QP CODE: 20101317

20101317

Reg No : .....

Name : .....

B.Sc.DEGREE (CBCS) EXAMINATION, NOVEMBER 2020

Second Semester

Complementary Course - EL2CMT07 - ELECTRONICS - DATA COMMUNICATION

(Common for B.Sc Computer Science Model III, B.Sc Cyber Forensic Model III

2017 ADMISSION ONWARDS

F546C3DE

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Explain spectrum of a signal.
2. State the relationship between bit interval and bit rate.
3. List the elements in a communication system.
4. Name the two major categories of transmission media.
5. Discuss the categories of UTP.
6. Mention the frequency range for radio communication.
7. Define (a) analog data (b) digital data.
8. Compare DM and ADM.
9. Define baud rate.
10. What is PSK?
11. What is the advantage of connection less service?
12. Why traditional cable networks were un suitable for data transfer?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain different types of noise in a communication system.
14. Explain the three transmission modes in a communication system.

15. Explain the different modes of optical fibre?

16. Write a description on various types of antennas.

17. Describe the process of companding.

18. Describe synchronous type of transmission.

19. With suitable waveform explain Amplitude Modulation.

20. How does virtual circuit switching differ from circuit switching?

21. What is a modem? Explain about V.90 modems?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. (a) Describe the various transmission impairments of a communication channel. (b) Explain the terms used to measure the performance of the transmission media.

23. Describe satellite communication and Infrared communication.

24. With relevant figures and waveform explain PCM.

25. Explain the multiplexing and demultiplexing process of FDM. Explain cellular telephony and radio broadcasting using FDM.

(2×15=30)