



C09-EC-304

3236

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL—2021

DECE - THIRD SEMESTER EXAMINATION

COMMUNICATION ENGINEERING

Time : 3 hours]

[Total Marks : 80

PART—A

4×5=20

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **four** marks.
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Draw the basic block diagram of communication system.
2. Define the term distortion and mention the types of distortions.
3. Mention the advantages of FM over AM.
4. Draw the frequency spectrum of AM Wave.
5. Define pre-emphasis and de-emphasis used in FM.
6. Mention various frequency bands used in Radio Receivers.
7. Define the terms sensitivity and selectivity.
8. Compare AM and FM Receivers.
9. Define wave polarization and mention its significance.
10. List different types of transmission lines.

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PART—B

15×4=60

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

11. Draw the frequency spectrum used for radio communication and mention applications of different frequencies in the spectrum.
12. Explain the term noise and its effects in communication systems.
13. Define AM and FM and draw its wave forms.
14. Describe Frequency Division Multiplexing (FDM) with block diagram.
15. Distinguish between low level and high level modulation transmitters.
16. Explain the process of demodulation in AM Receivers.
17. Describe the reflection, refraction and diffraction of EM wave.
18. Explain different layers of ionosphere.

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