4465

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL-2019 DEEE - FOURTH SEMESTER EXAMINATION

ELECTRONICS - II

Time:3 Hours Max.Marks:80

PART-A

10x3 = 30M

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.

PART-B

5x10 = 50M

- **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. 4
 - (b) Explain the working principle of a single tuned amplifier. 6
- 12. (a) List the applications of emitter follower.
 - (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.

 5+5
- 18. Draw and explain A/D conversion using successive approximate method.

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