

MCA -4<sup>th</sup> sem

Sub-Computer graphics and multimedia

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1. What is the primary use of clipping in computer graphics?
  - a) copying
  - b) zooming
  - c) adding graphics
  - d) removing objects and lines**
2. In a graphical system, the array of pixels in the picture are stored in
  - a) Frame buffer
  - b) Processor
  - c) Memory**
  - d) All of the mentioned
3. Clipping in computer graphics is primarily used for which of the following function?
  - a) Removing objects and lines from a picture**
  - b) Zooming out a picture
  - c) Copying a picture
  - d) Zooming In a picture
4. How many different types of translation are present in computer graphics?
  - a) 5
  - b) 3**
  - c) 4
  - d) 6
5. A bitmap is collection of \_\_\_\_\_ that describes an image.
  - a) pixels**
  - b) algorithms
  - c) bits
  - d) colors
6. Which devices provides positional information to the graphics system ?
  - a) Pointing devices
  - b) Both Input devices and Pointing devices**
  - c) Output devices
  - d) Input devices
7. The number of pixels stored in the frame buffer of a graphics system is known as
  - a) Resalution
  - b) Resolution
  - c) Depth
  - d) None of the mentioned**
8. The primary output device in a graphics system is\_\_\_\_\_
  - a) Printer
  - b) Scanner

- c) **Video monitor**  
d) Neither Scanner nor Video monitor
9. \_\_\_\_\_ is used in graphics workstation as input devices to accept voice commands.  
a) **Speech recognizers**  
b) Touch panels  
c) None of the mentioned  
d) All of the mentioned
10. What voice the use of voice system?  
a) To enter data  
b) **To initiate graphics operation and also to enter data**  
c) To initiate graphics operation  
d) None of the mentioned
11. The process of elimination of parts of a scene outside a window or a viewport is called \_\_\_\_\_  
a) editing  
b) cutting  
c) plucking  
d) **clipping**
12. The window opened on the raster graphics screen in which the image will be displayed is called \_\_\_\_\_  
a) **Interface window**  
b) World window  
c) World co-ordinate system  
d) Screen co-ordinate system
13. Which of the following operation can be applied on a 3 D object to zoom it in or out about any axis from its original position?  
a) Rotation  
b) Shearing  
c) **Scaling**  
d) Translation
14. The process of elimination of parts of a scene outside a window or a viewport is called \_\_\_\_\_  
a) editing  
b) plucking  
c) cutting  
d) **clipping**
15. The process of mapping a world window in World Coordinates to the Viewport is called Viewing transformation.  
a) False  
b) **True**
16. Drawing of number of copies of the same image in rows and columns across the interface window so that they cover the entire window is called \_\_\_\_\_  
a) Zooming  
b) Panning

- c) **Tiling**
  - d) Roaming
17. How many axes does three-dimensional graphics consist of?
- a) Two axes
  - b) **Three axes**
  - c) Five axes
  - d) One axis
18. Which of the following is the most commonly used boundary representation for a 3-D graphics object?
- a) Volume polygon
  - b) System polygon
  - c) Data polygon
  - d) **Surface polygon**
19. The process of digitizing a given picture definition into a set of pixel-intensity for storage in the frame buffer is called
- a) **Scan conversion**
  - b) True color system
  - c) Encoding
  - d) Rasterization
20. On a black and white system with one bit per pixel, the frame buffer is commonly called as
- a) **Bitmap**
  - b) Pix map
  - c) Multi map
  - d) All of the mentioned
21. Which algorithm is a faster method for calculating pixel positions?
- a) Parallel line algorithm
  - b) Mid-point algorithm
  - c) **DDA line algorithm**
  - d) Bresenham's line algorithm
22. If the boundary is specified in a single color, and if the algorithm proceeds pixel by pixel until the boundary color is encountered is called
- a) Parallel curve algorithm
  - b) Flood-fill algorithm
  - c) Scan-line fill algorithm
  - d) **Boundary-fill algorithm**
23. Pixel mask means
- a) **A string containing 1 and 0**
  - b) A string containing 0 and 0
  - c) A string containing only 0's
  - d) A string containing only 1;s
24. Aspect ratio means
- a) Ratio of vertical points to horizontal points
  - b) **Ratio of vertical points to horizontal points and horizontal points to vertical**

