25015879

UNDER GRADUATE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS, FEBRUARY 2025

Fifth Semester

(Offered by the Board of Studies in Electronics)

OPEN COURSE - EL5OPT03 - ELECTRONIC COMMUNICATION

2022 Admission Only

3BAC669B

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Name main blocks of electronic communication system.

2. What is simplex mode?

3. What can noise do to communication?

4. What does a modulator do?

5. What is the purpose of demoduation?

6. Classify various multipexing methods.

7. Define SDM.

8. Define the term cross talk.

9. List the different types of wireless channels.

10. Why are optical fibers secure, compared to other medium?

11. What is commonly used unit for measuring the speed of modem?

12. Write any two merits of data communications multiplexer (mux) -modem.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Define S/N ratio, channel bandwidth, bit rate and signal bandwidth.

14. Write a short note on electromagnetic wave.

15. Discuss the concept of adjacent channel.

16. Distinguish between frequency modulation, phase modulation and amplitude modulation using figures.

17. Compare AM and FM.

18. Expain in detail about phase modulation.

19. Describe the advantages and disadvantages of TDM.

20. Distinguish between signal jamming and signal interference in wireless communication.

21. Discuss various modulation techniques used in modem.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Draw the structure of electromagnetic spectrum and explain different frequency bands.

23. Sketch and expain the frequency spectrum of AM signal. Also discuss the merits and demerits of amplitude modulation.

24. What do you mean by multiplexing? With the help of a schematic block explain frequency division multipexing.

25. Differentiate between analog signal and digital signal. Also disuss various advantages of digital system.

(2×15=30)