



**C16-EE-405**

**6444**

**BOARD DIPLOMA EXAMINATION, (C-16)  
OCT/NOV—2018  
DEEE—FOURTH SEMESTER EXAMINATION  
ELECTRONICS ENGINEERING—II**

*Time* : 3 hours ]

[ *Total Marks* : 80

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**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 oscillator.
2. State the need for AF oscillators.
3. Draw the pin diagram of 741 IC.
4. State the need of timer.
5. Define amplitude modulation.
6. Draw the waveforms of frequency modulated waves.
7. State the need for A/D converters.
8. List the applications of CRO.
9. State the working principle of strain gauge.
10. Classify transducers.

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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 the 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.
- 12.** (a) Draw the circuit diagram of Hartley oscillator.  
(b) Draw the circuit diagram of Colpitt's oscillator.
- 13.** (a) Explain the working of op-amp as inverting amplifier with input and output waveforms.  
(b) Explain the op-amp as integrator.
- 14.** Draw the pin diagram of 555 IC and explain the function of each pin of 555 IC.
- 15.** (a) Explain the effect of overmodulation with waveforms.  
(b) Compare between AM and FM.
- 16.** Explain D/A conversion using R-2R ladder network.
- 17.** (a) Explain the use of thermocouple for the measurement of temperature.  
(b) Explain about semiconductor sensors.
- 18.** Explain the construction and working of LVDT.

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