

30th, 16

Exam.Code:0921
Sub. Code: 6833

1128
B.E. (Information Technology)
Third Semester
ITE-372: Analog and Digital Communication

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Define the following:-
 - a) List one merit and one demerit of modulation.
 - b) What is Frequency modulation?
 - c) Define Companding.
 - d) What is the need for Line codes?
 - e) What is the error in a ASK and PSK signal? (5x2)

UNIT - I

- II. Describe the concept of Amplitude modulation. With the help of waveforms, show how an Amplitude modulated signal is transmitted? (10)
- III. a) Draw and explain the different stages of FM receiver.
b) Define the principle of Phase modulation. (6,4)
- IV. a) What is Pulse Code Modulation?
b) Draw the waveforms for PAM, PPM, and PWM. (6,4)

UNIT - II

- V. What is the purpose of a Modem? Discuss the different groups under which the modems are classified. (10)
- VI. Describe the principle of transmission and reception of QASK signal. (10)
- VII. a) Define Scrambling. What is the need for Scrambling?
b) How will you define data rate? Why is it important to know the data rate limit of a transmitted signal? (6,4)

x-x-x