19U427	(Pages: 2)	Name:	

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## FOURTH SEMESTER B.Sc./B.C.A. DEGREE EXAMINATION, APRIL 2021

(CBCSS - UG)

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

(Common Course)

(2019 Admission - Regular)

Time: 2.5 Hours Maximum: 80 Marks

Credit: 4

## Part A (Short answer questions)

Answer all questions. Each question carries 2 marks.

- 1. Define point to point line configration.
- 2. What do mean by modulaion.
- 3. Define modem.
- 4. Define tranmission impairment.
- 5. Explain cellular system.
- 6. What is GSM?
- 7. Explain framing.
- 8. List down the link access procedures.
- 9. Explain Ethernet.
- 10. Write short note on message switching.
- 11. List down the benefits of optical fibre communication.
- 12. Expalin optical detectors.
- 13. Define Ray theory.
- 14. Explain single mode fibre.

15. Explain mode filed diameter.

(Ceiling: 25 Marks)

## Part B (Paragraph questions)

Answer all questions. Each question carries 5 marks.

- 16. Write about Protocol and Standards
- 17. Different methods for Digital signal transmission.
- 18. Explain multiplexing.
- 19. Write about Frequency Division Multiplexing.
- 20. Explain the concept of token bus.
- 21. What do you mean by Circuit Switched Network.
- 22. List the uses of optical fiber.
- 23. Explain optical fibre waveguides.

(Ceiling: 35 Marks)

#### Part C (Essay questions)

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

- 24. Explain the basic components and concepts of data communications.
- 25. Explain and write down the advantage and diadvantages of different types of topologies in network.
- 26. What are the characteristics of GSM. With neat diagram explain GSM system Architecture.
- 27. Write a short note on data link layer .Also explain Flow control and error control.

 $(2 \times 10 = 20 \text{ Marks})$ 

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