C16/C16S-EC-304

5460

BOARD DIPLOMA EXAMINATION, (C-16/C-16S)
JUNE / JULY - 2020
DECE - III SEMESTER EXAMINATION
ANALOG COMMUNICATION

Time : 3 Hours] [Total Marks : 80

PART - A 3×10=30

Instructions : *(1) Answer ALL questions.*
(2) Each question carries THREE marks.
(3) Answer should be brief and straight to the point.

1 Define modulation.

2 Define signal to noise ratio and noise figure.

3 List the advantages and disadvantages of FM over AM.

4 List the applications of SSB.

5 List the specifications of transmitters.

6 Mention the advantages of super heterodyne receiver.

7 Define maximum usable frequency (MUF).

8 Define fading.

9 Define antenna gain and directivity.

10 Define isotropic antenna and draw its radiation pattern.

PART - B 10×5=50

Instructions : *(1) Answer any FIVE questions.*
(2) Each question carries TEN marks.
(3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.

11 Define distortion and list causes of distortion and measures for distortion less transmission.

12 What is an AM and derive the time domain equation for an AM signal.

13 State the need for pre-emphasis and de-emphasis in FM.

14 Draw and explain the High level modulation AM transmitter.

15 Draw and explain the Armstrong FM transmitter.

16 Describe reflection, refraction and diffraction of EM waves.

17 Explain about space wave propagation.

18 What is half wave dipole ? Explain the formation of half wave dipole, draw its radiation pattern.