



Course: Electronics I

Course Code: EC238

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Sheet 4

Question 1

At temperature of 27°C , determine the thermal voltage V_T .

Question 2

Determine the diode current at 20°C for Si diode with $I_S = 50\text{nA}$ and applied forward bias 0.6v .

Question 3

Determine the DC resistance levels for the diode given in the figure

- a) $I_D = 2\text{ mA}$
- b) $I_D = 20\text{ mA}$
- c) $V_D = -10\text{V}$