**points**

- c) Number of pixels
  - d) Ratio of horizontal points to vertical points
25. Expansion of line DDA algorithm is
- a) Data differential analyzer
  - b) Direct differential analyzer
  - c) Digital difference analyzer
  - d) Digital differential analyzer**
26. The Cohen-Sutherland algorithm divides the region into \_\_\_\_\_ number of spaces.
- a) 9**
  - b) 8
  - c) 7
  - d) 6
27. The Liang-Barsky algorithm is more efficient than the Cohen Sutherland algorithm.
- a) False
  - b) True**
28. \_\_\_\_\_ is used for 3D positioning and modeling, animation and other application.
- a) Spac ball
  - b) Trackball
  - c) Space ball**
  - d) All of the mentioned
29. \_\_\_\_\_ can be used to determine the position on the data tablet.
- a) Either Signal strength or coded pulse**
  - b) Coded pulse
  - c) Signal strength
  - d) Strip microphones
30. Which of the following type of perspective projection is also called as “Angular Perspective”?
- a) Four-Point
  - b) Three-point
  - c) One-point
  - d) Two-point**
31. Which of the following type of perspective projection is used in drawings of railway lines?
- a) Three-point
  - b) Two-point
  - c) One-point**
  - d) Perspective projection is not used to draw railway lines
32. A three-dimensional object can be represented using which of the following representation?
- a) Function
  - b) Point
  - c) Polygon
  - d) Equation**

33. In exterior clipping which part of a picture is considered and saved?
- a) We don't consider the picture in exterior clipping
  - b) Picture which is outside the view window**
  - c) Picture which is inside the view window
  - d) Picture which is on the edges of the view window
34. Which of the following clipping process handles the clipping of strings?
- a) Text Clipping**
  - b) Exterior Clipping
  - c) Curve Clipping
  - d) Shape Clipping
35. Which of the following algorithm can be used to clip a polygon in 3D space?
- a) Vatti Clipping Algorithm
  - b) Polygon in 3D space cannot be clipped
  - c) Weiler Atherton Algorithm**
  - d) Greiner Hormann Clipping Algorithm
36. For a 45% line, the line path is \_\_\_\_\_ on the polygon area.
- a) Vertical**
  - b) Horizontal
  - c) Centered
  - d) None of the mentioned
37. The sampling of object characteristic at a high resolution and displaying the result at a lower resolution is called?
- a) Anti-aliasing
  - b) Super-sampling or Post-filtering**
  - c) Post-filtering
  - d) Super-sampling
38. What is full form of NLN line clipping algorithm?
- a) Nicholai-Lee-Nicholl algorithm
  - b) Nicholl-Liang-Nicholl algorithm
  - c) Nicholl-Lee-Nicholl algorithm**
  - d) Nicholai-Liang-Nicholl algorithm
39. 'Skala' is an example of which type of clipping?
- a) polygon clipping
  - b) line clipping**
  - c) curve clipping
  - d) point clipping
40. Which of the following is NOT a type of area sampling?
- a) Point sampling**
  - b) Weighted area sampling
  - c) Anti-aliasing
  - d) Unweighted area sampling
41. In which method, fixed pattern of a line is used to generate characters?
- a) Dot-matrix method
  - b) Bitmap method

- c) Stroke method
  - d) Starburst method**
42. \_\_\_\_\_ stores the picture information as a charge distribution behind the phosphor-coated screen.
- a) Direct-view storage tube**
  - b) Flat panel displays
  - c) 3D viewing device
  - d) Cathode ray tube
43. The device which is designed to minimize the background sound is
- a) Joy stick
  - b) Data glove
  - c) Microphone**
  - d) Digitizers
44. Which devices provides positional information to the graphics system ?
- a) Input devices
  - b) Output devices
  - c) Pointing devices
  - d) Both a and c**
45. The number of pixels stored in the frame buffer of a graphics system is known as
- a) Resolution
  - b) Depth
  - c) Resalution
  - d) Only a**
46. In graphical system, the array of pixels in the picture are stored in
- a) Memory**
  - b) Frame buffer
  - c) Processor
  - d) All of the mentioned
47. Heat supplied to the cathode by directing a current through a coil of wire is called
- a) Electron gun
  - b) Electron beam
  - c) Filament**
  - d) Anode and cathode
48. The maximum number of points that can be displayed without overlap on a CRT is referred as
- a) Picture
  - b) Resolution**
  - c) Persistence
  - d) Neither b nor c
49. \_\_\_\_\_ stores the picture information as a charge distribution behind the phosphor-coated screen.
- a) Cathode ray tube
  - b) Direct-view storage tube**

