

Daffodil International University

Faculty of Science & Information Technology
Department of Computer Science and Engineering
Mid Semester Examination, Fall-2024

Course Code: CSE112 Course Title: Computer Fundamentals

Level: 1 Term: 1 Batch: 67

Exam Duration: 1.5 Hours

Marks: 25

Answer ALL the Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes.]

1.		Describe the role and operation of the following components in a basic computer system:		1
		i. Control Unit ii. Arithmetic Logic Unit (ALU) iii. Memory Unit	[5]	
	Sec.	Use a block diagram of basic computer organization to illustrate your explanation on how these components work together to execute a simple instruction.	_	CO1
2.	a)	What are the primary properties for considering anything as a system? Provide proper example.	[2.5]	
	<i>b)</i>	Demonstrate the step by step process of data processing activity.	[2.5]	
3.	a)	Compare the impact and non-impact printers.	[2]	
	<i>b)</i>	Compare the Fixed word length and Variable word length memory.	[3]	
4.	a)	Perform the following conversions: i. $(4\frac{4}{3}752)_8 = (?)_{16}$ ii. $(4DF9C)_{16} = (?)_{10}$ iii. $(132)_4 = (?)_6$	[6]	CO2
	b)	Perform the following binary operations and show all steps: i. 10110101 + 01110101=? ii. 10000010- 01010111=?	[4]	CO2

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