C14–EE–405

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BOARD DIPLOMA EXAMINATION, (C–14)
OCT/NOV—2016
DEEE—FOURTH SEMESTER EXAMINATION

ELECTRONICS—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. State the need for power amplifier.

2. List the advantages of negative feedback amplifier.

3. Draw the circuit diagram of Hartley oscillator.

4. List the applications of oscillators.

5. List the characteristics of an ideal operational amplifier.

6. Draw the pin out diagram of 741 IC.

7. Define modulation index of AM wave.

8. Define FM and frequency deviation in FM.

9. Define accuracy and resolution of D/A converter.

10. List the applications of CRO.

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PART—B   10×5=50

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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 block diagram of voltage shunt and voltage series feedback amplifier.   3+3=6

     (b) State the differences between regenerative and degenerative feedback.   4

12. Draw and explain emitter follower circuit diagram with its advantages and applications.   10

13. Explain the working of Colpitts oscillator with the help of circuit diagram.   4+6=10

14. Explain the need for AFO and RF oscillators and mention examples for each.   10

15. Explain the working of Op-Amp inverting amplifier with input and output waveforms.   10

16. Explain the working of astable multivibrator using 555 IC.   10

17. Explain any FM generation technique.   10

18. Explain the working of digital frequency meter with the help of block diagram.   10

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