



C14-EE-405

4465

BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH/APRIL—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 differences between voltage amplifier and power amplifier. 3
2. List the applications of emitter follower. 3
3. List different types of oscillator. 3
4. State the need for square-wave oscillator. 3
5. Define common mode rejection ratio. 3
6. List the applications of op-amps. 3
7. Draw the waveforms of amplitude modulated wave. 3

8. Mention the <sup>\*</sup>bandwidth requirements of FM wave. 3
9. State the necessity of time-base voltage. 3
10. Explain loading effect of voltmeter. 3

**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 principle of a single-tuned amplifier with its frequency response and state its limitations. 3+3+4=10
12. (a) Draw the block diagram of current series and current shunt feedback amplifier. 2+2=4
- (b) Explain the effect of feedback on gain, bandwidth and noise. 2+2+2=6
13. Draw and explain the working of RC phase-shift oscillator with the help of circuit diagram. 4+6=10
14. Draw and explain the working of UJT relaxation oscillator. 4+6=10
15. Draw and explain the working of inverting operational amplifier. 4+6=10
16. Draw the internal block diagram of IC 555 timer and name the function of each pin. 6+4=10
17. Explain the generation of amplitude modulation DSB. 10
18. Explain the functions of various stages of a CRO with the help of block diagram. 4+6=10

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