CBCS SCHEME

USN | | | | | | | | | | |

15MT82

Eighth Semester B.E. Degree Examination, November 2020
Communication System

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions irrespective of modules.

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-1

1 a. Define Modulation and explain the need for modulation. **(08 Marks)**
b. Explain Sampling Theorem. **(08 Marks)**

2 a. With a neat diagram, explain basic communication system. **(08 Marks)**
b. List the differences between Analog and Digital communication. **(08 Marks)**

Module-2

3 a. With neat sketches explain Amplitude Modulation (time and frequency domain). **(08 Marks)**
b. Explain Switching Modulation with circuit diagram, necessary equations and sketches. **(08 Marks)**

4 a. Explain type of AM waves. **(08 Marks)**
b. Explain generation of DSBSC waves using a Ring Modulator. **(08 Marks)**

Module-3

5 a. Explain Angle Modulation and also like inter operability of FM and PM systems. **(08 Marks)**
b. Explain Super Heterodyne Receiver. **(08 Marks)**

6 a. Explain Phase Lock Loop system with neat sketch and equations. **(08 Marks)**
b. Describe FM stereo – Multiplexing. **(08 Marks)**

Module-4

7 a. Explain Pulse Amplitude Modulation with neat sketches and necessary equations. **(08 Marks)**
b. Describe Time Division Multiplexing in detail with neat sketches. **(08 Marks)**

8 a. With block diagram, explain basic elements of PCM. **(08 Marks)**
b. Explain line codes used in the communication systems. **(08 Marks)**

Module-5

9 a. Briefly explain Pseudo Noise sequences. **(08 Marks)**
b. Explain Slow Frequency Hop. **(08 Marks)**

10 a. Explain Coherent Binary PSK. **(08 Marks)**
b. Explain Fast Frequency Hop. **(08 Marks)**

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