

MAHATMA GANDHI UNIVERSITY  
SCHOOL OF DISTANCE EDUCATION  
(MGU – CBCSS – UG – SDE 2012)  
B.Sc Computer Science

Semester VI

Core-25 : Computer Graphics and Multimedia

Multiple Choice Questions.

1. Expansion of CRT is \_\_\_\_\_.

- A. Cathode Ray Tube.
- B. Computer Related Tube.
- C. Component Related Tools.
- D. Common Reflection Tube.

ANSWER: A

2. The operations of most \_\_\_\_\_ is based on the Standard Cathode ray tubes.

- A. scanners.
- B. video monitors.
- C. printers.
- D. card readers.

ANSWER: B

3. A beam of electrons emitted by an electron gun is also called as \_\_\_\_\_.

- A. electric rays
- B. magnetic rays.
- C. cathode rays.
- D. infra-red rays.

ANSWER: C

4. Expansion of DDA is \_\_\_\_\_.

- A. Device Display Analyzer.
- B. Digital Differential Analyzer.
- C. Digital Device Analyzer
- D. Digital Display Analyzer.

ANSWER: B

5. Random scan displays are designed to draw all component lines at of a picture \_\_\_\_\_ times each second.

- A. 20 to 40.
- B. 30 to 60.
- C. 40 to 70.
- D. 20 to 50.

ANSWER: B

6. In beam penetration method, \_\_\_\_\_ layers of phosphor are usually used.

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: B

7. In beam penetration method, \_\_\_\_\_ and \_\_\_\_\_ layers of phosphor are usually used.
- A. red and green.
  - B. blue and green.
  - C. yellow and green
  - D. orange and green.

ANSWER: A

8. VDU is a \_\_\_\_\_ device
- A. processing.
  - B. input.
  - C. peripheral.
  - D. hardware.

ANSWER: C

9. The operation of the most video monitors is based on the \_\_\_\_\_ CRT.
- A. static.
  - B. dynamic.
  - C. standard.
  - D. pervasive.

ANSWER: C

10. In cathode ray tube, a beam of electrons is emitted \_\_\_\_\_.
- A. from the base.
  - B. by a focusing system.
  - C. by an electron gun.
  - D. by deflection plates

ANSWER: C

11. The negatively charged electrons inside the CRT are then accelerated towards the \_\_\_\_\_.
- A. phosphor coating
  - B. electron gun.
  - C. Base
  - D. Electron beam object

ANSWER: A

12. The magnetic field produced by each pair of coils results in \_\_\_\_\_ deflection force.
- A. transverse.
  - B. magnetic.
  - C. slopping.
  - D. repulsive.

ANSWER: A

13. A major difference between phosphors is their \_\_\_\_\_.
- A. permanent state.
  - B. persistence.

- C. feebleness.
- D. magnetic deflection.

ANSWER: B

14. The diagonal screen dimension of a personal computer system is given as the sizes varying from about \_\_\_\_\_ inches or more.

- A. 12 to 21.
- B. 27 to 12.
- C. 0 to 27.
- D. 4 to 12.

ANSWER: A

15. Picture definition is stored in \_\_\_\_\_ buffer area in memory.

- A. frame.
- B. outer.
- C. refresh.
- D. restore.

ANSWER: A

16. The rate at which the picture is redrawn on the screen is called \_\_\_\_\_ rate.

- A. buffer.
- B. refresh.
- C. drawn.
- D. delete.

ANSWER: B

17. A system with 24 bites per pixel & a screen resolution of 1024 by 1024 requires \_\_\_\_\_ mega byte of storage for frame buffer

- A. 9.
- B. 7.
- C. 3.
- D. 2.

ANSWER: C

18. In a black and white system \_\_\_\_\_ per pixel is needed to control the intensity of screen positions.

- A. 0 bit.
- B. 1 bit.
- C. 2 bits.
- D. 3 bits.

ANSWER: B

19. In a high quality system \_\_\_\_\_ bits per pixel is needed to control the intensity of screen positions.

- A. 8.
- B. 12.
- C. 16.
- D. 24.

ANSWER: D

20. On a black and white system with one bit per pixel, the frame buffer is commonly called as

- 
- A. pixmap.
  - B. pelmap
  - C. bitmap.
  - D. bitmap.

ANSWER: D

21. For systems with multiple bits per pixel, the frame buffer is commonly called as \_\_\_\_\_.

- A. pixmap.
- B. pelmap
- C. bitmap.
- D. bitmap

ANSWER: A

22. Refresh rate near to \_\_\_\_\_ frames per second is an effective technique for avoiding flicker.

- A. 60.
- B. 45.
- C. 30
- D. 15.

ANSWER: A

23. Random scan monitors draw a picture \_\_\_\_\_ at a time.

- A. one pixel.
- B. two pixel.
- C. one line.
- D. two line.

ANSWER: C

24. In raster scan system the \_\_\_\_\_ beam is swept across screen.

- A. electron.
- B. magnetic
- C. electro
- D. electrothermal

ANSWER: A

25. In raster scan system the electron beam is swept across screen from \_\_\_\_\_.

- A. right to left.
- B. top to bottom.
- C. bottom to top.
- D. side to side.

ANSWER: B

26. A CRT monitor displays color picture by using a combination of phosphor that emits light of \_\_\_\_\_ color

- A. same.
- B. different.
- C. many.
- D. Only one.

ANSWER: B

27. Shadow mask methods are commonly used in raster scan system including \_\_\_\_\_.

- A. monitor.
- B. beam penetration method.
- C. random scan system.
- D. color tv

ANSWER: D

28. In flat panel display the emissive displays are devices that converts electric energy into \_\_\_\_\_.

- A. obscurity
- B. stimulating energy.
- C. light energy.
- D. non emitting energy.

