologies.
26. Define mobile communication. Explain with neat diagram GSM system Architecture.
27. Explain Data link Control. Also Explain flow control and error control.

**(2 × 10 = 20 Marks)**

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