1. If the eccentricity is less than one then the conic is?
   A. parabola  
   B. ellipse  
   C. hyperbola  
   D. circle

   Answer: B

2. Fractals deals with curves that are?
   A. regularly irregular  
   B. irregularly irregular  
   C. regularly regular  
   D. irregularly regular

   Answer: A

3. The best hidden surface removal algorithm is?
   A. Depth buffer  
   B. Area subdivision  
   C. Depends on the application  
   D. painters

   Answer: C

4. Engineering drawing commonly applies?
   A. orthographic projection  
   B. oblique projection  
   C. perspective projection  
   D. none of the above

   Answer: A

5. Back face removal is an example of?
   A. combination of both  
   B. image space method  
   C. object space method  
   D. none of the above

   Answer: C

6. Which of the following device has a relative origin?
   A. Mouse  
   B. Joystick  
   C. Track ball  
   D. none of the above
7. In a clipping algorithm of Cohen & Sutherland using region codes, a line is already clipped if the?
A. codes of the end point are same
B. logical AND of the end point code is not 0000
C. both (a) and (b)
D. logical AND of the end point code is 0000
Answer: C

8. The subcategories of orthographic projection are?
A. isometric, dimetric, trimetric
B. cavalier, cabinet
C. cavalier, cabinet, isometric
D. isometric, cavalier, trimetric
Answer: A

9. The refresh rate below which a picture flickers is?
A. 5
B. 15
C. 20
D. 25
Answer: D

10. What is ZUI in computer Graphics?
A. Logical Enhancement of GUI
B. A Widget
C. An application that saves memory
D. None of the above
Answer: B

11. In Bresenham's algorithm, while generating a circle, it is easy to generate?
A. One octant first and other by successive rotation
B. One octant first and other by successive translation
C. One octant first and other by successive reflection
D. All octants
Answer: C
12. Why a circle drawn on the screen appears to be elliptical?
A. Screen has rectangular shape  
B. It is due to the aspect ratio of monitor
C. CRT is completely spherical  
D. Our eyes are not at the same level on screen
Answer: B

13. In bresenhan's algorithm error term is initialized to?
A. 0  
B. 1
C. -1/2  
D. None of above
Answer: A

14. Which of the following technique is used in Midpoint Subdivision algorithm?
A. Heap sort  
B. Bubble sort
C. Binary search  
D. Linear search
Answer: C

15. Which of the following clipping algorithm follows the Divide and Conquer strategy?
A. Cohen-Sutherland algorithm  
B. Cyrus break algorithm
C. 4-bit algorithm  
D. Midpoint algorithm
Answer: D

16. A line with endpoints codes as 0000 and 0100 is?
A. Completely visible  
B. Completely invisible
C. Partially invisible  
D. Trivially invisible
Answer: C

17. Choose the correct statement?
A. The components line of a random scan picture must be refreshed in a particular order  
B. Random scan method is well suited for displaying shading and color areas
C. Raster scan monitors draw a picture one line at a time
D. Random scan monitors draw a picture one line at a time

Answer: D

18. The ISO standard for computer Graphics is?
A. Computer graphics standard
B. Graphics Standard System
C. Graphics Kernel System
D. None of above

Answer: C

19. Examples of Presentation Graphics is?
A. Line Graphs
B. Bar Charts
C. Both (a) and (b)
D. CAD

Answer: C

20. The technique used to summarize the financial, statistical, mathematical, scientific and economic data is?
A. Presentation Graphics
B. Image processing
C. Computer Art
D. None of above

Answer: A

21. Computer generated models of physical, financial and economic systems are often used for?
A. Quality Control
B. Educational Aid
C. Entertainment
D. None of above

Answer: B

22. Special System designed for some training application are known as?
A. Video Display Devices
B. Simulators
C. GUI
D. None of above

Answer: B
23. Computer Graphics models are now commonly used for making?
A. Television shows  B. Motion pictures  
C. Music Videos  D. All of the above
Answer: D

24. Graphics and image processing technique used to produce a transformation of one object into another is called?
A. Half toning  B. Morphine 
C. Animation  D. None of above
Answer: C

25. The amount of light emitted by the phosphor coating depends on the?
A. Number of electrons striking the screen  B. Distance from the cathode to the screen 
C. Speed of electrons striking the screen  D. None of above
Answer: A

