COMPUTER GRAPHICS

BCA

III Sem

Multiple choice questions

1. Smallest size object that can be displayed on a monitor is called .....
   a) Picture element b) Point c)Dot Pitch d) aspect ratio
   Ans: Picture element

2. Each screen point is referred to as .....
   a) Resolution b)Pixel c)Persistence d)Dot Pitch
   Ans: Pixel

3. On a monochromatic monitor, the frame buffer is known as .....
   a) Display file b) Pixmap c) Bitmap d) Refresh buffer
   Ans: Bitmap

4. On a color monitor, the refresh buffer is also called .....
   a)Frame buffer b)Pixmap c)Bitmap d)Display file
   Ans: Pixmap

5. ..... refers to pixel spacing.
   a)Pixmap b)Resolution c)Pixel depth d)Persistence
   Ans: Resolution

6. The distance from one pixel to the next pixel is called .....
   a)Resolution b)Dot Pitch c)Pixmap d)ppi
   Ans: Resolution

7. The maximum number of points that can be displayed without overlap on a CRT
   a)Aspect Ratio b)Resolution c)Brightness d)Pixel
   Ans: Resolution

8. ..... is the number of points per centimeter that can be plotted horizontally and vertically.
   a)Aspect Ratio b)Pixel Depth c)Resolution d)Dot Pitch
   Ans: Resolution

9. ..... is the ratio of horizontal points to vertical points necessary to produce equal length lines in both direction.
   a)Dot Pitch b)Resolution c)Aspect Ratio d) Height-Width Ratio
   Ans: Aspect Ratio

10. Identify the odd one out from the following
a)Frame Buffer b)Pixmap c)Display program d)Refresh Buffer
Ans: Pixmap

11. The shortest distance between any two dots of the same color is called .....
a)Resolution b)Dot Pitch c)Pixel Depth d)ppi
Ans: Dot Pitch

12. The standard aspect ratio for PC is .....
a) 6:5 b) 4:3 c)3:2 d)5:3
Ans: 4:3

13. In CRT, the electron intensity is adjusted using .....
a) Accelerating anode b) Control grid c) Electron gun d) Focusing anode
Ans: Control grid

14. Brightness of a display is controlled by varying the voltage on the .....
a) Focusing anode b)Connection pins c)Control grid d)Power supply
Ans: Control grid

15. Lower persistence phosphorus is used in
a) Animation b) Simple object c) Complex object d) All of these
Ans: Animation

16. Lower persistence phosphorus needs_____ refresh rate
a) Lower b)Higher c)Medium d)None of these
Ans: Higher

17.. Higher persistence phosphorus needs _____ refresh rate
a) Lower b)Higher c)Medium d)None of these
Ans: Lower

18. Higher persistence phosphorus is used in
a) Animation b) Simple object c) High Complex object d) All of these
Ans: High Complex object

15. Memory area holding the intensity information of an image is called .....
a)Refresh buffer b)Font cache c)Picture definition d)Video controller
Ans: Refresh buffer

16. Intensity representation of an image is called .....
a)Frame buffer b)Picture definition c)Display list d)Brightness
Ans: Picture definition

17. The purpose of refreshing a CRT is .....

a)To avoid flickering b)To maintain steady picture
c)To avoid fading of pixels d)All of the above
Ans: All of the above

18. The fly-back of electron beams from one scanline to next is known as .....
a)Vertical Retrace b)Horizontal Retrace c)Raster scanning d)Refreshing
Ans: Horizontal Retrace

19. The return of electron beam to top left corner of the screen after one frame is called .....
a)Horizontal fly-back b)Vertical Fly-back c)Scanning d)None of the above
Ans: Vertical Fly-back

20. In raster scan display, the frame buffer holds .....
a)Line drawing commands b)Scanning instructions c)Image Resolution d) Intensity information
Ans: Intensity information

21. In random scan display, the frame buffer holds .....
a)Line drawing commands b)Scanning instructions c)Image Resolution d) Intensity information
Ans: Line drawing commands

22. Identify the odd one out from the following
a)Vector display b)Raster scan display c)Calligraphic display d)Stroke-writing display
Ans: Raster scan display

