



C16-EE-405

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**BOARD DIPLOMA EXAMINATION, (C-16)
SEPTEMBER/OCTOBER - 2020
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 the applications of oscillator.
2. State the need for RF oscillator.
3. Draw the pin diagram of 741 IC.
4. List the advantages of ICs over discrete circuits.
5. Define amplitude modulation.
6. Define bandwidth of FM wave and frequency deviation.
7. State the advantages of electronic instruments.

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8. Define the terms resolution and accuracy of D/A convertor.
9. List the applications of transducers.
10. State the need of transducers in measurement systems.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. (a) Draw the circuit diagram of Hartley oscillator.
(b) Draw the circuit diagram of Colpitt's oscillator.
12. Draw and explain the working of UJT relaxation oscillator.
13. Explain the operational amplifier as (a) summer and (b) scale changer.
14. Explain the working of astable multivibrator using 555 IC and draw the output waveforms.
15. Draw the waveforms of an AM wave and explain the power distribution in AM wave.
- * 16. Explain the D/A conversion using R-2R ladder network.
17. Explain the measurement of temperature using thermistor in bridge circuit.
18. Explain the construction and working of LVDT (Linear Variable Differential Transformer).
