



C14-EE-305

4247

**BOARD DIPLOMA EXAMINATION, (C-14)
OCT/NOV—2018
DEEE—THIRD 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) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. List the type of resistors based on composition.
2. List the different types of core material used in a transformer.
3. Write two differences between conductors and insulators.
4. What is the necessity of filter.
5. What is the need of voltage regulator.
6. Draw the symbols of Opto-coupler N - channel JFET and LED
7. Give the applications of photo diode.
8. Define operating point.
9. State the need of transistor biasing.
10. Define (a) Gain, (b) Frequency response.

PART-B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each questions carries **ten** marks.
(3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

- 11.** a) Define capacitance. Give its circuit symbol and units.
b) Compare the features of carbon and wire wound potentiometer.
- 12.** a) Draw the characteristics of Zener diode.
b) Explain the operation of Zener diode.
- 13.** Explain the working of center tapped full wave rectifier with a neat circuit diagram.
- 14.** Explain the working of SCR.
- 15.** Drawing equivalent circuit and explain V-I characteristics of UJT.
- 16.** Explain how stabilization of operating Point is achieved.
- 17.** Explain the working of RC coupled Amplifier.
- 18.** Explain the working of two - stage transformer coupled amplifier.

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