DOON UNIVERSITY, DEHRADUN
Mid Semester Examination, IInd Semester 2025
Academic Year 2024-25 (Even Semester)
School of Technology, Department of Computer Science
Programme Name B.Tech. Computer Science and Engineering
Course Code with Title : CEC153 - Fundamentals of Electronics

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Time Allowed 1.5 Hours   *Maximum Marks: 30*

SECTION: A
(Very Short Answer Type Questions)   3×2= 6

1. What are clippers and clampers?
2. What is the value of α, β when γ is 50 in BJT configurations?
3. What is the difference between intrinsic and extrinsic semiconductors?

SECTION: B
(Short Answer Type Questions)   3×4= 12

1. Discuss about the working of a half wave rectifier?
2. Explain the concept of power supply with a diagram.
3. Why do we use a Bipolar Junction Transistor?

SECTION: C
(Long Answer Type Questions)   2×6= 12

1. Explain the working of CB configuration. Draw input and output transfer characteristics. Also identify the relation between input and output current.
2. Discuss about four regions of BJT with a diagram.