

Roll No.

Total Pages : 2

BT-4/J-22

44181

BASICS OF COMMUNICATION

Paper : ES-IT-202A

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *five* questions in all, selecting at least *one* question from each unit. All questions carry equal marks.

UNIT-I

1. (a) What are the differences between simplex, half-duplex, and full-duplex telecommunication and computer networking channels? Explain.
(b) What are the different elements in a communication system? What are the limitations of communication system? Discuss.
2. (a) What do you understand by gain attenuation? How is it converted to decibels? Explain.
(b) What are the different types of noises in communication system? Discuss.

UNIT -II

3. What do you understand by Amplitude Modulation (AM)? What is Modulation index? Explain.

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295 [P.T.O.]

4. With the simple phasor diagram and block diagram explain the principle of generation of AM. Discuss the advantages and disadvantages of AM over FM.

UNIT-III

5. (a) Explain the Double spotting with reference to radio receivers.
(b) Write a note on IF amplifier.
6. (a) What is Super heterodyne Receiver?
(b) Write a brief note on RF tuning and amplification.

UNIT-IV

7. What is the principle of fiber optical communication? What is the difference between Step Index and Graded Index Fiber? Explain.
8. (a) How Does an Optical Fiber Work? Explain.
(b) Discuss the losses in fiber optic system.

EXAMKIT