Dr. Babasaheb Ambedkar Open University
Term end Examination July - 2016

Course	**: BCA**		
Subject Code	**: BCA-601 / 1**	**Max. Marks**	**: 70**
Subject Name	**: Computer Graphics**	**Duration**	**: 03 hours**
Date	**:**	**Time**	**:**

Section A

Answer the following (any three) (30)

1. What does process of Universal design requires and discuss the example of UDI.

2. Write a short note on Computer Graphics Application and explain some of the famous graphics applications.

3. Discuss the different tips for developing creativity.

4. Write down DDA Algorithm and also discuss Advantage of DDA algorithm compared to line equation.

5. Define transformation. Discuss the basic three Transformations with example.

Section B

Answer the following (any four) (20)

1. Discuss the principles of traditional animation.

2. Discuss the Modify/Distort and Substitute/simplify.

3. Discuss the four categories of Interaction in IDEO.

4. Difference between

I. Interactive and None interactive graphics
II. Boundary fill and Flood fill

5. Explain COHEN Sutherland line clipping algorithm.

6. Discuss the two techniques used for producing color display with CRT.

Section C

A. MCQ (2x5) (10)

1. In CRT the electron intensity is adjusted using_____.

a. Accelerating anode b. Control grid c. Electron gun d. Focusing anode

2. Interlaced refresh procedure is allowed in_____.

a. LCD b. DVST c. Raster can display d. Random scan display

3. Pick out the odd one out.

a. LED b. LCD c. Gas discharge tube d. Plasma panel

4. The transformation in which an object is moved in a minimum distance path from one position to another is called.

a. Rotation b. Replacement c. Translation d. Scaling

5. If a point (x,y) is reflected about an exist which is normal to the XY plane and passing through the origin, the reflected point (X,Y) is:

a. (x,-y) b. (-x,y) c. (-x,-y) d. (y,x)

6. (2, 4) is a point on a circle that has center at the origin. Which of the following points are also on circle?

a. (2, -4) b. (-2, 4) c. (-4, 2) c. All of above

7. The region code of a point within the window is_____.

a. 1111 b. 0000 c. 1000 d. 00

8. The region code of a point is 1001. The point is in the _____ Region of window.

a. Top right b. Top left c. Bottom left d. Bottom right

9. A line connecting the points (1,1) and (5,3) is to be drawn, using DDA algorithm. Find the value of x and y increments.

a. x- increments =1; y-increments =1 b. x- increments =0.5; y-increments =1
c. x- increments =1; y-increments =0.5 d. None of above

10. Which display is best suited for CAD systems?

a. A CRT with vector refresh monitor. b. A CRT with raster scan monitor
c. Plasma Panel display d. LED display

B. True or False/ Fill in the blanks/ one sentence answer. (10)

1. _____space is where shapes and forms exist: _____space is the empty space around shapes and forms.
2. The refresh rate is the number of times in a second that display the data it is being given:
    a. True
    b. False
3. Maximum refreshes rates formula is_____.
4. What is 3D?
5. Explain pixels.
6. _____is a video output devices that drives a video display from a memory buffer containing a complete frame of data.
7. Define aspect Ratio:
8. The maximum number of points that can be displayed without overlap on a CRT is known as_____.
9. Regions are used for clipping:
    a. True
    b. False
10. Define flat panel display.