



19101937

**QP CODE: 19101937**

**Reg No** : .....

**Name** : .....

**B.Sc.DEGREE (CBCS) EXAMINATION, MAY 2019**

**Second Semester**

B.Sc Computer Science Model III

Complementary Course - **EL2CMT07 - ELECTRONICS - DATA COMMUNICATION**

2017 ADMISSION ONWARDS

B2679A1F

**Maximum Marks: 80**

**Time: 3 Hours**

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. Express the relation between period and frequency?
2. Explain bandwidth of a signal.
3. What is the relation between propagation speed and propagation time?
4. Explain coaxial cable standards.
5. What is refraction?
6. How are terrestrial microwaves relayed from source to destination?
7. Compare Serial and parallel ports.
8. Compare synchronous and asynchronous transmission
9. What is FSK?
10. What do you mean by analog -to-analog conversion.How this conversion can be accomplished?
11. What do you mean by a telephone switching office? Which are the different types?
12. What is DSLAM? What is the function of splitter used in a DSL network?

(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. (a) What does the shannon capacity have to do with communications? (b) Define wavelength.





14. Write a note on noise calculation in communication system.
15. Write a note on UTP connectors.
16. Describe the physical composition of optical fibre.
17. With a neat diagram and wave forms explain the transmitting section of PCM.
18. What is delta modulation and explain its features?
19. Give an account of various types of FHSS.
20. Explain the sequence of actions in the setup phase of a virtual circuit network?
21. How traditional cable networks differ from HFC networks?

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. (a) What is a signal? Explain how they are classified. (b) Describe various types of signal and give the graphical and functional representation of those signal.
23. Explain radio frequency allocation and types of propagation of radio waves.
24. (a) Give an account of analog to digital conversion. (b) Draw and explain the block diagram of analog to digital conversion?
25. Explain TDM and briefly explain the two schemes of TDM.

(2×15=30)

