BASIC ELECTRONICS 2nd Exam/ECE/CSE/IT/MECHATRONICS/0190/Jan'2022 (FOR 2018 BATCH ONWARDS)

Duration: 1.15Hrs. M.Marks:25

SECTION-A

Q1. Attempt any three questions.

3x5=15

- i. Write a Short Note on drift current.
- ii. Differentiate between P-Type and N-Type Semiconductor.
- iii. Explain the concept of temperature on conductivity of intrinsic Semiconductors.
- iv. Explain the working of LC capacitor input filter.
- v. How does a transistor amplify a signal?
- vi. Write a short note on Zener breakdown.
- vii. What is Zener Diode? Draw its symbol.

SECTION-B

Q2. Attempt any one question.

1x10=10

- a. Explain the working of full wave bridge rectifier with the help of Suitable diagram and waveform.
- b. Explain the Input and output characteristics of CE configuration. Also derive the relation between alpha (α) and beta (β).
- c. Differentiate between Junction field effect transistor (JFET) and Bipolar junction transistor (BJT).
- d. Explain the working of NPN transistor.