- 1. What is computer graphics?
- 2. What are applications of computer graphics?
- 3. Why computer graphics are used?
- 4. What is computer device?
- 5. Explain various audio input devices.
- 6. Explain working of CRT display device.
- 7. Explain DDA line drawing algorithm.
- 8. Explain Bresenham Line Drawing Algorithm.
- 9. Explain Mid Point Line Drawing Algorithm.
- 10. Mid Point Circle Drawing Algorithm-
- 11. Midpoint ellipse drawing algorithm
- 12. Define vector and raster graphics.
- 13. Write a note on interactive graphic system.
- 14. Write a note on different video input devices.
- 15. Write a note on Color CRT monitor.
- 16. Explain shadow mask method.
- 17. Write a note on Liquid-Crystal Device (LCD).
- 18. What do you mean by video? Explain video format.
- 19. Write a note on
  - a. Standard Definition (SD)
  - b. High Definition (HD)
- 20. What is line clipping?
- 21. Explain Cohen–Sutherland's line clipping algorithm.
- 22. What is Sutherland-Hodgman's polygon-clipping algorithm?
- 23. What is 2D scaling? Explain.
- 24. What is 2D Translation? Explain.
- 25. What is 2D Rotation? Explain.
- 26. What is 2D shearing?
- 27. What do you mean by window, viewport, world coordinates?
- 28. Explain window to viewport mapping with example.
- 29. Explain 3D scaling.
- 30. Explain 3D translation.
- 31. Explain 3D rotation.
- 32. Explain 3D rotation with arbitrary point.
- 33. What is projection?
- 34. What are different types of projections?
- 35. What are different classes of projections?
- 36. Write a note on computer graphics pipeline.
- 37. Explain different major phases, the character passes in order to take an animated movie character from an idea or storyboard drawing to a fully polished 3D rendering.
- 38. What is parallel projection?
- 39. What is perspective projection?

- 40. What is Cavalier Projection?
- 41. Explain the following:
  - a. Light
  - b. Radiant Energy
  - c. Radiance
- 42. What is Colorimetry?
- 43. What do you mean by color spaces?
- 44. What do you mean by Hue, Saturation and Value (HSV)?
- 45. What is object space method?
- 46. What is Image space method?
- 47. Explain depth-buffer space method.
- 48. Explain back face detection method.
- 49. What is binary space partitioning?
- 50. Explain sub division algorithm?
- 51. Write a note on different types of curves.
- 52. What are different principles of animation? Explain any three.
- 53. What is image? What are different formats of image?
- 54. Write a note on image compression.
- 55. Differentiate between Contrast Stretching and Histogram Equalization.
- 56. What is secondary action to animate character / object?
- 57. Write a note on morphing in animation.
- 58. What is Mesh Subdivision surface method?
- 59. What is implicit and explicit representation?
- 60. Explain Bezier Curves and Bezier Surface.