ourdiu.com | Shared by Mohammad Al Faied

Daffodil International University

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Final Examination, Summer 2022
Course Code: CSE212 (Day), Course Title: Basic Electronics
Sections & Teachers : All

Time: 2:00 Hours **Marks: 40**

Answer ALL Questions

1.	*a)*	What are Donor & Acceptor impurities? Explain the Limitations in operating conditions of the pn junction in detail.	[2+3]	CO1
	b)	How Full Wave bridge Rectifier works, Explain it with a diagram.	[5]	
2.	*a)*	Prove that $I_C = \beta I_B + I_{CEO}$ for CE connection.	[5]	CO2
	b)	Explain the working process of the Transistor to raise the strength of a weak signal with a proper example.	[4]	
	c)	In which condition, faithful amplification will achieve? What is the working principle of JFET write it in detail.	[2+4]	
3.	*a)*	A Full-Wave rectifier uses two diodes, the internal resistance of each diode may be consumed constantly at 20 Ω. If the peak inverse voltage is 141.4 V & load resistance is 980 Ω then solve it to get the followings: i) I_{dc} ii) I_{rms} iii) Draw the Circuit	[8]	CO3
	b)	A transistor is connected in CE configuration in which the collector supply is 8V and the voltage drop across resistance R_C connected in the collector circuit is 0.5V. The value of R_C is 800Ω. If the current amplification factor is 0.96, then i) Build the Circuit ii) Find V_{CE} & I_B	[7]	

Scanned with CamScanner