22. Interlaced refresh procedure is allowed in .....
a) LCD b)DVST c)Raster scan display d)Random scan display
Ans: Raster scan display

23. Vector display is well suited for .....
a) Animation b) Line drawing applications c) Cartoons d) All of the above
Ans: Line drawing applications

24. Beam penetration method is usually used in .....
a)LCD b)Raster Scan display c) Random scan display d)DVST
Ans: Random scan display

25. Shadow mask method is usually used in .....
a)LCD b)Raster Scan display c) Random scan display d)DVST
Ans : Raster Scan display

26. Identify the colors produced in beam penetration method.
a) Red, Green, Blue, White b)Red, Orange, Yellow, Green
c)Red, Green, Blue d) Green, Red, White, Orange
Ans : Red, Orange, Yellow, Green

27. An RGB color system with 24 bits os storage per pixel is known as .....
a) Color CRT b)True-color system c)RGB monitor d)Color- Depth
Ans: True-color system

28. Identify the features of Vector display
a)High resolution, Jagged lines, Lack in color depth
b)Smooth lines, Poor resolution, Black & White
c)High resolution, Lack in color depth, Smooth lines
d)Inexpensive, monochromatic, smooth lines
Ans: High resolution, Jagged lines, Lack in color depth

29. Identify different type of computer graphics
a) Monochrome and Color b)CRT and Flat panel
c)Vector an Raster d)Monitors and Hardcopy devices
Ans: Vector an Raster

30. DVST stands for .....
a)Digital View Storing Table b)Direct Visual Storage Tube
c)Direct View Storage Tube c)Digital View Storage Tube
Ans: Direct View Storage Tube

31. Refreshing is not needed in DVST because of the presence of .....
a) Primary gun b) Flood gun c) Focusing anode d)Control grid
Ans: Flood gun

32. In DVST, the electron beam from primary electron gun strikes on .....
a) Phosphor screen b) Collector mesh c)Storage mesh d) Flood gun
Ans: Storage mesh

33. The purpose of flood gun in DVST is .....
a) To store the picture pattern b) To slow down the flood electrons
c) To enable color pixels d) To focus the electron beam
Ans: To slow down the flood electrons

34. Identify the features of DVST from the following.
a) Monochromatic, Flicker free, Low resolution b)Monochromatic, Flicker free
c) Color screens, Refresh monitors, High resolution d)Expensive, Low resolution
Ans: Monochromatic, Flicker free

35. Video devices with reduced volume, weight and power consumption are collectively known as .....

a) Light weight monitors b)Flat-panel displays c)CRT d) Portable display

Ans: Flat panel displays

36. Pick out the odd one out

a) LED b)LCD c) Gas Discharge tube d) Plasma Panel

Ans: LCD

37. Match the following

	Part A	Part B
A.	Plasma panel	i) Polarizer
B.	DVST	ii) Zinc sulfide
C.	LCD	iii) Dielectric mesh
D.	Thin film electroluminescent	iv)Neon gas

a) A-ii, B-iv, C-i, D-iii b) A-ii, B-iii, C-iv, D-i

c) A-iv, B-iii, C-i, D-ii d) A-i ,B-iv, C-ii, D-iii

Ans: A-iv, B-iii, C-i, D-ii

38. ..... is responsible for accessing the frame buffer to refresh the screen.

a) Graphics package b) Video controller c) CPU d) Monitor

Ans: Video controller

39. Digitizing a picture definition into a set of intensity values is known as .....

a) Digitization b) Scan conversion c)Refreshing d) Scanning

Ans: Scan conversion

40. ..... will free the CPU from graphics chores.

a) Display processor b) Monitor c) ALU d)Video controller

Ans: Display processor

41. Write an example for non-emissive displays

a) LED b)LCD c) Gas Discharge tube d) Plasma Panel

Ans: LCD

42. Identify impact printer from the following

a) Drum Plotter b)Inkjet printer c)Electrostatic printer d) Dot-matrix printer

Ans: Dot-matrix printer

45. Write an example for non-impact printer

a) Drum plotter b) Electrostatic printer c) Laser printer d) All of the above

Ans: All of the above

46. Identify the odd one out.

a) Mouse b) Keyboard c) Trackball d) Space ball

Ans: Keyboard

47. GIF stands for .....
    a) Global Image Format b) Graphics Interchange Format
    c) Graphics Image Format d) None of the above
Ans: Graphics Interchange Format

