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Daffodil International University

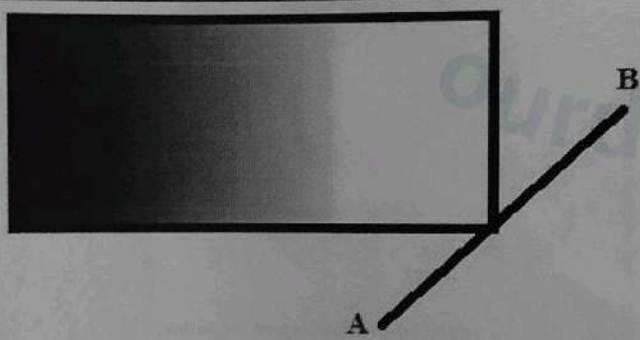
Faculty of Science & Information Technology
Department of Computer Science & Engineering
64-K, CT-02, Spring 2026
Course Code: CSE411, Course Title: Computer Graphics

Time: 1 Hour **Marks: 15**

Answer ALL Questions [Optional]

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

1.



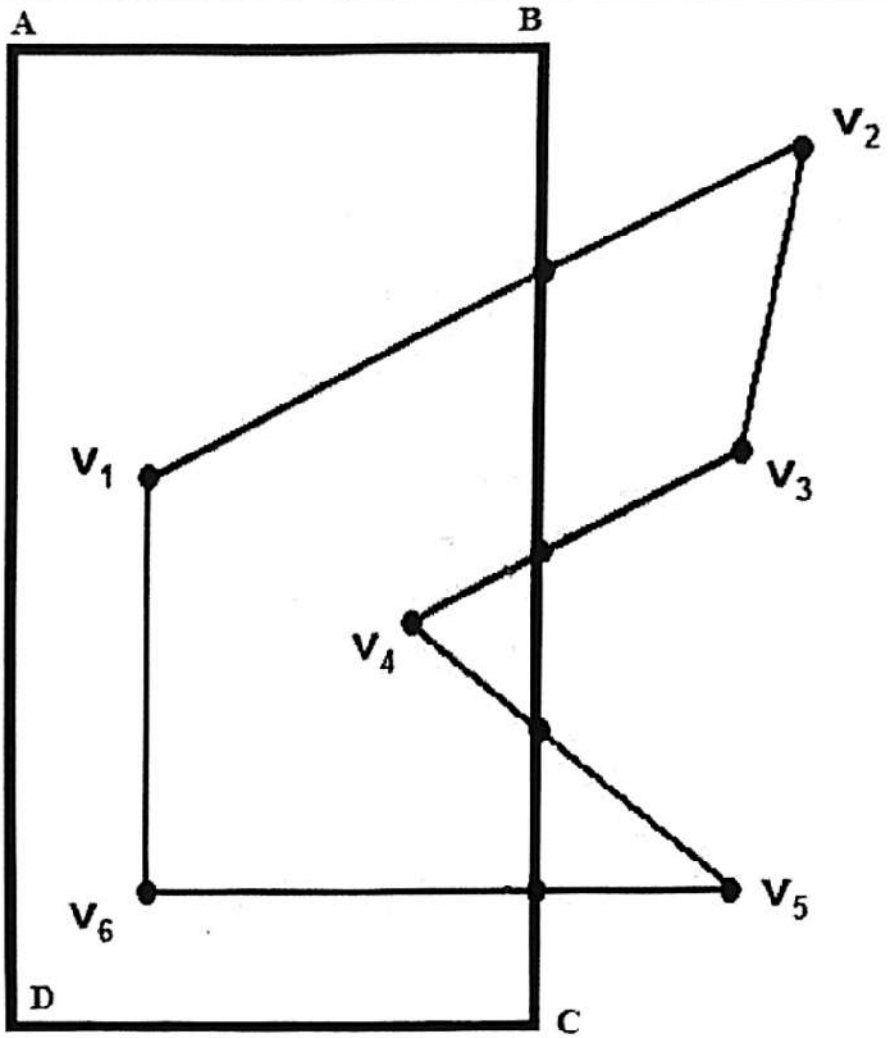
Given a clipping window with
$xmin = -2,\ xmax = 5,\ ymin = -1,\ ymax = 3$
and a line segment joining
$A(3,-2)$ *and* $B(7,0)$

a.	Determine the category of the line. If the line is a clipping candidate, perform the clipping with proper mathematical steps.	[3]	CO2
b.	Explain the technology used to generate the color in the clipping window shown above.	[2]	CO1

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2.



a.	Perform clipping of the above polygon using the Sutherland-Hodgeman algorithm.	**[4]**	**CO2**
b.	Perform clipping of the same polygon using the Weiler–Atherton algorithm.	**[4]**	**CO2**
c.	State which algorithm is more suitable in this case and justify your answer.	**[2]**	**CO3**

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