



CBCS SCHEME

21MT72

Seventh Semester B.E./B.Tech. Degree Examination, June/July 2026 Communication Systems

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain the historical perspective of communication systems. (10 Marks)
- b. Make use of the block diagram to explain Analog and Digital Transmission Systems. (10 Marks)

OR

- 2 a. Explain the Electromagnetic Frequency Spectrum with a neat diagram and mention the applications of each band. (10 Marks)
- b. Explain the elements of Communication System with a neat diagram. (10 Marks)

Module-2

- 3 a. Explain the principle of Amplitude Modulation with a neat diagram. (10 Marks)
- b. Explain single tone Frequency Modulation with its waveforms. (10 Marks)

OR

- 4 a. Explain the generalized concepts of Angle modulation. (10 Marks)
- b. Explain the concept of Phase Modulation. (06 Marks)
- c. Explain the limitations of AM. (04 Marks)

Module-3

- 5 a. Explain Analog transmission versus Digital transmission with a block diagram. (10 Marks)
- b. Elucidate the modulation and Demodulation of PAM with necessary diagrams. (10 Marks)

OR

- 6 a. State and explain Sampling Theorem. (10 Marks)
- b. Describe the Modulation and Demodulation of PWM with its diagrams. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

Module-4

- 7 a. Explain the modulation and demodulation of ASK with block diagrams and suitable waveforms. (10 Marks)
- b. Explain the modulation and demodulation of QPSK with block diagrams and suitable waveforms. (10 Marks)

OR

- 8 a. Explain the modulation and demodulation of FSK with block diagrams and suitable waveforms. (10 Marks)
- b. Explain the modulation and demodulation of BPSK with its diagram and waveforms. (10 Marks)

Module-5

- 9 a. Elucidate the history of wireless communication. (10 Marks)
- b. Explain the applications of wireless communication. (10 Marks)

OR

- 10 a. Describe the advantages and disadvantages of wireless communication system. (10 Marks)
- b. Discuss the different wireless network generations. (10 Marks)

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