

# Computer Graphics.

Date : .....

## I<sup>st</sup> UNIT

35-40 Marks.

1. Explain the classification [categories] of Computer Graphics. ?
2. Explain the 3 components of Interactive graphics. [OR] How Interactive graphics display works. ?
3. Explain Graphics Software ?
4. Explain the functionality of CRT
5. Explain the Factors affecting CRT.
6. Explain Raster Scan Display
7. Explain Random Scan Display
8. Difference between Raster Scan & Random Scan display
9. Explain Shadow-Mask Method.
10. What is Display processors ? Explain its types.
11. What is color Mapping or color model ? Explain Different type of color models.

+ One mark questions.

Computer Graphics, Frame buffer.

Image processing, Morphing, Resolution, Persistence, Aspect ratio, Pixel Instruction set.



1. Explain Line Drawing Algorithms. (OR) General requirements to draw line.
2. Explain DDA Line algorithm?
3. Explain Bresenham's Line algorithm?
4. Explain DDA circle algorithm?
5. Explain ~~Bresenham's~~ circle algorithm?  
Midpoint
6. Explain Line attributes?
7. Different types of Line caps?
8. Explain Area filling attributes?
9. Explain character attributes?
10. Explain Scan-line algorithm for area filling.

Q<sup>th</sup> UNIT

15-20 Marks.

1. Define Transformation? Basic types of transformation.
2. Define translation vector? Explain translation?
3. Explain Rotation, Scaling?
4. Explain Uniform Scaling.
5. Explain Reflection & Shear?
6. Explain Homogeneous Co-ordinates?
7. Define Composite transformation? Explain?
8. Explain General pivot point rotation?
9. Explain General Fixed point Scaling?



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### 3<sup>rd</sup> UNIT

30-35 Marks.

1. Define Window & Viewport ?
2. Define Viewing transformation ? Explain 2D Viewing transformation ?
3. Explain 2D Viewing pipeline ?
4. Explain window-to-viewport co-ordinate transformation.
5. Define clipping ? Application of clipping
6. Explain Different types of clipping.
7. Point clipping, Line clipping.
8. Explain Cohen-Sutherland Line clipping ?
9. Define Region code.
10. Explain Area or polygon clipping ?
11. Explain Sutherland-Hodgeman polygon clipping
12. Explain Text & Curve clipping ?
13. Explain Exterior clipping ?