

C09-EE-306

[Total Marks : 80

3244

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL-2021

DEEE - THIRD SEMESTER EXAMINATION

ELECTRONICS ENGINEERING

Time : 3 hours]

PART-A

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. | Draw the circuit diagram of Full wave (centre tapped) rectifier. | 4 |
|----|--|---|
| 2. | Draw block diagram of a regulated power supply. | 4 |
| 3. | (a) List the different types of filters. | 2 |
| | (b) Draw the symbol for photo diode. | 2 |
| 4. | Write the applications of photo transistor. | 4 |
| 5. | List any four differences between BJT and FET. | 4 |
| 6. | Define operating point. | 4 |
| 7. | Draw the circuit diagram of voltage shunt feedback. | 4 |
| 8. | Classify amplifies based on type of load. | 4 |
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9. Give the condition for sustained oscillations.410. Give the front panel controls of CRO.4

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.** Explain the working of Half Wave Rectifier with neat waveforms.
- **12.** Explain construction and working of LCD with neat diagram.
- **13.** Explain the potential divider biasing method.
- **14.** Explain the operation of direct-coupled amplifier with neat diagram and also draw its frequency response.
- **15.** Explain the working principle of complementary push-pull power amplifier with neat circuit diagram.
- **16.** Explain the use of op-amp as summer and an integrator.
- **17.** Explain the working principle of colpitts Oscillator.
- **18.** Describe the functions of different parts of CRT neat diagram.

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