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: i. Control Unit ii. Arithmetic Logic Unit (ALU) iii. Memory Unit Use a block diagram of basic computer organization to illustrate your explanation on how these components work together to execute a simple instruction.	[5]	CO1
2.	a)	What are the primary properties for considering anything as a system? Provide proper example.	[2.5]	
	b)	**Demonstrate** the step by step process of data processing activity.	[2.5]	
3.	a)	**Compare** the impact and non-impact printers.	[2]	
	b)	**Compare** the Fixed word length and Variable word length memory.	[3]	

4.	a)	**Perform** the following conversions:
		   i. $(4752)_8 = (?)_{16}$
		   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]	