



**Avinashilingam Institute for Home Science and Higher Education for Women**

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)  
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC  
Coimbatore - 641 043, Tamil Nadu, India

**Continuous Internal Assessment Test II – October 2024**

**Semester V**

**21BITC23 – Computer Graphics**

**Class : III UG**

**Major : Information Technology**

**Time : 2 Hrs**

**Max Marks : 60**

**Course Outcomes:**

1. Define about computer graphics and devices used for graphic implementation.
2. Implement lines, circle and ellipse generating algorithms.
3. Capable to ascertain graphic system attributes.
4. Know how to determine 2D transformations and various clipping operations.
5. Develop underlying ideas about 3D graphic methods, packages and transformations.

**Part -A**

**Choose the Correct Answer**

**6 x 1 = 6**

1. A single character that can be displayed in different colors and in different sizes. CO3 K2  
a) Text Attributes b) Marker Attributes  
c) Bundled Attributes d) Character Attributes
2. Which of the following clipping operation used in the concept of overlapping windows? CO4 K3  
a) Polygon Clipping b) Exterior clipping c) Point clipping d) Curve clipping
3. Which one of the following transformations moves an object without deformation? CO4 K2  
a) Scaling b) Rotation c) Translation d) Reflection
4. These coordinates are not used in 2D viewing transformation. CO4 K2  
a) Modelling coordinates b) Viewing coordinates  
c) Device coordinates d) Vector coordinates
5. A pixel will be represented as \_\_\_\_ in homogenous coordinate system. CO5 K2  
a) X,Y b) X,Y,Z c) X,Y,W d) Xw, Yw,w
6. Which of the following method assigns higher intensity to closer objects and lower intensity to far objects? CO5 K2  
a) Parellel projection b) Perspective projection  
c) Depth cueing method d) Surface rendering

**Part – B**

**Answer the following**

**Answer should not exceed 400 words**

**3 x 6 = 18**

7. a. Explain about bundled attributes in graphic systems. CO3 K5  
(OR)  
b. Demonstrate composite transformations in 2D graphics. CO4 K5
8. a. Define the various 2D viewing functions. CO4 K5  
(OR)  
b. Compare augmented reality with virtual reality with real time examples. CO5 K4
9. a. Describe the techniques that can be used to provide text clipping in graphics package. CO4 K2  
(OR)  
b. Write short notes on modeling and coordinate transformations. CO5 K1

**Part – C**

**Answer the following**

**Answer should not exceed 800 words**

**3 x 12 = 36**

10. a. Demonstrate and explain the basic transformations in 2D graphics. CO5 K5  
(OR)  
b. Discuss:  
(i) 2D viewing transformation Pipeline (4)  
(ii) Window-to-viewport coordinate transformation (8) CO3 K6
11. a. Explain about Cohen Sutherland Line clipping algorithm. CO4 K2  
(OR)  
b. Construct a polygon and depict clipping of polygon against window boundaries. CO4 K6
12. a. Explain the 3-Dimensional display methods. CO5 K4  
(OR)  
b. Explain the various color models in graphic systems. CO5 K4

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