- c) Flat panel displays
  - d) 3D viewing device
50. The devices which converts the electrical energy into light is called
- a) Liquid-crystal displays
  - b) Non-emitters
  - c) Plasma panels
  - d) Emitters**
51. In which system, the Shadow mask methods are commonly used
- a) Raster-scan system**
  - b) Random-scan system
  - c) Only b
  - d) Both a and b
52. The process of digitizing a given picture definition into a set of pixel-intensity for storage in the frame buffer is called
- a) Rasterization
  - b) Encoding
  - c) Scan conversion**
  - d) True color system
53. Which display devices allows us to walk around an object and view it from different sides.
- a) Direct view storage tubes
  - b) Three-dimensional devices**
  - c) Flat panel display devices
  - d) Plasma panel display devices
54. In LCD, the refresh rate of the screen is
- a) 60 frames/sec**
  - b) 80 frames/sec
  - c) 30 frames/sec
  - d) 100 frames/sec
55. Random-scan system mainly designed for
- a) Realistic shaded screen
  - b) Fog effect
  - c) Line-drawing applications**
  - d) Only b
56. The primary output device in a graphics system is\_\_\_\_\_
- a) Scanner
  - b) Video monitor**
  - c) Neither a nor b
  - d) Printer
57. On a black and white system with one bit per pixel, the frame buffer is commonly called as
- a) Pix map
  - b) Multi map

- c) Bitmap**  
d) All of the mentioned
58. Aspect ratio means  
a) Number of pixels  
b) Ratio of vertical points to horizontal points  
c) Ratio of horizontal points to vertical points  
**d) Both b and c**
59. \_\_\_\_\_ allows screen positions to be selected with the touch of a finger.  
**a) Touch panels**  
b) Image scanner  
c) Light pen  
d) Mouse
60. What is the disadvantage of the light pen?  
a) It's shape  
b) They cannot detect positions  
c) Accurate reading  
**d) Cannot detect positions within black areas**
61. \_\_\_\_\_ is used in graphics workstation as input devices to accept voice commands.  
a) Touch panels  
**b) Speech recognizers**  
c) Only a  
d) All of the mentioned
62. What voice the use of voice system?  
a) To initiate graphics operation  
b) To enter data  
c) Neither a nor b  
**d) Both a and b**
63. When a voice command is given, the system searches the \_\_\_\_\_ for a frequency-pattern match.  
a) Memory  
b) Input data  
**c) Dictionary**  
d) Hard disk
64. The device which is designed to minimize the background sound is  
**a) Microphone**  
b) Digitizers  
c) Data glove  
d) Joy stick
65. The quality of a picture obtained from a device depends on  
a) Dot size  
b) Number of dots per inch  
c) Number of lines per inch  
**d) All of the mentioned**



66. Which of the following device is not the input device?  
a) Trackball and space ball  
b) Data glove  
**c) Only d**  
d) Impact printers
67. Which device contains thumbwheel, trackball and a standard mouse ball?  
**a) Z mouse**  
b) Joystick  
c) Mouse  
d) Trackball
68. Virtual reality, CAD, and animations are the application of  
**a) Z mouse**  
b) Digitizers  
c) Data tablets  
d) Image scanners
69. The most commonly used input device is  
a) Mouse  
**b) Keyboard**  
c) Scanner  
d) Printer
70. Which keys allows user to enter frequently used operations in a single key stroke?  
**a) Function keys**  
b) Cursor control keys  
c) Trackball  
d) Control keys
71. \_\_\_\_\_ are used to measure dial rotations.  
a) Potentiometers  
b) Volta meter  
c) Parameter  
**d) Only a**
72. The device which is used to position the screen cursor is  
**a) Mouse**  
b) Joystick  
c) Data glove  
d) Both a and c
73. Which is the ball that can be rotated with the fingers or palm of the hand?  
a) Space ball  
**b) Trackball**  
c) Only a  
d) Both b and c
74. Potentiometers mounted at the base of the joystick measures  
**a) The amount of movement**  
b) The direction

- c) Position
  - d) Resolution
75. Which is the device that is constructed with the series of sensors that detects hand and finger motion?
- a) Digitizers
  - b) Data glove**
  - c) Joystick
  - d) Track ball