ourdiu.com | Shared by Md. Shefat Al Mahmud

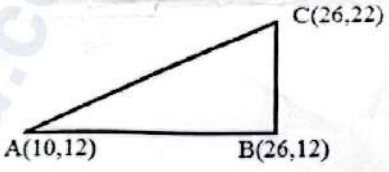
Daffodil International University

Faculty of Science & Information Technology
Department of Computer Science & Engineering
Mid Examination, Spring 2025
Course Code: CSE421, Course Title: Computer Graphics
Level: 4 Term: 1 Batch: 60

Time: 01:30 Hrs **Marks: 25**

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.	A group of engineers is designing a virtual reality (VR) system that can produce hyper-realistic environments. They must decide between using raster scan technology, which allows for vibrant textures, or random scan technology, which excels in rendering smooth lines and shapes. Please **define** the best technology from your understanding and justify your suggestion.	**[5]**	**CO1**
2.	Can we draw the whole figure given below (figure "A") using Line Drawing algorithm? Mention the algorithm and **apply** that to draw the portion of the following figure that is possible to draw.  Fig: A	**[7]**	**CO2**
3.	Suppose, Mr. Muttaqin has been appointed to design a video game, where he needs to draw a helipad. The helipad has a diameter of 16 and center at (-3, -3). Now, **analyze** circle Algorithm to determine the points of the 1st, 2nd and 3rd quadrant of the helipad.	**[7]**	**CO2**
4.	Given a triangle placed at A(0,0), B(1,1) *and* C(5,2) (i) **Apply** the 2D translation with distance 5 towards X axis and 1 towards Y axis. *(ii) Rotate the triangle of in 90 degrees.* *(iii) Finally reflect the triangle of about the y axis.* Draw the final change according to the first position in a graph paper.	**[6]**	**CO2**