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BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—2023

DEEE - FOURTH SEMESTER EXAMINATION

ELECTRONICS ENGINEERING—II

Time : 3 Hours ]

[ Total Marks : 80

**PART—A**

3×10=30

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

1. List any six applications of oscillator.
2. Draw the circuit diagram of Colpitts oscillator.
3. List the characteristics of an ideal operational amplifier.
4. Mention any three important specifications of 741 IC.
- \* 5. Define frequency deviation.
6. Draw the waveforms of amplitude modulated wave.
7. State the need for D/A converters.
8. Mention the use of any three front panel controls of a CRO.
9. State the applications of transducers.
10. Classify transducers based on the principle of transduction form used.

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## PART—B

10×5=50

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

11. Explain the working of transistor multivibrator circuit.
12. Explain UJT relaxation oscillator with necessary circuit diagram.
13. Explain the working of op-amp as summer, integrator, differentiator and inverter.
14. Explain the working of astable multivibrator using 555 IC.
15. (a) Explain the power distribution in AM wave.  
(b) Compare AM and FM.
16. Explain the working of ramp type digital voltmeter with the help of a block diagram.
17. Describe the construction and working of LVDT.
18. (a) Explain the factors influencing the choice of transducers.  
(b) Explain the concept of sensors.

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