48. The ..... simply reads each successive byte of data from the frame buffer.
    a) Digital Controller b) Data Controller c) Display Controller d) All of above
Ans: Display Controller

49. The refresh rate below which a picture flicker is .....
    a) 25 b) 30 c)35 d)60
Ans: 25

50. ..... used to regulate the flow of elections in CRT ?
    a) Electron gun b) Focusing anode c) Control grid d) All of the above
Ans: Control grid

51. The technique used to summarize the financial, statistical, mathematical,scientific and economic data is ?
    a) Computer Art b) Image processing c) Presentation Graphics d)None of the above
Ans: Presentation Graphics

52. Graphics and image processing technique used to produce a transformation of one object into another is called
    a) Animation b) Morphing c) Half toning d) None of the above
Ans: Animation

53. The amount of light emitted by the phosphor coating depends on the?
    a) Number of electrons striking the screen
    b) Speed of electrons striking the screen
    c) Distance from the cathode to the screen
    d)None of above
Ans: Number of electrons striking the screen

54. Gray scale is used in .....
    a) A Monitor that have color capability
    b) A Monitor that have no color capability
    c) Random scan display
    d) Raster scan display
Ans: A Monitor that have no color capability

55. A wireless mouse works on

a) Infra blue radiation b) Infra Red radiation c) X-rays d) UV rays
Ans: Infrared radiation

56. Vector graphics is composed of
a. Pixels b. Paths c. Palette` d. None of these
Ans: Paths

57. Raster graphics are composed of
a. Pixels b. Paths c. Palette d. None of these
Ans: Pixels

58. EPS image file format is used for
a) Vector graphics b) Bitmap c) Both a & b d) None of these
Ans: Both a & b

59. TIFF (tagged image file format)are used for
a. Vector graphics b. Bitmap c. Both a & b d. None of these
Ans: Bitmap

60. Two dimensional color model are
a. RGB and CMKY b. RBG and CYMK c. RGB and CMYK d. None
Ans: RGB and CMYK

61. RGB model are used for
a. Computer display b. Printing c. Painting d. None of these
Ans: Computer display

62. CMYK model are used for
a. Computer display b. Printing c. Painting d. None of these
Ans: Printing

63. The intersection of three primary RGB color produces
a. White color b. Black color c. Magenta color d. Blue color
Ans: White color

64. The intersection of primary CMYK color produces
a. White color b. Black color c. Cyan color d. Magenta color
Ans: Black color

65. Random scan systems are designed for
a. Line drawing application b. Pixel drawing application
c. Color drawing application d. None of these
Ans: Line drawing application

66. A major disadvantage of DVST in interactive computer graphics is
a) Ability to selectively erase part of an image
b) Inability to selectively erase part of image from screen
c) Inability to produce bright picture

d) None

Ans: Inability to selectively erase part of image from screen

67. Which of the following allow for 8 mirror images?

a) Parabola b)Ellipse c)Hyperbola d) Circle

Ans: Circle

68. The simplest output primitive is .....

a) Straight line b) Straight line segment c) Point d)Circle

Ans: Point

69. A bitmap is ..... bit(s) per pixels.

a) 0 b)1 c)2 d)4

Ans: 1

70. The intensity of a grayscale pixel is expressed within a given range between a minimum and a maximum

a) 1 and 2 b) 2 and 1 c) 0 and 1 d)0 and 2

Ans: 0 and 1

71. Each pixel has _____basic color components

a. Two or three b. One or two c. Three or four d. None of these

Ans: Three or four

72. The quality of an image depend on

a. No. of pixel used by image b. No. of line used by image

c. No. of resolution used by image d. None

Ans: No. of pixel used by image

73. The basic geometric structures that describes a scene on display is called .....

a) Attributes b) Output primitive c) Lines d) Curves

Ans: Output primitive

74. ..... controls the basic display properties of output primitives.

