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Total No. of Printed Pages: 1

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B.Sc. IT (Semester – 4th)
COMMUNICATION SYSTEMS
Subject Code: BECE0F94
Paper ID: [OE2130408]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

- Q1. Attempt the following:
- a. Need for modulation
 - b. Difference between AM and FM modulation
 - c. What is vestigial sideband?
 - d. Effect of Noise on angle modulation
 - e. Sampling Theorem.
 - f. What is Quantization Error?
 - g. On-Off signaling
 - h. Definition of spectral density
 - i. Need of equalizer
 - j. Significance of Eye Diagram

Section – B

(5 marks each)

- Q2. Draw and explain the basic block diagram of Communication System.
- Q3. What do you mean by modulation and demodulation?
- Q4. Explain the circuit diagram of envelope detector and square law detector with the help of neat diagram.
- Q5. Draw and explain the spectral characteristics of angle modulated signals.
- Q6. Explain the concept of aliasing and flat top sampling.

Section – C

(10 marks each)

- Q7. Define the term modulation. Explain with the help of diagrams the three different type of modulations used for a message signal using a sinusoidal continuous carrier wave.
- Q8. What are different types of communication system? Explain the elements of Digital communication system.
- Q9. What are different Line coding schemes used in communication systems and also compare all of them?