

45074 B

M.Sc. DEGREE EXAMINATION, MARCH/APRIL 2019.

FOURTH SEMESTER

Physics

Paper -IV : ADVANCED COMMUNICATION SYSTEMS

(Electronics - II)

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Write a note on CVSD.
2. What is DPSK ? Explain.
3. What are the types of networks?
4. Briefly discuss on WCDMA.
5. What are the System design considerations?
6. Explain the sensitivity of a receiver.
7. What are the digital hierarchies ?
8. What is foot print ? Explain.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. State and Prove sampling theorem ? Discuss the application of sampling theorem for low-pass and band-pass signals.

Or

10. Distinguish between DPSK and BPSK. Explain the working of BPSK transmitter.
11. What is TDMA? Discuss on TDMA.

Or

12. Write a note on ISDN. Discuss on Carrier Sense Multiple Access (CSMA).

13. With the block diagram, explain the function of optical fiber communication system.

Or

14. What are the demodulation schemes ? Discuss one of them.

15. What are the satellite system parameters ? explain the satellite system link equations and Link budget.

Or

16. Explain the function of Hybrid Microwave system.