a) Attribute parameter b) setpixel c) getpixel d) None of the above

Ans: Attribute parameter

75. To set line width attributes in a PHIGS package, ... function is used.

a) setLineThickness(lw) b)setLineWidth(lw)

c) setLineWidthScaleFactor(lw) d)setPolylineWidth(lw)

Ans: setLineWidthScaleFactor(lw)

76. Identify the values for fill-style parameter from the following

a) Hollow b)Hatch c) Pattern d)All of the above

Ans: All of the above

77. ..... function is used to set the basic fill style.

a) setFillStyle(fs) b) setFillStyleIndex(fs) c) setInteriorStyle(fs) d)FillType(ft)
Ans: setInteriorStyle(fs)

78. ..... is defined as the distance between the baseline and cap line of the character body.
a) Character Size b) Character Height c) Character Width d)Character Length
Ans: Character Height

80. ..... function is used to change the size of a character without changing the height:width ratio.
a)setTextSize(ts) b)setCharacterHeight(ch) c)setCharacterSize(cs) d)setTextHeight(th)
Ans: setCharacterHeight(ch)

81. ..... will define a group of attribute values of each primitive to be used on a monitor
a) Primitive table b)Bundle table c) Attribute table d) None of the above
Ans: None of the above

82. ..... function is used to set how text is to be positioned with respect to the start coordinates
a) setTextAlignment(h,v) b)setTextPrecision(tp) c)setTextPosition(h,v) d)setText(ts)
Ans: setTextAlignment(h,v)

83. ..... is used to check the current status of each attributes
a) setpixel b)getpixel c)inquiry function d)status function
Ans: Inquiry function

84. The basic transformations include
a) Translation b)Rotation c)Scaling d) All of the above
Ans: All of the above

85. The transformation in which an object is moved in a minimum distance path from one position to another is called
a) Rotation b) Replacement c) Translation d) Scaling
Ans: Translation

86. The translation distances (dx, dy) is called as
a) Translation vector b) Shift vector c) Both a and b d) Neither a nor b
Ans: Both a and b

87. The two-dimensional translation equation in the matrix form is
a) P'=P+T
b) P'=P-T
c) P'=P*T
d) P'=p

88. The transformation in which an object is moved from one position to another in circular path around a specified pivot point is called

a) Rotation b) Shearing c) Translation d) Scaling

Ans: Rotation

89. The transformation in which the dimension of an object are changed relative to a specified fixed point is called

a) Rotation b) Reflection c) Translation d) Scaling

Ans: Scaling

90. The transformation that produces a parallel mirror image of an object are called

a) Rotation b) Reflection c) Translation d) Scaling

Ans: Reflection

91. If an object is rotated through an angle A in clockwise direction, the rotation matrix R= .....

a) $\begin{matrix}\cos A & \sin A \\ -\sin A & \cos A\end{matrix}$ b) $\begin{matrix}\cos A & -\sin A \\ \sin A & \cos A\end{matrix}$ c) $\begin{matrix}\sin A & \cos A \\ \cos A & \sin A\end{matrix}$ d) None

Ans: $\begin{matrix}\cos A & \sin A \\ -\sin A & \cos A\end{matrix}$

92. If a point (x,y) is reflected about an axis which is normal to the XY plane and passing through the origin, the reflected point (X,Y) is:-

a) (x,-y) b) (-x,y) c) (-x,-y) d) (y,x)

Ans: (-x,-y)

93. Reflection of a point about x-axis, followed by a counter-clockwise rotation of 900 , is equivalent to reflection about the line ?

a) x= -y b) x=0 c)x=y d) x+y=1

Ans: x=y

94. A circle, if scaled only in one direction becomes a ?

a) Hyperbola b)Ellipse c) Parabola d)remains a circle

Ans: Ellipse

95. (2,4) is a point on a circle that has center at the origin. Which of the following points are also on circle ?

