## 4465

# BOARD DIPLOMA EXAMINATION, (C-14) <br> MARCH / APRIL-2019 <br> DEEE - FOURTH SEMESTER EXAMINATION <br> ELECTRONICS - II 

Time:3 Hours
Max.Marks:80

## PART-A

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10 \times 3=30 M
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Instructions: 1) Answer all question. Each question carries three marks.
2) Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. Define (i) Feedback and (ii) Feedback factor.
2. List the advantagaes of negative feedback.
3. Explain the need for AF oscillator.
4. Lsit the applications of oscillators.
5. Draw the symbol of op-amp and mark the terminals.
6. State the need of timer.
7. Define frequency modulation.
8. Draw the waveforms of amplitude modulated wave.
9. List the front panel controls of a CRO.
10. Define the terms monotonicity and settling time of DAC.

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Instructions: 1) Answer any five questions. Each question carries ten marks.
2) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
11. (a) Distinguish between voltage and power amplifier.
(b) Explain the working principle of a single tuned amplifier.
12. (a) List the applications of emitter follower. 2
(b) Explain the differences between degenerative and regenerative feed back.
13. Explain the working of UJT Relaxation oscillator with neat circuit diagram.
14. Explain the working of RC phase shift oscillator with the help of circuit diagram.
15. Draw and explain the operational Amplifier as: $5+5$
(i) Summer
(ii) Differentiatior.
16. Draw pin diagram of 555 IC and explain the function of each pin. $4+6$
17. Explain the effect of over modulation and under modulation with wave forms.
18. Draw and explain $A / D$ conversion using successive approximate method.

