



Daffodil International University

Faculty of Science & Information Technology

Department of Computer Science & Engineering

Mid Examination, Spring 2025

Course Code: CSE421, Course Title: Computer Graphics

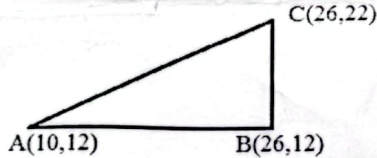
Level: 4 Term: 1 Batch: 60

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 1 st , 2 nd and 3 rd 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