a) (2,-4) b) (-2,4) c) (-4,-2) d) All of above

Ans: All of above

96. Which technique of color CRT is used for production of realistic image

a) Beam penetration b) Shadow mask c) both a&b d)None of above

Ans: Shadow mask

97. A composite transformation matrix can be made by determining the _____of matrix of the individual transformation

a) Sum b) Product c) Difference d) None of the above

Ans: Product

98. Each successive transformation matrix _____ the product of the preceding transformation

a) pre-multiplies b) post-multiplies c) adds d)subtracts
Ans: pre-multiplies

99. Which of the following is not a rigid body transformation?
a) Translation b) Rotation c) Shearing d) Reflection
Ans: Shearing

100. Forming products of transformation matrices is often referred as
a) Concatenation b) Composition c) both a&b d) None of above
Ans: both a&b

101. Two consecutive translation transformation t1 and t2 are
a) Additive b) Multiplicative c) Subtractive d) none of above
Ans: Additive

102. Two consecutive rotation transformation r1 and r2 are
a) Additive b) Multiplicative c) Subtractive d) none of above
Ans: Additive

103. Two consecutive scaling transformation s1 and s2 are
a) Additive b) Multiplicative c) Subtractive d) none of above
Ans: Multiplicative

104. The process of mapping a world window in world coordinate system to viewport are called
a) Transformation viewing b) Viewport
c) Clipping window d) Screen coordinate system
Ans: Transformation viewing

105. The process of extracting a portion of a database or a picture inside or outside a specified region are called
a) Transformation b) Projection c) Clipping d) Mapping
Ans: Clipping

106. The rectangle portion of the interface window that defines where the image will actually appear are called
a) Transformation viewing b) View port c) Clipping window d) Screen coordinate system
Ans: View port

107. The phenomenon of having a continuous glow of a beam on the screen even after it is removed is called as ?
a) Fluorescence b) Persistence c) Phosphorescence d) Incandescence
Ans: Phosphorescence

108. Coordinates of window are knows as .....

a) Screen coordinates b) World coordinates c) Device coordinates d) Cartesian coordinates
Ans: World coordinates

109. Coordinates of viewport are known as .....
a) World coordinates b)Polar coordinates c) Screen coordinates d)Cartesian coordinates
Ans: Screen coordinates

110. The region against which an object is clipped is called a .....
a) Clip window b) Boundary c) Enclosing rectangle d) Clip square
Ans: Clip window

111. ..... identifies the picture portions that are exterior to the clip window
a) Interior clipping b) Exterior clipping c)Extraction d) None of the above
Ans: Exterior clipping

112. Identify line clipping algorithms from the following
a) Cohen- Sutherland algorithm b) Liang-Barsky clipping c) Nicholl-Lee-Nicholl clipping
d)All of the above
Ans: All of the above

113. The region code of a point within the window is .....
a) 1111 b)0000 c)1000 d)0001
Ans: 0000

114. According to Cohen-Sutherland algorithm, a line is completely outside the window if .....
a) The region codes of line endpoints have a '1' in same bit position.
b) The endpoints region code are nonzero values
c) If L bit and R bit are nonzero.
d) The region codes of line endpoints have a '0' in same bit position.
Ans: The region codes of line endpoints have a '1' in same bit position.

115. The region code of a point is 1001. The point is in the ..... region of window.
a) Top right b) Top left c) Bottom left d) Botton right
Ans: Top left

116. The result of logical AND operation with endpoint region codes is a nonzero value. Which of the following statement is true?
a) The line is completely inside the window
b) The line is completely outside the window
c) The line is partially inside the window
d) The line is already clipped
Ans: The line is completely outside the window

117. The left (L bit) bit of the region code of a point (X,Y) is '1' if .....

a) $X > XW_{MIN}$ b) $X < XW_{MIN}$ c) $X < XW_{MAX}$ d) $X > XW_{MAX}$
Ans: $X < XW_{MIN}$

118. The right bit (R bit)of the region code of a point (X,Y) is '1' if .....
a) $X > XW_{MIN}$ b) $X < XW_{MIN}$ c) $X < XW_{MAX}$ d) $X > XW_{MAX}$
Ans: $X > XW_{MAX}$

119 . The Most Significant Bit of the region code of a point (X,Y) is '1' if .....
a) $Y > YW_{MIN}$ b) $Y < YW_{MIN}$ c) $Y < YW_{MAX}$ d) $Y > YW_{MAX}$
Ans: $Y > YW_{MAX}$