26. The maximum number of points that can be displayed without overlap on a CRT is refereed to as?
A. Attenuation  B. Persistence 
C. Resolution  D. None of above
Answer: C

27. Gray scale is used in?
A. Monitor that have no color capability  B. Monitor that have color capability 
C. Random scan display  D. None of above
Answer: A
28. Reflection of a point about x-axis, followed by a counter-clockwise rotation of 90°, is equivalent to reflection about the line?
   A. \( x = -y \)  
   B. \( y = -x \)  
   C. \( x + y = 1 \)  
   D. \( x = y \)

Answer: D

29. In the raster scan method for transformation, a 90° rotation can be performed by?
   A. by coping each row of the block into a column in the new frame buffer location  
   B. reversing the order of bits within each row in the frame buffer  
   C. by performing XOR on the frame buffer location  
   D. None of above

Answer: A

30. Oblique projection with an angle of 45° to the horizontal plane is called as?
   A. Cabinaet projection  
   B. Cavalier projection  
   C. Isometric projection  
   D. None of these

Answer: B

31. Which of the following statement is true?
   A. Request, sample and event are the three basic modes of input  
   B. A mouse is typically a device for inputting an absolute position on the screen  
   C. Special graphics hardware support is essential for providing menu-driven user interface to an application  
   D. Keyboard is a device ideally suited for use in sample mode

Answer: A

32. Choose the incorrect statement from the following about the basic ray tracing technique used in image synthesis?
   A. This technique removes hidden surfaces.  
   B. In this technique, viewing transformation are not supplied to the scene prior to rendering  
   C. In this technique rays are cast from the eye point through every pixel on the screen  
   D. In this technique rays are cast from the light source to the object in the scene

Answer: C
33. Aspect ratio is generally defined as the ratio of the ?
A. Vertical to horizontal points  
B. Horizontal to vertical points  
C. Either A or B, depending on the convention followed  
D. Vertical to (horizontal + vertical) points

Answer: C

34. When several types of output devices are available in graphics installation, it is convenient to use?
A. inquiry attributes  
B. unbundles attributes  
C. bundled attributes  
D. all of above

Answer: C

35. \( x = at^2; \ y = 2at \) is the parametric equation of?
A. Parabola  
B. Circle  
C. Rectangular hyperbola  
D. Ellipse

Answer: A

36. In displaying a clipped picture the efficient method is?
A. Clipping against the window and then applying the window transformation  
B. Applying window transformation and then clipping against the view port  
C. Both A and B have the same efficiency  
D. Efficiency depends on whether the window is an aligned rectangle or not

Answer: D

37. The anti-aliasing technique which allows shift of 1/4, 1/2 and 3/4 of a pixel diameter enabling a closer path of a line is?
A. Filtering  
B. Pixel phasing  
C. Sampling technique  
D. Intensity compensation
38. All the hidden surface algorithms employ an image space approach except?
   A. Depth sort method       B. Scan line method
   C. Depth buffer method     D. Back face removal

Answer: D

39. The major components of CRT are?
   A. Phosphorous coated screen       B. Control electrodes
   C. Deflection yoke and Electronic Gun  D. All of the above

Answer: D

40. ........ used to regulate the flow of electrons in CRT?
   A. Focusing electrode       B. Electronic Gun
   C. Control electrode       D. All of the above

Answer: C

41. The glow given off by the phosphor during exposure of the electron beam is known as?
   A. Phosphorescence       B. Fluorescence
   C. Persistence          D. All of the above

Answer: B

42. Raster is a synonym for the term?
   A. Model       B. Matrix
   C. Array       D. All of above

Answer: B
43. The ........ simply reads each successive byte of data from the frame buffer?
A. Display Controller
B. Digital Controller
C. Data Controller
D. All of above

Answer: A

44. Hue of color is related to ?
A. Incandescence
B. Luminance
C. Saturation
D. Wavelength

Answer: D

45. The phenomenon of having a continuous glow of a beam on the screen even after it is removed is called as
A. persistence
B. fluorescence
C. phosphorescence
D. incandescence

Answer: C

46. All the following hidden surface algorithms employ image space approach except
A. scan line method
B. depth sort method
C. depth buffer method
D. back face removal

