No. of Printed Pages : **2**

Sl. No.

91514

B.Sc I Semester (NEP) Degree Examination, March/April - 2022

ELECTRONICS (OEC - 1)

Fundamentals Of Electronics

Time : 3 Hours Maximum Marks : 60

Instruction : *Answer* ***all*** *Sections.*

SECTION - A

1. Answer **all** the sub-questions. **10x1=10**

(a) What is Semiconductor ?

(b) Atomic number of Germanium is _____.

(c) What is the function of Resistor ?

(d) What are the types of transformers ?

(e) Expand the abbreviation of CRO.

(f) Define frequency of a wave.

(g) Write the statement of Ohm's law.

(h) Write the colour rings of 330 Ω resistor.

(i) Ideal forward bias resistance of a diode is _____ Ω.

(j) What are the tools required for Soldering.

SECTION - B

Answer **any four** questions. **4x5=20**

2. Draw the atomic structure of silicon and explain.

3. Write a note on different capacitors.

4. Explain the basic principle of Sine wave.

5. Explain colour coding of resistors.

6. Explain the method of Soldering Technique.

7. What is voltage and current sources ?

P.T.O.

SECTION - C

Answer **any three** questions. **3x10=30**

8. Using energy band theory explain the classification of Solids.

9. Derive the expression for charging of Capacitor through Resistor.

10. Explain the functions of CRO.

11. Find the total resistance of series and parallel combination of resistors.

12. Write the experimental setup of PN junction diode in forward and reverse bias.

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