Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Voc. (Electronics & Information Technology) (Sem.–1)

BASIC ELECTRONICS

Subject Code : BVET 101-20

M.Code : 79138

Date of Examination : 14-01-2023

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) Give the energy band structure of Semi conductor.

b) What is doping?

c) Define drift current.

d) What is forward bias and reverse bias in a PN junction?

e) What is depletion layer?

f) What is meant by operating point?

g) Draw the symbol of PNP and NPN transistor.

h) What is potential barrier?

i) What is ripple factor in half wave rectifier?

j) What is leakage current?

SECTION-B

2. Explain, why CE configuration is most popular in amplifier circuits?

3. Explain the Output characteristics of CC transistor.

4. Compare LC and RC filters in detail.

5. What are the values of collector to emitter, Base to emitter saturation, active, cut in, cut off voltages?

6. Explain different types of biasing circuits.

SECTION-C

7. Draw and explain the working of Full wave rectifier.

8. Draw and explain the V-I characteristics of PN junction diode.

9. Explain the characteristics and applications of Zener diode.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.