

Roll No.

Total Printed Pages - 2

F - 1756

**C.B.C.S. (Second Semester)
EXAMINATION, MAY-JUNE, 2022
Electronics
(EL1-Basics of Electronics)**

Time : Three Hours]

[Maximum Marks : 80]

Note : Attempt any five questions. All questions carry equal marks.

1. Convert following binary numbers into its equivalent hexadecimal numbers-
(A) 11101011
(B) 00110101
(C) 11010001
(D) 01010100

P.T.O.

[2]

2. Convert following decimal numbers into its equivalent octal numbers-
(A) 23.6
(B) 155.0
(C) 100.23
(D) 49.7
3. Explain De-Morgan's Theorem. Explain its application/usage in Boolean algebra.
4. Explain the formation of depletion region and barrier potential in PN junction diode.
5. Describe the function of a transistor as an amplifier with the neat circuit diagram. Sketch the input and output wave form.
6. What is Ion Implantation? Why is it preferred over diffusion process?
7. Define charge, potential, voltage, current, power, with their units.
8. Define capacitor and Inductor as circuit elements. Explain their working principle of operation with suitable illustrations.

F - 1756