ANSWER: C

29. In liquid crystal display the flat panel device is referred to as a \_\_\_\_\_ LCD.

- A. matrix.
- B. passive.
- C. active.
- D. submissive.

ANSWER: B

30. The refresh buffer also called a \_\_\_\_\_ buffer.

- A. frame.
- B. element.
- C. resolution.
- D. bitmap.

ANSWER: A

31. Each screen point is referred to as a \_\_\_\_\_.

- A. point.
- B. pixel.
- C. position.
- D. element.

ANSWER: B

32. Refreshing on raster-scan displays is carried out at the rate of 60 to 80 \_\_\_\_\_ per second.

- A. points.
- B. pixels
- C. positions
- D. frames.

ANSWER: D

33. The raster-scan systems, each frame is displayed in two passes using an \_\_\_\_\_ procedure.

- A. interlaced refresh.
- B. refresh.
- C. providing.
- D. vector-displays.

ANSWER: A

34. The magnetic field produced by each pair of coils results in a \_\_\_\_\_. a. transverse deflection force.

- A. transverse deflection force.

- B. generic field
- C. electron beam.
- D. horizontal deflection.

ANSWER: A

35. A property of video monitors is\_\_\_\_\_.

- A. length.
- B. centimeter
- C. direction
- D. aspect ratio.

ANSWER: D

36. Intensity of the electron beam is controlled by setting voltage levels on the\_\_\_\_\_.

- A. control panel.
- B. electron gun.
- C. connector pins.
- D. control grid.

ANSWER: D

37. The\_\_\_\_\_ emits a small spot of light at each position contacted by the electron beam.

- A. electron gun.
- B. control grid.
- C. phosphor
- D. cathode.

ANSWER: C

38. The maximum number of points that can be displayed without overlap on a CRT is referred to as its\_\_\_\_\_.

- A. persistence.
- B. non persistence.
- C. resolution
- D. distribution.

ANSWER: C

39. Sterio scopic viewing is also a part in \_\_\_\_\_.

- A. virtual reality system.
- B. essential system
- C. Actual reality system.
- D. Implicit system.

ANSWER: A

40. The primary output devices in a graphics system is a \_\_\_\_\_.

- A. video monitor.
- B. video display devices.
- C. cathode ray tube.
- D. deflection CRT.

ANSWER: A

41. The focusing system in a CRT is needed to force the electron beam to converge into a \_\_\_\_\_ as it strikes the phosphor.

- A. large spot.

- B. small spot.
- C. double spot
- D. spot.

ANSWER: B

42. A shadow-mask CRT has \_\_\_\_\_ phosphor color dots at each pixel position.

- A. five.
- B. four
- C. three
- D. two.

ANSWER: C

43. The \_\_\_\_\_ shadow-mask method, is commonly used in color CRT systems.

- A. delta-delta.
- B. beta-beta.
- C. delta-beta.
- D. alpha-alpha.

ANSWER: A

44. Color CRTs in graphics systems are designed as \_\_\_\_\_.

- A. CRT monitors.
- B. RGB monitors.
- C. DVST monitors.
- D. color monitors.

ANSWER: B

45. DVST stands for \_\_\_\_\_.

- A. Device View Storage Tube.
- B. Direct View Space Tube.
- C. Direct View Storage Tube.
- D. Device View Space Tube.

ANSWER: C

46. The emissive displays are device that convert electrical energy into \_\_\_\_\_.

- A. light.
- B. image
- C. pixel
- D. colors

ANSWER: A

47. The plasma is also called as \_\_\_\_\_ displays.

- A. image.
- B. glass
- C. gas-discharge.
- D. glass-discharge

ANSWER: C

48. A beam of slow electrons excites only the outer \_\_\_\_\_ layer.

- A. blue.
- B. green
- C. white

D. red  
ANSWER: D

49. A beam of very fast electrons penetrates through the red layer and excites the inner\_\_\_\_\_ layer.

- A. blue.
- B. green
- C. white
- D. red

ANSWER: B

50. LED stands for\_\_\_\_\_.

- A. Light Emitted Display.
- B. Light Emitting Display.
- C. Light Emitting Diode.
- D. Light Emit Diode.

ANSWER: C

51. BSP Stands for\_\_\_\_\_.

- A. Bit Space-Partitioning.
- B. Binary Space- Partitioning.
- C. Bit Space- positioning.
- D. Binary Space- Positioning.

ANSWER: B

52. The simplest model for a light emitter is \_\_\_\_\_.

- A. light source.
- B. open source.
- C. data source.
- D. point source.

ANSWER: D

53. \_\_\_\_\_algorithm are broadly classified according to whether they deal with object definitions directly or with their projected images.

- A. Line clipping.
- B. Simple DDA.
- C. Visible surface detection.
- D. Midpoint algorithm.

ANSWER: C

54. \_\_\_\_\_is applied in an object by pre positioning along a straight line.

- A. Translation.
- B. Rotation
- C. Scaling
- D. Shearing

ANSWER: A

55. A\_\_\_\_\_ is a transformation that produces a mirror image of an object.

- A. reflection.
- B. shear
- C. translation

D. rotation  
ANSWER: A

56. \_\_\_\_\_ generally refers to any time sequence of visual changes in a scene.
- A. Computer animation.
  - B. Graphics
  - C. Visualization.
  - D. Frame work.

ANSWER: A

57. A world coordinate area selected for display is called as \_\_\_\_\_.
- A. window.
  - B. Viewport
  - C. window-to-viewport.
  - D. Viewing transformation.

