Computer Graphics

1. Describe applications of Computer Graphics.
2. What is refresh CRT? Explain function of CRT in detail with all characteristics.
3. Compare raster scan and vector scan display methods in detail.
4. Explain flat panel display in detail.
5. Scan converge line endpoint (3, 4) to (10, 7) using DDA and Bresnham line drawing algorithm.(prepare both)
6. Scan converge a circle using radius of 7 and find out all pixel surrounding the circle boundary.
7. Explain area filling algorithm flood fill.
8. Explain area filling algorithm boundary fill algorithm.
9. Explain scan line fill polygon filling algorithm.
10. Describe character generation methods.
11. Define transformation. Explain all basic transformations. (rotation, scaling, translation) (Note: any one will be asked in detail so prepare all)
12. Prove that two consecutive rotation are additive.
13. Prove that transformation matrix multiplications are associative.
14. Prove that two transformation matrix multiplications may be and may not be commutative.
15. Explain Cohen-Sutherland line clipping algorithm.
16. Explain window to viewport transformation.
17. Explain N-L-N line clipping algorithm.
18. Explain liang barsky line clipping algorithm.
19. Describe polygon clipping algorithm weiler athertan and Sutherland hodgeman.
20. Explain 3D display methods in detail.
21. What is anti-aliasing? Explain its methods.