



C14-EC-304

4240

BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH/APRIL—2021  
DECE - THIRD SEMESTER EXAMINATION  
ANALOG COMMUNICATION

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. Define amplitude modulation.
2. Classify different types of noises.
3. Describe the effects of over modulation.
4. List two types of angle modulation.
5. Draw the block diagram of TRF receiver.
6. Explain the need of AVC (AGC).
7. Define the term fading.
8. List four types of wave propagation.
9. Define isotropic antenna and draw its radiation pattern.
10. State the need of binomial array.

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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. Describe the basic elements of a communication system with block diagram.
12. Derive time domain equation of an AM wave.
13. Explain the need of pre-emphasis and de-emphasis in frequency modulation.
14. Draw the block diagram of low level modulated transmitter and explain.
15. Explain the process of demodulation in AM receivers.
16. Explain reflection, refraction and diffraction of EM waves.
17. Explain space wave propagation.
18. Explain the construction and working of Rhombic antenna.

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