ANSWER: A

58. One of the oldest and most popular line clipping procedure is \_\_\_\_\_.
- A. Liang-Barsky Line Clipping.
  - B. Nicholl-Lee-Nicholl Line Clipping.
  - C. Cohen-Sutherland Line Clipping.
  - D. Line Clipping using Nonrectangular Clip window.

ANSWER: C

59. A commonly used image space approach to detect visible surface is \_\_\_\_\_.
- A. buffer depth method.
  - B. surface rendering method.
  - C. polygon surface method.
  - D. depth buffer method.

ANSWER: D

60. An illumination model is also called as \_\_\_\_\_.
- A. lighting model.
  - B. surface model.
  - C. shading model.
  - D. rendering model.

ANSWER: A

61. The scattered light is called as \_\_\_\_\_.
- A. specular reflection.
  - B. source light.
  - C. ambient light.
  - D. defuse reflection.

ANSWER: D

62. The area subdivision method takes advantage of area coherence in a scene by location of those view areas that represent the part of a \_\_\_\_\_.
- A. double surface.
  - B. single surface.
  - C. triple surface.
  - D. area surface.

ANSWER: B

63. Orthographic projection that display more than one face of an object is called \_\_\_\_\_.
- A. axonometric orthographic projection
  - B. orthographic axonometric projection
  - C. projection axonometric orthographic.
  - D. projection orthographic axonometric.

ANSWER: A

64. Spotlights are used to control the amount of light emitted within a cone with apex at \_\_\_\_\_ source position.
- A. line.
  - B. object
  - C. point
  - D. out

ANSWER: C

65. An area on a display device to which a window is mapped is called as \_\_\_\_\_.
- A. view map. .
  - B. path map.
  - C. view port.
  - D. path graph.

ANSWER: C

66. The scaling transformation alters the size of an \_\_\_\_\_.
- A. vector.
  - B. edge
  - C. side
  - D. object

ANSWER: D

67. The set of unit vectors is called \_\_\_\_\_.
- A. vector basis.
  - B. normal basis.
  - C. orthogonal basis.
  - D. base vectors.

ANSWER: B

68. A matrix with a single row or a single column represents a \_\_\_\_\_.
- A. vector.
  - B. square
  - C. row vector.
  - D. column vector.

ANSWER: A

69. The matrix with same number of rows and columns is called as \_\_\_\_\_.
- A. square matrix.
  - B. row matrix.
  - C. column matrix.
  - D. row, column matrix.

ANSWER: A

70. Vector V is called the\_\_\_\_\_.

- A. world coordinate.
- B. view up vector.
- C. fixed-size.
- D. direction

ANSWER: B

71. The region against which an object is to be clipped is called as\_\_\_\_\_.

- A. world coordinate.
- B. view port
- C. clip window
- D. boundaries

ANSWER: C

72. The two-dimensional viewing transformation is simply referred to as the window-to-viewport transformation or the\_\_\_\_\_.

- A. viewing pipeline.
- B. transformation.
- C. windowing transformation.
- D. world coordinate.

ANSWER: C

73. A standard method for fitting a function to a set of data points is called as\_\_\_\_\_ algorithm.

- A. Fitting.
- B. straight-line
- C. least-squares
- D. DDA

ANSWER: C

74. The three color parameters in HLS color model are \_\_\_\_\_.

- A. hue, lightness and saturation.
- B. height, lightness and saturation.
- C. hue, light and saturation.
- D. hue, lightness and scaling.

ANSWER: A

75. The depth-buffer method is also called as\_\_\_\_\_.

- A. A-buffer.
- B. C-buffer
- C. Z-buffer
- D. W-buffer.

ANSWER: C

76. CSG stands for

- A. Constructed Solid Geometry.
- B. Concatenate Solid Geometry.
- C. Construct Solid Geometry.
- D. Constructive Solid Geometry.

ANSWER: D

77. The most straight forward method for defining a motion square is\_\_\_\_\_ specification.

- A. higher.
- B. complete
- C. indirect
- D. direct

ANSWER: D

78. One of the most popular methods for finding roots of nonlinear equations is the\_\_\_\_\_ algorithm.

- A. raphson.
- B. Newton
- C. root
- D. newton-raphson.

ANSWER: D

79. curve-fitting techniques are often used to specify the animation paths between\_\_\_\_\_.

- A. two elements.
- B. key frames.
- C. two positions.
- D. key elements.

ANSWER: B

80. \_\_\_\_\_ description is a typical task in an animation specification.

- A. Vector.
- B. Scene
- C. Frame
- D. Action

ANSWER: B

81. \_\_\_\_\_ system allows object motion characteristics to be specified as part of the object definitions.

- A. Parametric.
- B. Specialized
- C. Adjustable
- D. Parameterized

ANSWER: D

82. We can also animate object along 2D motion paths using the\_\_\_\_\_ transformations.

- A. table-color.
- B. color-table
- C. coordinate origin.
- D. fixed point

ANSWER: B

83. Constant-intensity shading is also called as\_\_\_\_\_ shading.

- A. intensity.
- B. constant
- C. flat
- D. polygon

ANSWER: C

84. A fast and simple method for rendering an object with polygon surfaces is called as \_\_\_\_\_ shading.

- A. intensity.
- B. constant
- C. constant-intensity.
- D. polygon

ANSWER: C

85. Procedure for determining visibility of object edges are referred to as \_\_\_\_\_ visibility methods.

- A. surface.
- B. window
- C. wireframe
- D. background

ANSWER: C

86. A drawback of the depth-buffer method is that it can only find one visible surface at each \_\_\_\_\_ position.

- A. depth.
- B. visible
- C. display
- D. pixel

ANSWER: D

87. The A-buffer has two fields, the depth field and \_\_\_\_\_ field.

- A. surface.
- B. accumulate
- C. intensity
- D. pixel

ANSWER: C

88. The A-buffer has two fields, the \_\_\_\_\_ field and intensity field.

- A. surface.
- B. accumulate
- C. depth
- D. pixel

ANSWER: C

89. The parallelepiped is mapped into the unit cube in a normalized view volume called the \_\_\_\_\_ system.

- A. normalized coordinate projection.
- B. normalized coordinate.
- C. coordinate projection.
- D. normalized projection coordinate.

