Short Questions

1. What are the different application areas of computer graphics?
2. What components constitute a graphics system?
3. What are video-display devices?
4. Describe the difference between raster-scan systems and random-scan systems.
5. What are graphics monitors and workstations?
6. What are input devices in computer graphics?
7. What are output primitives in computer graphics?
8. What is the Digital Differential Analyzer (DDA) used for?
9. Explain Bresenham's Algorithm.
10. What are circle-generating algorithms?
11. Describe the scan-line algorithm for polygon filling.
12. What are boundary-fill and flood-fill algorithms?
13. What are the basic 2-D geometric transformations?
14. Explain translation transformation.
15. What is scaling transformation?
16. Describe rotation transformation.
17. What is reflection transformation?
18. Explain shear transformation.
19. How are transformations represented using matrices?
20. What are homogeneous coordinates?
21. What are composite transforms?
22. How do transformations between coordinate systems work?
23. What is the viewing pipeline in computer graphics?
24. Explain the concept of point clipping.
25. What is the Cohen-Sutherland line clipping algorithm?
26. Describe polygon clipping.
27. What are the methods for 3-D object representation?
28. What are polygon surfaces?
29. What are quadric surfaces?
30. What is spline representation?
31. Explain the characteristics of Hermite curves.
32. What are Bezier curves?
33. Describe B-Spline curves.
34. What is the significance of homogeneous coordinates?
35. How does the midpoint circle algorithm work?
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