



C14-EE-305

4246

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DEEE - III SEMESTER EXAMINATION

ELECTRONICS - I

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=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 Distinguish between carbon and wire wound potentiometers.
- 2 What are the specifications of capacitors.
- 3 Distinguish between intrinsic and extrinsic semiconductors.
- 4 Draw the circuit diagram of half wave rectifier.
- 5 What is the need of filters in power supplies.
- 6 Draw the symbols of
 - (a) LED
 - (b) SCR
 - (c) Photo transistor.
- 7 What are the applications of photo diode.
- 8 What is the need of biasing in amplifiers.
- 9 Draw the transistor circuit as an amplifier.
- 10 Classify amplifiers based on frequency and method of operation.

4246]

1

[Contd...

PART - B

10×5=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 losses in Inductors and Transformers.
 - 12 Explain about NO bias, forward bias and reverse bias of semiconductor diode.
 - 13 Explain about centre tap full wave rectifier with wave forms.
 - 14 Explain working of n-channel JEFT.
 - 15 Explain about working of uni junction transistor. (UJT)
 - 16 Explain about working of self bias circuit.
 - 17 Explain about working of RC coupled amplifier and its frequency response curve.
 - 18 Explain about working of transformer coupled amplifier and draw its frequency response curve.
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