Answer: D

47. The typical aspect ratio of the CRT is?
A. 0.8
B. 0.5
C. 0.2
D. 0.99

Answer: A

48. Which one of the following adapters does not support. All points addressable display?
A. VGA
B. CGA
C. MGA
D. EGA
49. The resolution offered by SVGA is?
A. 720 x 348 Pixels  
B. 640 x 350 Pixels  
C. 1280 x 1024 Pixels  
D. 1024 x 768 Pixels  
Answer: C

50. The CAD stands for?
A. Computer And Data  
B. Commonly Available Data  
C. Computer Aided Drawing  
D. Computer Aided Design  
Answer: D

51. Which one of the following transmits digital information to the computer?
A. Joystick  
B. Mouse  
C. Graphics tablet  
D. None of the above  
Answer: D

52. Which one of the following attributes is important for presenting text in a multimedia document?
A. Font  
B. Colour  
C. Character Format  
D. All of the above  
Answer: A

53. A scanner is specified by?
A. Dots per inch it can scan  
B. Length of paper it can scan  
C. Vertical and Horizontal Resolution  
D. None of the above  
Answer: C
54. What is the name of the display feature that highlights are of the screen which requires operator attention?
   A.  Touch screen  B.  Reverse video  
   C.  Pixel  D.  Cursor

   Answer: B

55. In a display specified as 600x400 the number of pixels across the display screen is?
   A.  600  B.  400  
   C.  240000  D.  All of these

   Answer: A

56. If the resolution of a printer is 1200 dpi, the number of dots per square inch is?
   A.  12  B.  800  
   C.  1200  D.  1200x1200

   Answer: D

57. Graphics programmes are those which create?
   A.  Designs  B.  Images  
   C.  Pictures  D.  All of the above

   Answer: C

58. Graphics programmes create images on the screen or printer either as?
   A.  Vector images  B.  Bitmapped images  
   C.  Both (a) and (b)  D.  None of these

   Answer: A

59. Graphics software packages are available for?
   A.  Pictures  B.  Charts  
   C.  Graphics  D.  All of the above
60. What technology is used for flat panel displays?
A. RBG monitor
B. Direct view storage tube
C. Solid state
D. VLSI

Answer: C

61. Pixel stands for?
A. Picture Element
B. Sound
C. File Format
D. None of these

Answer: A

62. Bitmap image is also known as?
A. Raster Images
B. Picture
C. Photo
D. None of these

Answer: A

63. SVGA system displays?
A. 800 X 640
B. 800 X 600
C. 800 X 400
D. 800 X 200

Answer: B

64. Metafiles are ________ that contain both raster and vector data?
A. Word
B. WAV
C. Multimedia
D. Graphics

Answer: D
65. The number of LED display indicators in logic probe are?
A. 0  B. 1
C. 2  D. 3

Answer: C

66. The method which used either delta x or delta y, whichever is larger, is chosen as one raster unit to draw the line this algorithm is called?
A. DDA Line Algorithm  B. Midpoint Line Algorithm
C. Bresenham`s Line Algorithm  D. Generalized Bresenham`s Algorithm

Answer: A

67. There are two standard methods of mathematically representing a circle centered at the origin. They are?
A. DDA, and Bresenham`s  B. Polynomial Method, and Trigonometric Method
C. Polynomial Method, and Bresenham`s  D. Trigonometric Method and Bresenham`s

Answer: B

68. There are 2 types of polygons. They are?
A. squire and rectangle  B. convex and concave
C. octagon and convex  D. hexagon and squire

Answer: B

69. Which type of display is used in digital watches?
A. CRT  B. LED display
C. HD display  D. LCD display

Answer: D

70. The smallest addressable screen element is called?
A. Pixel  
B. voltage level  
C. color information  
D. Graph  

Answer: A

71. Pixel on the graphics display represents?
A. picture  
B. voltage values  
C. mathematical point  
D. a region which theoretically can contain an infinite number of points  

Answer: D

72. The process of determining the appropriate pixels for representing picture or graphics object is known as?
A. representation  
B. rasterization  
C. animation  
D. Both (a) and (b)  

Answer: B

73. The relationship among the data and objects which are stored in the database called application database, and referred by the?
A. Application programs  
B. graphics display  
C. application model  
D. none of these  

Answer: A

74. Selective or part erasing of screen is not possible in?
A. vector scan display  
B. raster scan display  
C. both (a) and (b)  
D. DVST  

Answer: D

75. Display processor is also called a
A. display coprocessor  
B. graphics controller
C. both (a) and (b)   D. output device for graphics

