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BOARD DIPLOMA EXAMINATION, (C-14) OCTOBER/NOVEMBER-2018 DEEE – FOURTH SEMESTER EXAMINATION

ELECTRONICS – II

Time: 3 Hours] [Total Marks: 80

PART-A

3X10=30

Instructions:

- 1. Answer **All** questions.
- 2. Each question carries **three** marks.
- 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1. Mention the need for power amplifier.
- 2. Mention any three differences between degenerative and regenerative feedback.
- 3. State the conditions required for sustained oscillations.
- 4. Explain the need for RF oscillators.
- 5. List the characteristics of ideal Op-amp.
- 6. List the applications of Op-amps.
- 7. Define band width of AM wave.
- 8. Define frequency modulation.
- 9. List the applications of CRO.
- 10. Define the terms (a) Resolution (b) Accuracy (c) Monotonicity.

PART-B

10X5=50

Instructions:

- 1. Answer any **Five** questions.
- 2. Each question carries **ten** marks.
- 3. Answer 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.
- 12. Explain the performance characteristics of emitter follower.
- 13. Explain the working of RC phase shift oscillator with neat diagram.
- 14. Draw and explain the working of colpitt's oscillator.
- 15. Explain the working of operational amplifier with neat block diagram.
- 16. Draw and explain the internal block diagram of IC555 timer.
- 17. Explain the effect of over modulation and under modulation with waveforms.
- 18. Explain R-2R ladder type D/A converter with neat diagram.
