Sant Gadge Baba Amravati University, Amravati

Syllabus Prescribed for 3 Year BCA UG Programme

Programme: Bachelor of Computer Application (BCA)

Semester V

Code of the Course/Subject	Title of the Course/Subject (Laboratory/Practical/practicum/hands-on/Activity)	(No. of Periods/Week)
5BCALAB1	**Graphics Programming**	**4 periods**

COs

1. To develop programming skills needed to create graphics applications.

2. To learn to create and manipulate 2D graphics.

3. To learn to implement different graphics drawing algorithms.

4. To learn to implement different types of animation effects.

* List of Practical/Laboratory Experiments/Activities etc.

Sr. No.	Name of Experiment/Practical
1	Write a c graphics program to perform 2D-Translation Transformation in Geometrical Transformation.
2	Write a c graphics program to perform 2D-Scaling Transformation in Geometrical Transformation.
3	Write a c graphics program to perform 2D-Rotation Transformation in Geometrical Transformation.
4	Write a c graphics program to perform 2D-Shearing Transformation in Geometrical Transformation.
5	Write a c graphics program to transforme Window-To-View Port Transformation.
6	Write a c program to draw a line using DDA Algorithm.
7	Write a c program to display a line using Bresenham's Algorithm.
8	Write a c program to draw a circle using Bresenham's circle drawing Algorithm.
9	Write a c program to performed Cohen-Sutherland Line Clipping Algorithm.
10	Write a c program to implements Bezier Curve.
11	Write a c program to draw an arc.
12	Write a c program to draw an ellipse.
13	Write a c program to draw a circle.
14	Write a c program to draw a smiley face using circle, arc and ellipse.
15	Case Study on the applications of Animation
16	To create tweening animation for Bouncing Ball using Flash Animation.
17	To create morphing animation for the Text using Flash Animation.
18	To create a blur effect on picture using Flash Animation.
19	To create a Shape Tweening Flash Animation.
20	To create a Tweening Animation for Text (Rotate Text) in Flash Animation.