ANSWER: D

90. The emissive displays are devices that convert \_\_\_\_\_ energy to light

- A. electrical.
- B. magnetic
- C. mechanical
- D. wind

ANSWER: A

91. The emissive displays are devices that convert electrical energy to \_\_\_\_\_.

- A. light.
- B. magnetic
- C. mechanical
- D. wind

ANSWER: A

92. The non-emissive displays are devices that convert \_\_\_\_\_ to graphics pattern.

- A. sunlight.
- B. magnetic
- C. mechanical
- D. wind

ANSWER: A

93. The non-emissive displays are devices that convert sunlight or light from other sources to \_\_\_\_\_.

- A. graphics pattern.
- B. magnetic
- C. mechanical
- D. wind

ANSWER: A

94. \_\_\_\_\_ is also called as gas-discharge displays.

- A. LED.
- B. Plasma panel.
- C. LCD
- D. CRT

ANSWER: B

95. RGB color system with 24 bits of storage is also called as \_\_\_\_\_ color system.

- A. false.
- B. full
- C. half
- D. finite

ANSWER: B

96. A three dimensional reflection can be performed relative to a selected reflection axis or with respect to a selected \_\_\_\_\_.

- A. rotations.
- B. reflection plane
- C. matrix form
- D. edges

ANSWER: B

97. \_\_\_\_\_ modeling packages often provide a number of construction techniques.

- A. scale.
- B. solid
- C. view
- D. coordinate

ANSWER: B

98. \_\_\_\_\_ representations are useful for constructing 3D objects that possess translational, rotations or other symmetries.

- A. buffer.
- B. periodic
- C. sweep
- D. spline

ANSWER: C

99. The primary output device in a graphics system is \_\_\_\_\_.

- A. joy stick.
- B. light pen
- C. key board.
- D. Monitor

ANSWER: D

100. The operation of most video monitors is based on the standard \_\_\_\_\_.

- A. cathode ray device.
- B. cathode device
- C. cathode ray tube.
- D. cathode rode.

ANSWER: C

101. Spots of \_\_\_\_\_ are produced on the screen by the transfer of the CT beam energy to the phosphor.

- A. sound.
- B. energy
- C. light
- D. platelet

ANSWER: C

102. Proper deflection amounts are attained by adjusting the \_\_\_\_\_ through the coils.

- A. current.
- B. heat
- C. intensity
- D. voltage

ANSWER: A

103. The most common types of graphics monitor employing a CRT is the \_\_\_\_\_ scan.

- A. raster.
- B. random
- C. CRT
- D. electron

ANSWER: A

104. The term \_\_\_\_\_ refers to the total screen area.

- A. screen.
- B. gun
- C. frame
- D. pixel

ANSWER: C

105. The number of bits per pixel in the frame buffer is called \_\_\_\_\_ buffer area.

- A. width of the buffer.
- B. depth of the buffer area.
- C. height of the buffer area.
- D. color of the buffer area.

ANSWER: B

106. At the end of scan line, the electron beam returns to the \_\_\_\_\_ side of the screen.

- A. up.
- B. bottom
- C. right
- D. left

ANSWER: D

107. Refresh rates are described in units of \_\_\_\_\_.

- A. pixel.
- B. meter
- C. hertz
- D. cubic

ANSWER: C

108. After refreshing each scan line is called the \_\_\_\_\_.

- A. vertical retrace.
- B. horizontal retrace.
- C. interlace
- D. buffer line.

ANSWER: B

109. Example of a random-scan display is \_\_\_\_\_.

- A. pen plotter.
- B. mouse
- C. keyboard
- D. printer

ANSWER: A

110. Refresh \_\_\_\_\_ depends on the number of times to be displayed

- A. rate.
- B. times
- C. pixel
- D. system

ANSWER: A

111. Refresh display file is called the \_\_\_\_\_.

- A. display unit.
- B. display list.
- C. display processor.
- D. display file

ANSWER: A

112. \_\_\_\_\_ ball is a two dimensional positioning device.

- A. Mouse.

- B. Track
- C. Space
- D. Thumb

ANSWER: B

113. The LEDs in touch panel operate at IR frequencies, so that the light is \_\_\_\_\_ to a user.

- A. visible.
- B. not visible
- C. partially visible.
- D. blurred

ANSWER: B

114. A light pen activated with a \_\_\_\_\_.

- A. button.
- B. switch
- C. pointer
- D. button switch.

ANSWER: D

115. \_\_\_\_\_ scanner with a resolution of 600 dots per inch.

- A. Desktop full-color.
- B. Flatbed
- C. Drum
- D. Color

ANSWER: B

116. Input devices used in particular applications are \_\_\_\_\_.

- A. trackball.
- B. space ball
- C. joystick
- D. data gloves

ANSWER: D

117. A/An \_\_\_\_\_ Device is any device that provides information, which is sent to the CPU.

- A. Input.
- B. Output
- C. CPU
- D. Memory

ANSWER: A

118. \_\_\_\_\_ tablets use sound waves to detect a stylus position

- A. Acoustic or Sonic.
- B. Sonic or Data.
- C. Data & Acoustic
- D. Graphic or data

ANSWER: A

119. Buttons and switches are often used to input \_\_\_\_\_.

- A. numbers.
- B. inputs
- C. predefined Functions

D. values  
ANSWER: C

120. Isometric joystick have \_\_\_\_\_ stick.

- A. movable.
- B. partial movable.
- C. non-movable.
- D. static

ANSWER: C

121. To be able to select positions in any screen area with a light pen, we must have some \_\_\_\_\_ intensity assigned to each screen pixel.