120. The bottom bit of the region code of a point is '0' if .....
a) $Y > YW_{MIN}$ b) $Y < YW_{MIN}$ c) $Y < YW_{MAX}$ d) $Y > YW_{MAX}$
Ans: $Y < YW_{MIN}$

121. The ..... algorithm divides a 2D space into 9 regions, of which only the middle part (viewport) is visible.
a) Cohen-Sutherland b)Liang Barsky c) Sutherland Hodegeman d)N-L-N
Ans: Cohen-Sutherland

122. A method used to test lines for total clipping is equivalent to the .....
a) logical XOR b) logical OR c)logical AND d) both a & b
Ans: logical AND

123. Sutherland Hodgeman algorithm works well for.....
a) Concave polygon b) Convex polygon d)Smooth curves d) Line segment
Ans: Convex polygon

124. A transformation that slants the shape of an object is called .....
a) Reflection b) Shear c) Distortion d) Scaling
Ans: Shear

125. The text clipping strategy to reject an entire character string that overlaps a clip window is called.....
a) All-or-none character clipping b) All-or-none string clipping
c) Curve clipping d) both a & b
Ans: All-or-none string clipping

126. . The object refers to the 3D representation through linear, circular or some other representation are called
a) Quadric surface b) Sweep representation c) Torus d) None of these
Ans: Sweep representation

127. A quad-tree is a data structure which is used for graphical representation of .....

a) 2D digital picture or object b)3D picture or object c) Both a & b d)None of these
Ans: 2D digital picture or object

128. A octree is a data structure which is used for alternative representation of .....
a) 2D digital picture or object c) 3D picture or object c) Both a & b d) None of these
Ans: 3D picture or object

129. How many data elements for each region in quad-tree data structure
a) 2 b) 4 c) 8 d)6
Ans: 4

130. How many data elements for each region in octree data structure
a) 2 b) 4 c) 6 d) 8
Ans: 8

131. ..... refer to the shapes created by union, intersection and difference of given shapes
a) . Wire frame model b) Composite transformation
c) Constructive solid geometry methods d) None
Ans: Constructive solid geometry methods

132. The center of display screen is computed as
a) X_{max}, y_{max} b) $X_{max}/2, y_{max}/2$ c) $X_{max}/3, y_{max}/3$ d) None of these
Ans: $X_{max}/2, y_{max}/2$

133. The operation that is used for repositioning the object is called
a) Rubber band method b) Gravity method c) Dragging d) None
Ans: Dragging

134. Which method are used to construct and position the straight lines, arcs and circles etc.
a) Rubber band method b) Gravity method c) Dragging d)None of these
Ans: Rubber band method

135. Which are used to connect a line to already drawn line
a) Rubber band method b) Gravity method c) Dragging d)None of these
Ans: Gravity field

136. The rubber band method is also applicable to ..... objects.
a) Scale b) Scalar c) Vector d) Rotate
Ans: Scale

137. ..... is known as standard graphics objects
a) Octree b) Quadtree c) Polygon surfaces d) Ellipsoid
Ans: Polygon surfaces

138. ..... includes vertex coordinates and parameters to identify the spatial orientation of polygon surfaces

a) Attribute table b) Geometric table c) Orientation table d) Position table

Ans: Geometric table

139. Identify the data structures used to store the data about polygon surfaces

a) Vertex table b) Polygon table c) Edge table d) All of the above

Ans: All of the above

140. Coordinate values for each vertex is stored in .....

a) Coordinate table b) Vertex table c) Edge table d) Location table

Ans: Vertex table

141. ..... data structure is used to identify the vertices for each polygon edge.

a) Vertex table b) Polygon table c) Edge table d)Surface table

Ans: Edge table

142. ..... data structure is used to identify the edges for each polygon .

