

Arab Academy for Science & Technology and Maritime Transport – Cairo Branch



College of Engineering & technology Electronics & Communication Engineering Department

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 $I_S = 50nA$ and applied forward bias 0.6v.

Question 3

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

a)
$$I_D = 2 \, m \, A$$

b)
$$I_D = 20 \, m \, A$$

c) $V_D = -10V$

