

3468

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2021

DECE - FOURTH SEMESTER EXAMINATION

ELECTRONIC CIRCUITS - II

[Total Marks: 80 Time: 3 hours]

PART-A

 $4 \times 5 = 20$

- **Instructions:** (1) Answer any five questions.
 - (2) Each question carries four marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
 - 1. List the types of negative feedback amplifier.
 - 2. Define efficiency of a power amplifier.
 - 3. List the applications of power amplifiers.
 - List the applications of oscillators. 4.
 - State the condition for an amplifier to work as an oscillator. 5.
 - 6. Classify multivibrators.
 - **7.** List the applications of clippers and clampers.
 - 8. Sketch the symbols of LED and photo diode.
 - 9. Define lock range of PLL.
 - 10. Classify optoelectronic devices.

/3468 1 [Contd... **PART—B** 15×4=60

Instructions: (1) Answer any **four** questions.

- (2) Each question carries fifteen marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- 11. Compare negative and positive feedback amplifiers.
- **12.** Explain the working of complementary symmetry push pull power amplifier with diagram.
- 13. Explain the working of RC phase shift oscillator with diagram.
- 14. Explain the working of Colpitts oscillator with diagram.
- **15.** Distinguish between voltage and current time base generator circuits.
- **16.** Explain the transistor works as a switch in CE mode.
- 17. Explain the construction and working principle of LED.
- 18. Explain the block diagram of 555 IC.