a) Vertex table b) Polygon table c) Edge table d)None of the above

Ans: Polygon table

143. A triangular strip connected with 50 triangles connects ..... vertices.

a) 52 b) 48 c) 50 d) 49

Ans: 52

144. When a circle is subjected to translational sweep, a ..... is formed.

a) Ellipse b) Cone c) Sphere d) Cylinder

Ans: Cylinder

145. A surface of revolution is generated by a ..... of a 2D curve.

a) Translational sweep b) Rotational sweep c) union d) intersection

Ans: Rotational sweep

146. A prism is generated by translational sweep of a .....

a) Circle b) Square c) Polygon d) Triangle

Ans: Polygon

147. The ..... combines the volumes occupied by overlapping 3D objects using set operations

a)Beam penetration b) CSG Method c)Sweep representation d)None of the above

Ans: CSG Method

148. A ..... is a data structure that recursively subdivides a plane into 4 quadrants

a)Octree b)4-way tree c) quadtree d) 4-way mesh

Ans: quadtree

149. Identify the methods for Constructive Solid Geometry operations

a) Ray casting b) Ray tracing c) Beam penetraion d) Ray sorting

Ans: Ray casting

150. ..... solid representation take advantage of spatial coherence to reduce the storage representations.

a) Sweep representation b)Octree c) Polygon surfaces d) CSG

Ans: Octree

151. ..... is a data element to store the pixels within an octant having same color

a) Voxel b) Void c) Tex d) Flag

Ans: Voxel

152. Empty regions of the space are represented by type .....

a) int b) void c) null d) empty

Ans: void

153. If all the pixels within an octant have the same color, it is referred to as .....

a) Heterogeneous octant b) Homogeneous octant

c) Simultaneous octant d) Similar octant

Ans: Homogeneous octant

154. ..... is a label set of output primitives and its associated attributes.

a) Structure b) Function c) Table d) List

Ans: Structure

155. ..... enables easy modification to each picture element

a) Structure b) Function c) Table d) List

Ans: Structure

156. A structure is created using the function .....

a) initstructure( ) b) startstructure( ) c) openstructure( ) d) none

Ans: openstructure( )

157. ..... is the reference portion value of each structure element.

a) element pointer b) index c)attribute d)attribute index

Ans: element pointer

158. Identify the following data structure.

" If a region is uniform, store its properties. If a region is non-uniform, subdivide it and repeat the process"

a) Octree b) List c) Table d) Polygon surface

Ans: Octree

159. Identify the data structures that works on divide and conquer strategy.

a) List b) Table c) Octree d) Pointer

Ans: Octree

160. ..... can be produced by interpolating shading patterns across the polygon surfaces to eliminate or reduce the presence of polygon edge boundaries.

a) Rasterizing b) Rendering c) Smoothing d)None

Ans: Rendering

161. ..... function is used to display a structure on the screen.

a) poststructure( ) b) displaystructure( ) c) enablestructure( ) d) structurepost( )

Ans: poststructure( )

162. All structures can be removed from the screen using the function .....

a) deletestructure( ) b) unpoststructure( )

c) removestructure( ) d) unposalltstructures( )

Ans: unpostallstructures( )

163. In .....representation, an octree is decomposed into identical cells arranged in a fixed regular grid.

a)cell b) voxel c) pixel d) array

Ans: voxel

164. Identify the odd one out

a) Input mode b) Accept mode c) Sample mode d) Event mode

Ans: Accept mode

165. The typical input operation in a general programming language will be in ..... mode

a) Sample b) request c) Event d) Read

Ans: request

166. Identify the input mode in which the application program initiates data entry.

a) Sample b) request c) Event d) Read

Ans: request

167. In ..... input mode, the input devices initiates data input to the application program.

a) Sample b) request c) Event d) Read

Ans: Event

168. The maximum number of devices that can provide input in request mode is .....

a) 2 b)4 c) Any number of devices d) 1

Ans: 1

169. When an input device is placed in event mode, data input from the device is accumulated in .....

a)Event queue b)Read queue c)Device list d) None

Ans: Event queue

170. The device for specifying a coordinate position (x,y) is known as .....
a) String device b) Stroke device c) Valuator device d) Locator device
Ans: Locator device
171. Which device is suitable to input a series of coordinate positions.
a) Locator b) Stroke c) Valuator d) String
Ans: Stroke

172. ..... device is used to specify scalar values.
a) Locator b) Stroke c) Valuator d) String
Ans: Valuator