- A. zero.
- B. one
- C. non-zero
- D. none

ANSWER: C

122. \_\_\_\_\_ representations are useful for constructing 3D objects that possess translational, rotations or other symmetries.

- A. Buffer.
- B. Periodic
- C. Sweep
- D. Spline

ANSWER: C

123. \_\_\_\_\_ are common devices for entering scalar values.

- A. Dials.
- B. Keyboards
- C. Mouse
- D. Joystick

ANSWER: A

124. What is the latest write-once optical storage media?

- A. Digital paper.
- B. Magneto-optical disk.
- C. WORM disk.
- D. CD-ROM disk.

ANSWER: D

125. \_\_\_\_\_ are used to measure to dial rotations.

- A. Spectrometer.
- B. Voltmeter
- C. Potentiometer
- D. Ammeter

ANSWER: C

126. Digital devices are\_\_\_\_\_.

- A. digital clock.
- B. automobile speed meter.
- C. clock with a dial and two hands.

D. all of them.

ANSWER: A

127. An output device that uses words or messages recorded on a magnetic medium to produce audio response is \_\_\_\_\_.

- A. magnetic tape.
- B. voice response unit.
- C. voice recognition unit.
- D. voice band.

ANSWER: B

128. \_\_\_\_\_ procedure accepts the coordinates of an inter point.

- A. Scan fill.
- B. Poly fill.
- C. Boundary fill.
- D. Area fill

ANSWER: C

129. \_\_\_\_\_ is applied to regions by displaying sets of parallel lines.

- A. Line fill.
- B. Hatch fill
- C. Solid fill.
- D. Empty fill.

ANSWER: B

130. Changes in orientation, size and shape are accomplished with \_\_\_\_\_.

- A. geometric transformation.
- B. translation
- C. antialiasing
- D. transposition

ANSWER: A

131. \_\_\_\_\_ is applied to an object by repositioning it along a straight line path from one coordinate location to another.

- A. Rotation.
- B. Scaling
- C. Translation
- D. Transformation

ANSWER: C

132. The translation distance pair (tx, ty) is called \_\_\_\_\_.

- A. sector shift.
- B. shift vector.
- C. matrix vector.
- D. coordinate vector

ANSWER: B

133. The applications of the \_\_\_\_\_ mouse include virtual reality, CAD, animation.

- A. X
- B. Optical
- C. Optomechanical

D. Z  
ANSWER: D

134. Space ball is used for \_\_\_\_\_ dimensional positioning.
- A. 2.
  - B. 3
  - C. 1
  - D. 1 and 2.

ANSWER: B

135. Offline device is a/an \_\_\_\_\_.
- A. device which is not connected to CPU.
  - B. device which is connected to CPU
  - C. direct access storage device
  - D. I/O device.

ANSWER: A

136. The Z mouse features three button, \_\_\_\_\_ underneath.
- A. mouse ball.
  - B. thumbwheel
  - C. underwheel
  - D. trackball

ANSWER: A

137. The Z mouse features \_\_\_\_\_ buttons.
- A. 2.
  - B. 3
  - C. 4
  - D. 5

ANSWER: B

138. The Z mouse features three button, mouse ball underneath, \_\_\_\_\_ on the side.
- A. thumbwheel.
  - B. mouse ball
  - C. trackball
  - D. underwheel

ANSWER: A

139. Joystick consist of \_\_\_\_\_
- A. stick.
  - B. ball
  - C. wheel
  - D. ball

ANSWER: A

140. \_\_\_\_\_ transformation alters the size of an object.
- A. Rotation.
  - B. Scaling
  - C. Translation
  - D. Transferring

ANSWER: B

141. Uniform scaling is produced that maintains relative object \_\_\_\_\_.

- A. shape.
- B. vector
- C. scalar
- D. proportions

ANSWER: D

142. The location of the scaled object can be controlled by choosing a position called \_\_\_\_\_.

- A. vector position.
- B. scalar position.
- C. variable point.
- D. fixed point

ANSWER: D

143. Unequal values of  $s_x$  and  $s_y$  results in \_\_\_\_\_ scaling.

- A. integral.
- B. differential
- C. same
- D. different

ANSWER: B

144. Uniform scaling of a circle is simple done by adjusting the \_\_\_\_\_.

- A. side.
- B. radius
- C. circumference
- D. area

ANSWER: B

145. \_\_\_\_\_ is obtained by calculating the matrix product of individual transformations.

- A. Matrix transformation.
- B. Finite transformation matrix.
- C. Composite transformation matrix.
- D. Infinite transformation matrix.

ANSWER: C

146. The world coordinates area selected for display is called \_\_\_\_\_.

- A. window.
- B. glow
- C. view
- D. scene

ANSWER: A

147. An area on the display device to which a window is mapped is called \_\_\_\_\_.

- A. viewport.
- B. glow
- C. view
- D. scene

ANSWER: A

148. The mapping of a part of a world coordinate scene to a device coordinate is referred to as

\_\_\_\_\_ transformation.

- A. viewing.
- B. finite
- C. composite
- D. infinite

ANSWER: A

149. The area of a picture that is selected for viewing is called \_\_\_\_\_.

- A. window.
- B. glow
- C. view
- D. scene

ANSWER: A

150. Translation is a \_\_\_\_\_ body transformation that moves objects without deformation.

- A. Rigid.
- B. Fixed
- C. Flexible
- D. Single

ANSWER: A

151. \_\_\_\_\_ is a rigid body transformation that moves objects without deformation.

