



C16-EE-405

6444

BOARD DIPLOMA EXAMINATION, (C-16)

JANUARY/FEBRUARY—2022

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. Classify different types of oscillators.
2. State the need for AF oscillators.
3. List the advantages of ICs over discrete circuits.
4. Draw the pin diagram of 555 IC.
5. Define modulation and demodulation.
6. Define modulation index of AM wave.
7. State the advantages of electronic instruments.
- * 8. State the need for A/D converters.
9. State the need of transducer in measurement systems.
10. List the applications of sensors.

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[Contd...

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PART—B

- 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 RC phase shift oscillator with the help of circuit diagram. 10
12. (a) Draw the circuit diagram of Hartley oscillator. 5
(b) State the need for square wave oscillator. 5
13. Explain the working of operational amplifier with the help of a block diagram. 10
14. Explain the working of astable multivibrator using 555 IC and draw output waveforms. 10
15. (a) Draw the waveforms of amplitude modulated wave. 5
(b) Explain the generation of sidebands. 5
16. Explain the functions of various stages of CRO with the help of block diagram. 10
17. (a) Explain the use of thermocouple for the measurement of temperature. 5
(b) Explain about semiconductor sensors. 5
18. Explain the construction and working of LVDT. 10

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