

5468

BOARD DIPLOMA SUPPLEMENTARY EXAMINATION, (C-16/C-16S)

JUNE / JULY - 2020

DEEE - III SEMESTER EXAMINATION
ELECTRONICS ENGINEERING

Time : 2 Hours]

[Total Marks : 80

PART - A

5×6=30

- Instructions :*
- (1) Answer any 06 questions.
 - (2) Each question carries FIVE marks.
 - (3) Each answer should not exceed more than ONE page.

- 1 Draw the circuit diagram of Half Wave Rectifier. ✓
- 2 Draw the circuit diagram of Voltage regulator using Zener diode. ✓
- 3 (a) List any three different types of filters. ✓
(b) Draw the equivalent circuit diagram of UJT.
- 4 Draw the symbols of ✓
 - (a) N-Channel JFET
 - (b) LED
 - (c) Photo diode.
- 5 List any three applications of LCD. ✓
- 6 List the ~~three~~ causes for instability of biasing in a transistor amplifier.
- 7 Classify the amplifiers based on period of conduction. ✓
- 8 Define feedback factor. ✓
- 9 State the use of piezo electric crystal in oscillator circuit. ✓
- 10 List any three applications of CRO. ✓

5468]

1

PART - B

5×10=50

Instructions :

- (1) Answer any FIVE questions.
- (2) Each question carries TEN marks.
- (3) Each answer should not exceed more than TWO pages.

- 11 Explain the working of Bridge rectifier using PN junction diodes with neat sketch. **10**
- 12 Explain the construction, working principle and applications of solar cell. **10**
- 13 Explain the potential divider biasing method with neat diagram. **10**
- 14 (a) Explain the principle of operation of two stage RC coupled amplifier with neat sketch. **7**
(b) Draw and explain the frequency response of RC coupled amplifier. **3**
- 15 Define the following terms : **10**
 - (a) Gain
 - (b) Decibel
 - (c) Frequency response
 - (d) Bandwidth
- 16 Explain the working principle of complementary push pull power amplifier. **10**
- 17 Explain the working principle of Hartley oscillator with neat diagram. **10**
- 18 Draw and explain the internal block diagram of 555 timer. **10**