JYOTI NIVAS COLLEGE AUTONOMOUS

SYLLABUS FOR 2018 BATCH AND THEREAFTER

Programme: B.C.A   **Semester: III**

COMPUTER GRAPHICS – LAB

Course Code: 18BCAIIIP2   **No. of Hours: 60**

COURSE OBJECTIVES:
- To learn various algorithms to scan, convert the basic geometrical primitives, transformations and clipping.
- Learn algorithmic development of graphic primitives like line, circle, polygon
- To understand the fundamentals of animation, graphic design applications and its related technologies.

LEARNING OUTCOMES:
- Using OpenGL for implementation of Computer Graphics concepts.
- Implementation of the algorithms for 2D primitive object representations.
- Implementation of algorithms for 2D modeling, transformations and animation.
- To be able to discuss the application of computer graphics in graphic design applications like Adobe Photoshop, Macromedia Flash and Corel Draw.

PART A
1. Program to create simple geometric objects.
2. Program to implement the DDA technique to draw line.
3. Program to implement the Bresenham's technique to draw line.
4. Program to implement the DDA technique to draw Circle.
5. Program to implement the midpoint circle algorithm.
6. Program to implement 2 Dimensional basic transformations.
7. Program to implement various attributes of Graphics primitives.
8. Program to implement animation.

PART B
1. Using Photoshop to create a greeting card.
2. Coloring a black and white image in photoshop.
3. Correcting an image according to given specifications using photoshop.
4. Implement blinking of eyes using photoshop.
5. Create a banner for a national conference conducted in the college using Corel Draw.
6. Create an advertisement for any product or services using Corel Draw.
7. Create an animation for moving a car (include movement of wheels) using Flash.
8. Create a water rippling effect using masking in Flash.