

## 3468

# BOARD DIPLOMA EXAMINATION, (C-09) OCTOBER/NOVEMBER-2018 DECE - FOURTH SEMESTER EXAMINATION

### ELECTRONIC CIRCUITS - 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. List any three advantages of (-) ve feedback.
- 2. Distinguish between voltage and power amplifiers.
- 3. List various types of heat sinks.
- 4. Write any three reasons for instability in oscillators.
- 5. Classify oscillators based on frequency.
- 6. What is the need for sweep waveform?
- 7. List the applications of clippers.
- 8. Define capture range of PLL.
- 9. Draw the circuit of monostable multivibrator using Op-Amp.
- 10. What is the working principle of photo conductive cell?

#### **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. (a) Compare negative and positive feed back
  - (b) Draw and explain the block diagram of negative feedback amplifier.
- 12. Draw and explain the operation of class A amplifier with transformer load at collector and derive an expression for its efficiency.
- 13. Draw and explain the working of Wein Bridge oscillator.
- 14. (a) List the demerits of RC oscillators.
  - (b) Explain the working of transistor crystal oscillator with a neat circuit diagram.
- 15. Draw and explain the working of transistor Bi-stable multivibrator with waveforms.
- 16. Draw the miller sweep circuit and explain its working
- 17. (a) Explain the application of LED in dot matrix display
  - (b) Explain briefly the application of LED in seven segment display
- 18. (a) Explain the operation of LDR with its characteristics
  - (b) Explain the construction of LED.

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