Answer: C

76. Graphics software acts as a very powerful tool to create?
A. animated pictures   B. Images
C. both (a) and (b)   D. system interface

Answer: C

77. The purpose of display processor is __from the graphics routine task?
A. To free the secondary memory   B. to free the CPU
C. to free the main memory   D. none of these

Answer: B

78. Random-scan monitors typically offer __color choices?
A. Only a few   B. wide range
C. just 1 or 2   D. moderate range of

Answer: A

79. RGB system needs __of storage for the frame buffer?
A. 3 megabytes   B. 2 Gb
C. 10 megabytes   D. 100 megabytes

Answer: B

80. The SRGP package provides the __to wide the variety of display devices?
A. connection   B. way
C. link   D. interface

Answer: D
81. Length of shift register in bits is equal to __?
A. number of scan lines  
B. A single scan lines  
C. one word  
D. One bit  
Answer: A

82. Display controller is not required for __?
A. Display system with display controller  
B. display system with only frame buffer  
C. both (a) and (b)  
D. display system with color  
Answer: B

83. The midpoint circle drawing algorithm also uses the __ of the circle to generate?
A. two-way symmetry  
B. four-way symmetry  
C. both (a) and (b)  
D. eight-way symmetry  
Answer: D

84. A polygon in which the line segment joining any 2 points within the polygon lies completely inside the polygon is called __?
A. convex polygon  
B. concave polygon  
C. both (a) and (b)  
D. none of these  
Answer: A

85. A polygon in which the line segment joining any 2 points within the polygon may not lie completely inside the polygon is called __?
A. convex polygon  
B. concave polygon  
C. both (a) and (b)  
D. none of these  
Answer: B

86. Rectangular patterns are sometimes referred as __?
A. coloring patterns  
B. Filling patterns  
Answer: B
C. All of these  
D. tiling patterns  
Answer: D

87. Replicating pixels is one of the methods of__________
A. thin primitives  
B. thick primitives  
C. stylish primitives  
D. none of these  
Answer: B

88. Line produced by moving pen is __ at the end points than the line produced by the pixel replication?
A. straight  
B. thin  
C. both (a) and (b)  
D. thicker  
Answer: D

89. The process of selecting and viewing the picture with different views is called__________
A. Windowing  
B. clipping  
C. both (a) and (b)  
D. projecting  
Answer: A

90. The process which divides each element of the picture into its visible and invisible portions, allowing the invisible portion to be discarded is called__?
A. Windowing  
B. clipping  
C. both (a) and (b)  
D. Projecting  
Answer: B

91. The region against which an object is to be clipped is called__________
A. image window  
B. Drawing window  
C. clip window or clipping window  
D. none of these  
Answer: C
92. The region code 0000 represents the ____________________
A. bottom clipping window  B. right clipping window
C. left clipping window    D. viewing window

Answer: D

93. A method used to test lines for total clipping is equivalent to the ________________
A. logical OR operator  B. logical AND operator
C. both (a) and (b)    D. logical XOR operator

Answer: B

94. A process of changing the position of an object in a straight line path from one coordinate location to another is called ________________
A. rotation  B. translation
C. motion    D. none of these

Answer: B

95. Data hazards occur when ________________
A. machine size is limited  B. Greater performance loss
C. Pipeline changes the order of read/write accesses to operands  D. some functional unit is not fully pipelined

Answer: D

96. A two dimensional rotation is applied to an object by repositioning it along a?
A. upward in the x-y plane  B. diagonals path in the x-y plane
C. circular path in the x-y plane  D. straight path in the x-y plane

Answer: C
97. A scaling transformation changes the ________ of an object?
   A. location       B. size
   C. shape          D. none of these
   Answer: B

98. Given matrix 100000yxSSS represents the?
   A. Homogeneous Coordinates for both rotation and scaling
   B. Homogeneous Coordinates for translation
   C. Homogeneous Coordinates for rotation
   D. Homogeneous Coordinates for Scaling
   Answer: D

99. In two dimensional viewing we have?
   A. 2D window and 3D viewport
   B. 2D window and 2D viewport
   C. 3D window and 2D viewport
   D. 3D window and 3D viewport
   Answer: C

100. The first viewing parameter we must consider is the?
    A. view reference plane
    B. view reference point
    C. viewing window
    D. shift vector
    Answer: B