



Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Fall 2022

Course Code: CSE212, Course Title: Basic Electronics

Level: 2 Term:1 Batch: 60

Time: 1 hour & 30 Min.

Marks: 25

Answer ALL Questions

1.		Define i) Ripple Factor ii) Breakdown voltage. Explain p-type semiconductors in detail.	[2+3]	CO1
2.	a)	Show that a Full Wave rectifier is more effective than Half Wave Rectifier.	[5]	CO2
	b)	Explain the process of AC to DC conversion using two diodes simultaneously in detail.	[5]	
3.	a)	A Full-Wave rectifier uses two diodes, the internal resistance of each diode may be consumed constant at $20\ \Omega$. If the peak inverse voltage is 150 V & load resistance is $980\ \Omega$ then solve it to get the followings: i) Mean Load Current ii) R.M.S. Value of load current	[5]	CO3
	b)	A diode's internal resistance of $10\ \Omega$ is used for half-wave AC to DC conversion. If the maximum voltage is 25 V & load resistance is $400\ \Omega$ then solve this to get rectification efficiency.	[5]	