- A. Rotation.
- B. Scaling
- C. Translation
- D. Transformation

ANSWER: C

152. A two dimensional \_\_\_\_\_ is applied to an object by repositioning it along a circular path in the xy plane.

- A. rotation.
- B. scaling
- C. translation
- D. transformation

ANSWER: A

153. Successive scaling operations are \_\_\_\_\_.

- A. additive
- B. subtractive
- C. multiplicative
- D. infinite

ANSWER: C

154. A rigid body change in coordinate positions is referred to as \_\_\_\_\_ transformation.

- A. rigid body.
- B. rigid motion.
- C. rigid.
- D. rigid changing

ANSWER: B

155. \_\_\_\_\_ often involve inverse matrix calculations.

- A. Matrix transformation.
- B. Finite transformation matrix.
- C. Composite transformation.
- D. Infinite transformation matrix.

ANSWER: C

156. \_\_\_\_\_ is a transformation that produces a mirror image of an object.

- A. Shape.
- B. Vector
- C. Scalar
- D. Reflection

ANSWER: D

157. When objects are to be displayed with color or shaded surfaces we apply\_\_\_\_\_.

- A. object rendering.
- B. surface rendering
- C. view rendering.
- D. parameter rendering.

ANSWER: B

158. \_\_\_\_\_ include the intensity and positions of light sources and general background illumination required for a scene.

- A. Object rendering.
- B. Surface rendering
- C. Viewing specifications.
- D. Lighting specifications

ANSWER: D

159. In surface rendering procedures can then be applied to generate at the correct illumination and \_\_\_\_\_ of the scene.

- A. viewing specifications.
- B. color
- C. contrast
- D. shadow regions.

ANSWER: D

160. Objects displayed with \_\_\_\_\_, so that the intensity of lines decreases from the front to the back of the object.

- A. depth cueing.
- B. perpendicular projection.
- C. parallel projection.
- D. perspective projection.

ANSWER: A

161. \_\_\_\_\_ removes the part of the visible surfaces to show internal structure.

- A. Surface rendering.
- B. Cutaway view.
- C. Surface identification.
- D. Exploded view.

ANSWER: B

162. Three dimensional views can be obtained by \_\_\_\_\_ a raster scan image from a vibrating flexible mirror.

- A. reflecting.
- B. refracting
- C. observing
- D. deflecting

ANSWER: A

163. Stereoscopic devices present \_\_\_\_\_ views of the scene.

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: B

164. The mirror image for a two dimensional reflection is generated relative to an \_\_\_\_\_ by rotation the object 180 degrees about the reflection axis.

- A. axis of refraction.
- B. axis of restoration.
- C. axis of reflection.
- D. axis of deflection

ANSWER: C

165. The mirror image for a two dimensional reflection is generated relative to an axis of reflection by rotation the object \_\_\_\_\_ degrees about the reflection axis.

- A. 90.
- B. 180
- C. 270
- D. 360

ANSWER: B

166. \_\_\_\_\_ transformations can be used to modify object shape.

- A. Translation.
- B. Reflection
- C. Shear
- D. Scaling

ANSWER: C

167. \_\_\_\_\_ can be assigned as shear parameter.

- A. Integer.
- B. Real Number.
- C. Random Number.
- D. Floating Point.

ANSWER: B

168. Translation, rotation, scaling, reflection are examples of \_\_\_\_\_.

- A. point plotting.
- B. image transformation.
- C. graphics
- D. 2D transformation

ANSWER: D

169. Which table can be expanded so that vertices are cross referenced to corresponding edges?

- A. Vertex table.
- B. Polygon table.
- C. Edge table.
- D. Expanded vertex table.

ANSWER: A

170. Every vertex is the end point for at least \_\_\_\_\_ edge.

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: B

171. Each polygon has at least \_\_\_\_\_ shared edge

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: A

172. \_\_\_\_\_ can be constructed with various combination of plane and curved surfaces.

- A. Objects.
- B. Object boundaries.
- C. Surface
- D. Surface boundaries

ANSWER: B

173. Graphics package often provide routines for displaying internal components or \_\_\_\_\_ view of solid objects.

- A. Cross sectional.
- B. Hatch fill.
- C. Cross fill.
- D. Solid fill.

ANSWER: A

174. \_\_\_\_\_ rendering algorithms must be applied if a realistic rendering of the scene is required.

- A. Object.
- B. Surface
- C. View
- D. Parameter

ANSWER: B

175. The coordinate reference defines the \_\_\_\_\_ for the plane of the camera film.

- A. plane and surface.
- B. plane and coordinate.
- C. position and interface.
- D. position and orientation.

ANSWER: D

176. The easiest rotation axes to handle are those that are \_\_\_\_\_ to the coordinate.

- A. parallel.
- B. perpendicular
- C. straight
- D. opposite

ANSWER: A

177. \_\_\_\_\_ transformations can be used to modify object shape.

- A. Translation.
- B. Reflection
- C. Shear
- D. Scaling

ANSWER: C

178. The line joining the red and the violet spectral points, called as \_\_\_\_\_ line.

- A. violet line.
- B. red line.
- C. magenta line
- D. purple line.

ANSWER: D

179. Different tints are produced by adding \_\_\_\_\_ pigment to the original color.

- A. red.
- B. blue
- C. black
- D. white

ANSWER: D

180. GKS stands for \_\_\_\_\_.

- A. graphical kernel system.
- B. graphics kernel system.
- C. graphics kernel symbol.
- D. graphics kernel systems.

