



C09-EE-306

**3244**

**BOARD DIPLOMA EXAMINATION, (C-09)  
OCT/NOV—2018  
DEEE-FOURTH SEMESTER EXAMINATION  
ELECTRONICS ENGINEERING**

*Time : 3 hours*

*[ Total Marks : 80*

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**PART—A**

3×10=30Marks

**Instructions :** (1) Answer **all** questions  
(2) Each questions carries **three** marks.  
(2) Answer should be brief and straight to the point and shall not exceed **five** simple sentences.

1. Draw the circuit diagram of a half wave rectifier.
2. Draw the circuit diagram of zener voltage regulator.
3. a) List different types of filters.  
b) List the applications of JFET
4. What are the applications of LCD.
5. Draw the construction diagram of N-channel enhancement MOSFET.
6. State the necessity of proper biasing for a transistor amplifier.
7. Define frequency response and bandwidth of an amplifier.
8. Classify amplifiers on the basis of frequency and type of load
9. Mention the applications of oscillators.
10. State the need for an industrial timer.

## **PART—B**

- Instructions :** (1) Answer any **five** questions  
(2) Each question carries **ten** marks.  
(2) The answer should be comprehensive and the criteria for valuation is the content test not the length of the answer.
- 11.** Explain the working of centre tapped full wave rectifier with wave-forms.
  - 12.** Explain the construction and working principle of Photodiode.
  - 13.** (a) Explain the concept of DC-load line.  
(b) Draw the potential divider biasing circuit.
  - 14.** Explain the operation of direct coupled amplifier. Draw its frequency response.
  - 15.** Draw the practical CE amplifier and explain the function of each component.
  - 16.** Draw and explain the working of complementary push-pull amplifier with circuit diagram.
  - 17.** Explain the working principle of colpitts oscillator with circuit diagram.
  - 18.** Draw the block diagram of CRO and explain each block.

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