



G.H. Patel of College of Engineering and Technology

Department of Computer Engineering

Vision

To produce globally competitive computer engineers, who are prepared to accept the challenges at professional level, while maintaining the core values.

Mission

- ✓ To create excellent teaching learning environment.
- ✓ To mould engineers with a strong foundation of scientific knowledge and engineering concepts.
- ✓ To enhance the acquired concepts and develop new technology through excellence in research.
- ✓ To assist nation building and elevating the quality of life of the people through leadership in professionalism, education, research and public services.

Programme Educational Objectives (PEO)

- ✓ To educate young aspirants with the fundamentals of engineering and knowledge of latest technologies.
- ✓ To encourage the students to remain updated by pursuing higher degree or certification programs.
- ✓ To assume management and leadership roles to contribute in socio-economic development of the nation.



G.H. Patel of College of Engineering and Technology

Department of Computer Engineering

A.Y. 2024-25(ODD), SEMESTER 5

SUBJECT CODE: 202045611

SUBJECT NAME: COMPUTER GRAPHICS AND DESIGN

INDEX

NAME: _____

ENROLMENT NO: _____ BRANCH: _____

Sr. No	Name of the Experiment	Page No.	Date	Marks	Signature
01	Basic Graphics Functions.				
02	Perform Animation such as Rising Sun, Moving Vehicle, Smileys, Screen saver etc.				
03	a) Implementation of Digital Differential Analyser algorithm. b) Implementation of Bresenham's line drawing algorithm. c) Develop a program to display different types of lines.				
04	a) Implement midpoint circle drawing algorithm. b) Implement midpoint ellipse drawing algorithm.				
05	a) Implement flood fill algorithm. b) Implement boundary fill algorithm.				
06	a) Implementation of 2D Transformations. (Translation, Rotation, Scaling, Reflection and Shearing)				
07	Implementation of Cohen-Sutherland line clipping algorithm.				
08	Implementation of 3D Transformations. (Translation, Rotation, Scaling, Reflection and Shearing)				
09	Creation of Simple 2D and 3D surfaces using OpenGL.				
10	Texture mapping on different shapes using OpenGL.				
11	Demonstrate Clipping on different shapes using OpenGL.				
12	Special effects on different objects using OpenGL.				
13	Develop a mini project using various Graphics Functions.				



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Sr. No	List of Assignment(s)	Page No.	Date	Marks	Signature
1	Assignment I				
2	Assignment II				
3	Assignment II				