ANSWER: A

181. Visual pigment red have a peak sensitivity at wavelength of about \_\_\_\_\_ nm.

- A. 740.
- B. 630
- C. 530
- D. 450

ANSWER: B

182. The dominant frequency is also called as \_\_\_\_\_.

- A. saturation.
- B. luminance
- C. hue
- D. brightness

ANSWER: C

183. Data glove is used to grasp \_\_\_\_\_ object.

- A. binary.

- B. virtual
- C. existing
- D. real

ANSWER: B

184. Space partitioning representation is to describe interior properties by partitioning the spatial region containing an object into a set of small, non overlapping contiguous \_\_\_\_\_.

- A. objects.
- B. solids
- C. triangles
- D. liquid

ANSWER: B

185. \_\_\_\_\_ for a three dimensional graphics object is a set of surface polygons that enclose the object interior.

- A. Surface rendering.
- B. Space partitioning representations.
- C. Surface identification.
- D. Boundary representations.

ANSWER: D

186. A polygon mesh approximation to a curved surface can be improved by dividing the surface into smaller \_\_\_\_\_.

- A. polygon facets.
- B. octagon facets.
- C. squares
- D. circles

ANSWER: A

187. A way of storing \_\_\_\_\_ is to create lists namely vertex table, edge table and polygon table.

- A. convergence data.
- B. storage table.
- C. polygon surface table.
- D. geometric data.

ANSWER: D

188. The edge table contains pointers back to the \_\_\_\_\_ to identify vertices for each polygon edge.

- A. vertex table.
- B. polygon table.
- C. edge table.
- D. expanded vertex table.

ANSWER: A

189. In a \_\_\_\_\_ parallel lines in the world coordinate scene project into parallel lines on the two dimensional display plane.

- A. plane projection.
- B. perpendicular projection.
- C. parallel projection.
- D. perspective projection.

ANSWER: C

190. In \_\_\_\_\_, parallel lines in the scene that are not parallel to the display plane are projected into converging lines.

- A. plane projection.
- B. perpendicular projection.
- C. parallel projection
- D. perspective projection.

ANSWER: B

191. \_\_\_\_\_ is applied by choosing maximum and minimum intensity values and a range of distances over which the intensities are to vary.

- A. Depth cueing.
- B. Perpendicular projection.
- C. Parallel projection.
- D. Perspective projection.

ANSWER: A

192. The side of the plane that faces the \_\_\_\_\_ is called the inside face.

- A. object exterior.
- B. object interior.
- C. object
- D. solid

ANSWER: B

193. The side of the plane that faces the \_\_\_\_\_ is called the outward face.

- A. object exterior.
- B. object interior.
- C. object
- D. solid

ANSWER: A

194. When polygons are specified with more than \_\_\_\_\_ vertices, it is possible that the vertices may not all lie in one plane.

- A. 3
- B. 2
- C. 1
- D. 0

ANSWER: B

195. \_\_\_\_\_ is the number of control points in a Beizer curves.

- A. Polynomial.
- B. Curve polynomial.
- C. Beizer polynomial.
- D. Beizer integer.

ANSWER: C

196. Natural objects can be realistically described with \_\_\_\_\_.

- A. natural geometry.
- B. similarity geometry.
- C. fractal geometry.
- D. euclidean geometry.

ANSWER: C

197. The representation of the amount of variation in object detail is represented with\_\_\_\_\_.
- A. fractal geometry.
  - B. fractal dimension.
  - C. fractal definition.
  - D. fractal generation.

ANSWER: B

198. In depth cueing the lines farther are displayed with \_\_\_\_\_.
- A. increasing intensity.
  - B. decreasing intensity.
  - C. increasing color.
  - D. decreasing color.

ANSWER: B

199. A technique commonly used for engineering drawing is to display the non visible lines as \_\_\_\_\_ lines.
- A. straight.
  - B. dot
  - C. curved
  - D. dashed

ANSWER: D

200. \_\_\_\_\_ describe a three dimensional object as a set of surfaces that separate the object interior from the environment.
- A. Surface rendering.
  - B. Space partitioning representations.
  - C. Surface identification.
  - D. Boundary representations.

ANSWER: D

201. Sound pressure levels are measured in \_\_\_\_\_.
- A. decibels.
  - B. ounce
  - C. pound
  - D. fathom

ANSWER: A

202. MIDI stands for \_\_\_\_\_.
- A. music instruction digital interface.
  - B. musical instrument digital interface.
  - C. musical instrumental digit interface.
  - D. music instrument digit interface.

ANSWER: B

203. Digital audio data is the actual representation of a \_\_\_\_\_.
- A. light.
  - B. music
  - C. sound
  - D. noise

ANSWER: C

204. Digital audio data is also called as \_\_\_\_\_.

- A. tracks.
- B. probable
- C. examples
- D. samples

ANSWER: D

205. In Windows, system sounds are \_\_\_\_\_ files.

- A. .rar.
- B. .wav.
- C. .3gp.
- D. .wmv.

ANSWER: B

206. MIDI files are \_\_\_\_\_ than CD quality digital audio files.

- A. larger.
- B. too large
- C. smaller
- D. equal

ANSWER: C

207. The sampling frequencies often used in multimedia are \_\_\_\_\_.

- A. KHz.
- B. MHz
- C. GHz
- D. DHz

ANSWER: A

208. The value of each sample is rounded off to the nearest integer known as \_\_\_\_\_.

- A. samplization.
- B. quantization
- C. quantification
- D. digitations

ANSWER: B

209. The amount of information stored about each sample is the \_\_\_\_\_.

- A. sample no.
- B. sample volume.
- C. sample size.
- D. sample unit

ANSWER: C

210. LEDs operate on \_\_\_\_\_ frequencies.

- A. optical.
- B. infra
- C. infrared
- D. electro

ANSWER: C

211. Digitized sound is the \_\_\_\_\_ sound.

- A. sampled.
- B. covered
- C. diluted
- D. modified

ANSWER: A

212. Sample size are \_\_\_\_\_ bits.

- A. 2
- B. 4
- C. 6
- D. 8

ANSWER: D

213. A 16-bit sample provides a staggering \_\_\_\_\_ units.

- A. 16,384.
- B. 32,786.
- C. 65,536.
- D. 84,658.

