**Important CG Theory Questions**

1. Raster scan Vs. Random scan
2. What is aliasing?
3. What are anti-aliasing techniques?
4. Adv and disadv of DDA and Bresenham line.
5. Inside out test methods – odd even and winding number.
6. Types of projections – parallel & perspective (and their subtypes)
7. Different 3D representation techniques (B- resp and space partitioning)

(polygon table, wireframe model, sweep representation, octree etc.)

1. What do you mean by scan conversion?
2. What is frame buffer?
3. What is display file?
4. What is the refresh rate of raster system?
5. What are homogenous coordinates? What is the need of it?
6. Differentiate between window and viewport?
7. Explain working of boundary fill and flood fill algorithm.
8. Remember all matrices translation, rotation and scaling, reflection and shear.
9. What are the Steps involved in rotation w.r.t fixed point.
10. What are the steps involved in reflection about arbitrary axis. (y=mx+c)
11. What do you mean by Normalized coordinates.
12. Explain 3D viewing pipeline.
13. What are the advantages of Liang Basky line clipping over Sutherland line clipping?
14. Steps involved in rotation about arbitrary axis.
15. Properties of Bezier curve.
16. Difference between Bezier and B-Spline curve.
17. Local Vs. Global Control over the curve.
18. What are fractals.
19. Explain two properties of fractals – self similarity and fractal dimensionality
20. Explain construction of Koch curve.
21. What are the dimensions of Koch curve.
22. Give examples of fractals in nature.
23. What are the dimensions of Gasket fractal shown below.

