



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.	<p>Describe the role and operation of the following components in a basic computer system:</p> <ul style="list-style-type: none">i. Control Unitii. Arithmetic Logic Unit (ALU)iii. Memory Unit <p>Use a block diagram of basic computer organization to illustrate your explanation on how these components work together to execute a simple instruction.</p>	[5]	CO1
2.	a) What are the primary properties for considering anything as a system? Provide proper example.	[2.5]	CO1
	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]	CO2
4.	a) Perform the following conversions: <ul style="list-style-type: none">i. $(43752)_8 = (?)_{16}$ii. $(4DF9C)_{16} = (?)_{10}$iii. $(132)_4 = (?)_5$	[6]	
	b) Perform the following binary operations and show all steps: <ul style="list-style-type: none">i. $10110101 + 01110101 = ?$ii. $10000010 - 01010111 = ?$	[4]	