

Code No. 7039

FACULTY OF SCIENCE

B.Sc. II-Semester (CBCS) Examination, May / June 2018

Subject : Electronics

Paper – II : Electronic Devices

Time : 3 Hours

Max. Marks: 80

PART – A (5 x 4 = 20 Marks)

(Short Answer Type)

Note : Answer any FIVE of the following questions.

- 1 Explain the formation of depletion region in P – N junction diode.
- 2 Explain the effect of temperature on reverse saturation current.
- 3 What is Early Effect? Explain.
- 4 Explain AC and DC load lines.
- 5 Explain FET Parameters.
- 6 Explain the application of FET as voltage variable resistor.
- 7 What is the basic function of SCR.
- 8 Describe the operation of LED and mention its application.

PART – B (4x15 = 60 Marks)

(Essay Answer Type)

Answer ALL from the following questions

- 9 (a) Explain the working and characteristics of a Tunnel diode.

OR

- (b) Explain the working of a Varactor diode

- 10 (a) Explain and draw the input and output characteristics of NPN transistor in CB configuration.

OR

- (b) Define the h-parameters of transistor in CE configuration and draw its equivalent circuit.

- 11 (a) Explain the construction and working of JFET.

OR

- (b) Describe the construction and working of UJT.

- 12 (a) Explain the construction and working of SCR.

OR

- (b) Describe the construction and working of LDR.