173. ..... enables selection of picture components.
a) PICK b) LOCATOR c) STROKE d) CHOICE
Ans: PICK

174. Choice devices are suitable to select .....
a) Scalar values b) Menu options c) Text input d) Pictute components
Ans: Menu options

175. Identify the string device from the following
a) Mouse b) Webcam c) Keyboard d) Joystick
Ans: Keyboard

176. In ..... picture construction, the entity shape and size is dynamically changed with every mouse movement
a) Gravity b) Rubber band c) Constraint d) Painting
Ans: Rubber band

177. ..... technique is employed for drawing entities using mouse only.
a)) Gravity b) Rubber band c) Constraint d) Painting
Ans: Rubber band

178. ..... constraint forces the input point to the nearest intersection on a grid.
a) Directional b) Homogeneous c) Modular d)Gravity
Ans: Modular

179. ..... is a type of window which is involked by an application when mutiple inputs are required to specify the desired action.
a) Dialog box b) Panel c) Icon d)Menu
Ans: Dialog box

180. Symbolic representation of some object or process is called .....
a) Icons b) Menu c) List d) Label
Ans: Icon

181. ..... is used to connect a new line to a previously drawn line.

a) Gravity field b) Rubberband method c) Paiting d) None
Ans: Gravity field

182. Give an example for absolute locator device
a) Mouse b) Touch panel c) Light pen d) None
Ans: Touch panel

183. Identify an relative locator device from the following
a) Mouse b) Touch panel c) Light pen d) Keyboard
Ans: Mouse

184. Identify the odd one out
a) Icon b) Slider c) Spin box d) Locator
Ans: Locator

185. Which of the following is a 3D graphics package?
a) Paint b) AC3D c) Dreamweaver d) Lightroom
Ans: AC3D

186. ..... displays a list of commands
a) Menu b) List c) Icon d) Checkbox
Ans: Menu

187. ..... is used to set a value by viewing dynamically the entire data range
a) Menu b) Slider c) Spin boxes d) Text fields
Ans: Slider

188. ..... is used to select limited choices of predictable values
a) Menu b) Slider c) Spin boxes d) Text field
Ans: Spin boxes

189. The process of calculating the product of matrices of a number of transformations in sequence is called .....
a) Concatenation b) Continuation c) Mixing d) None
Ans: Concatenation

190. The point about which an object is rotated is called .....
a) Fixed point b) Central point c) Pivot point d) None
Ans: Pivot point

191. In ..... mode the program requests input and suspends processing until input is received.
a) Request b) Event c) Sample d) Constraint
Ans: Request

192. Identify odd one out

a) Vector based b) Hardware based c) Bitmap based d) Scanline based
Ans: Scanline based

193. When the polygon surfaces are to be tiled, ... is used
a) Polygon net b) Polygon mesh c) Polygon block d) Polygon cell
Ans: Polygon mesh

194. ..... is the practice by which an object is drawn by fixing one (or more) points, and then stretching the remain points out, connected by a line or lines that grow and shrink according to various properties.
a) Rubber banding b) Gravity c) Dragging d) grid
Ans: Rubber banding

195. ..... is created by revolution of a circle about an axis lying in its plane.
a) Sphere b) Ellipsoid c) Torus d) Cylinder
Ans: Torus

196. A region quad tree with depth of 'n' may be used to represent an image having resolution .....
a) 2^n b) 2×2^n c) $2^{n \times} 2^n$ d) 2n
Ans: $2^{n \times} 2^n$

197. ..... is a true tree because the centre of a subdivision always lies on a point.
a) Region quad tree b) Edge quad tree c) Point quad tree d) Child quad tree
Ans: Point quad tree

198. ..... is an adaptation of binary tree representing the 2-D point data
a) Region quad tree b) Edge quad tree c) Point quad tree d) Child quad tree
Ans: Point quad tree

199. ..... quad tree stores line rather than point.
a) Region quad tree b) Edge quad tree c) Point quad tree d) Child quad tree
Ans: Edge quad tree

200. ..... is commonly used to store sparse data
a) quad tree b) Table c) Binary tree d) Octant
Ans: quad tree