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## BRAC UNIVERSITY

### Department of Computer Science and Engineering

Quiz 01  
Duration: 30 minutes

Semester: Spring 2025  
Full Marks: 20

#### CSE 423: Computer Graphics

Name:	ID:	Section:
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Answer **all** the following questions.  
Figures in the right margin indicate marks.

1.	<p><math>y = 4x + 12</math></p> <p>This equation has a line segment that starts from its intersection with the y-axis and ends at that of the x-axis.</p> <p>a) Identify the Zone of the above line segment. [5]</p> <p>b) Using the <b>mid-point line</b> drawing algorithm, compute <b>5</b> pixels. Show the present value of <b>d</b> and <b><math>\Delta s</math></b> (derivatives [d updating]) at each stage. [8]</p> <p>Now, consider the same line segment <b>starting</b> from where it cuts the <b>x-axis</b> and <b>ending</b> where it cuts the <b>y-axis</b>.</p> <p>c) Using the <b>DDA</b> algorithm, compute <b>5</b> pixels. Show all the steps at each stage. [5]</p>
2.	What is the significance of Eight Way Symmetry? [2]