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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B. Tech II Year I Semester Supplementary Examinations August-2021**INTRODUCTION TO COMMUNICATION SYSTEMS**

(Computer Science and Engineering)

(Open Elective-I)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Compare Analog & Digital Communication systems 6M
b What is amplitude modulation express with mathematical equations? 6M

OR

- 2 a Describe the elements of communication systems. 6M
b Explain DSB-SC Amplitude modulation with mathematical equations. 6M

UNIT-II

- 3 a Explain different types of Angle modulation techniques with mathematical equations. 6M
b Write down about Wideband FM 6M

OR

- 4 a Write about 6M
(i) Frequency deviation (ii) Carrier signal in FM (iii) Carson's rule
b Define single tone FM with mathematical equation 6M

UNIT-III

- 5 a Write down about the different types of noises? 6M
b What is the process of demodulation of PAM signals? 6M

OR

- 6 a What is the process of demodulation of PAM signals? 6M
b Write down about generation of PPM signal and mention its applications 6M

UNIT-IV

- 7 a Define PCM with proper block diagram and write about its applications 6M
b Write a short note on BPSK modulation & demodulation. 6M

OR

- 8 a What is Quantization & Quantization Noise? Explain different types of quantizers 6M
b What is delta modulation? Define it properly with diagram 6M

UNIT-V

- 9 a Explain a structure of a mobile cellular system 6M
b What is 1G cellular system? Discuss about 2G & 2.5G cellular system. 6M

OR

- 10 a Discuss and differentiate 3G and 4G cellular systems 6M
b Write about 6M
(i) Frequency reuse (ii) Hand-off strategy (iii) TDMA

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