

G 8490



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Reg. No.....

Name.....

D.D.M.C.A. DEGREE EXAMINATION, APRIL 2026

Fourth Semester

DMCA 404—DATA COMMUNICATIONS

(2016 Admissions—Final Mercy Chance)

Time : Three Hours

Maximum Marks : 75

Part A

*Answer any **ten** questions.*

Each question carries 3 marks.

1. Write down the Fourier series representation of periodic signals.
2. Distinguish between the analog and digital signals.
3. Define : “Attenuation”.
4. What do you mean by sampling theorem ?
5. What are the characteristics of line coding ?
6. Define : “Manchester”.
7. Write a note on phase modulation.
8. Distinguish between the bit rate and baud rate.
9. What is an Asynchronous transmission ?
10. What are local loops ? Explain.
11. Mention the various functions of ADSL.
12. Write down the need of frequency hopping.

(10 × 3 = 30)

Turn over





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Part B

*Answer **all** questions.*

Each question carries 9 marks.

13. (a) What is the significance of the twisting in twisted-pair cable ? Explain.

Or

- (b) Compare the terrestrial microwave and satellite microwave.

14. (a) Summarize the functions of block coding analog data.

Or

- (b) Discuss the architecture of Pulse Code Modulation (PCM).

15. (a) Illustrate the functions of TDMA and CDMA with neat diagram.

Or

- (b) Draw and explain the concept of statistical TDM.

16. (a) Compare the parallel transmission and serial transmission.

Or

- (b) Elaborate the effect of packet size on transmission time.

17. (a) Discuss the features of fourth generation of GSM.

Or

- (b) Explain the reuse principle the cellular telephony.

(5 × 9 = 45)