ANSWER: C

214. Removing of dead air or blank space from a front of the recording is known as \_\_\_\_\_.

- A. trimming.
- B. cutting
- C. editing
- D. erasing

ANSWER: A

215. MIDI sounds are typically stored in files with the \_\_\_\_\_ extensions.

- A. .MDI.
- B. .MID.
- C. .MIDI.
- D. .MDII.

ANSWER: B

216. A popular effect in which one image transforms into another is known as \_\_\_\_\_.

- A. animation.
- B. encrypting
- C. modifying
- D. morphing

ANSWER: D

217. PAL stands for \_\_\_\_\_.

- A. pass alternative line.
- B. phase alternative line.
- C. pass alternate line.
- D. phase alternate line.

ANSWER: D

218. HDTV stands for \_\_\_\_\_.

- A. high defined television.

- B. high definition television.
- C. higher definition television.
- D. higher defined television.

ANSWER: B

219. Light comes from an \_\_\_\_\_.

- A. electron.
- B. cathode
- C. atom
- D. radium

ANSWER: C

220. VGA stands for \_\_\_\_\_.

- A. video graphics array.
- B. visual graphics array.
- C. video graph array.
- D. visual graph array.

ANSWER: B

221. The area on a display device to which a window is mapped is called a \_\_\_\_\_.

- A. window.
- B. view port
- C. coordinate
- D. section

ANSWER: B

222. A world coordinate area selected for display is called \_\_\_\_\_.

- A. window.
- B. view port
- C. view point
- D. section

ANSWER: A

223. The region against which an object is to clipped is called a \_\_\_\_\_.

- A. clipping.
- B. window
- C. view port
- D. clip window

ANSWER: D

224. The location of the point relative to the boundaries of the clipping rectangle is called \_\_\_\_\_ code.

- A. location.
- B. binary
- C. region
- D. area

ANSWER: C

225. The region code of the clipping rectangle is \_\_\_\_\_.

- A. 0000.
- B. 0001

C. 1000  
D. 1111  
ANSWER: A

226. A region code is a \_\_\_\_\_ digit binary code.

- A. 16
- B. 8
- C. 4
- D. 2

ANSWER: C

227. All-or none \_\_\_\_\_ strategy is used to keep all of the string inside a clip window.

- A. word clipping.
- B. object clipping
- C. character clipping
- D. string clipping

ANSWER: C

228. The picture parts to be saved are those that are outside the region is referred as \_\_\_\_\_ clipping.

- A. outside.
- B. exterior
- C. external
- D. extreme

ANSWER: B

229. \_\_\_\_\_ are used to describe interior properties by partitioning the spatial region containing an object into a set of small, non overlapping contiguous solids.

- A. Surface rendering.
- B. Space partitioning representation
- C. Surface identifications.
- D. Boundary representations.

ANSWER: B

230. \_\_\_\_\_ generally refers to any time sequence of visual changes in a scene

- A. Computer animation.
- B. Graphics
- C. Visualization
- D. Frame work

ANSWER: A

231. Analogy with two-dimensional polar co-ordinates the dimensions unit for solid angles is called the \_\_\_\_\_.

- A. steradian.
- B. solid angle.
- C. angle
- D. co-ordinates.

ANSWER: A

232. A \_\_\_\_\_ model is a method for explaining the properties or behavior of color within some particular control.

- A. single color model
- B. light color
- C. color
- D. spectral color

ANSWER: C

233. The dominant frequency is also called as the \_\_\_\_\_.

- A. hue.
- B. color
- C. frequency
- D. wavelength

ANSWER: A

234. The term \_\_\_\_\_ is used to refer collectively two properties describing color characteristics purity and dominant frequency.

- A. white light source.
- B. chromaticity
- C. purity
- D. saturation

ANSWER: B

235. \_\_\_\_\_ as the most commonly used boundary presentation for a 3-D graphics object

- A. Data polygon
- B. Surface polygon
- C. System polygon
- D. Area polygon

ANSWER: B

236. A three dimensional object can also be represented using \_\_\_\_\_

- A. Method
- B. Equation
- C. Point
- D. line

ANSWER: B

237. \_\_\_\_\_ is a simple object space algorithm that removes about half of the total polygon in an image as about half of the faces of objects are back faces

- A. Wire frame model
- B. Constructive solid geometry methods
- C. Isometric projection
- D. Back face removal

ANSWER: D

238. By which, we can take a view of an object from different directions and different distances

- A. Projection
- B. Rotation
- C. Translation
- D. Scaling

ANSWER: A

239. The projection that can be viewed as the projection that has a centre of projection at a finite distance

from the plane of projection are called

- A. Parallel projection
- B. Perspective projection
- C. Isometric projection
- D. Geometric projection

ANSWER: B

240. The surfaces that is blocked or hidden from view in a 3D scene are known as \_\_\_\_\_

- A. Hidden surface
- B. Frame buffer
- C. Quad tree
- D. Area buffer

ANSWER: A

241. \_\_\_\_\_ surface algorithm is based on perspective depth.

- A. Depth comparison
- B. Z-buffer or depth-buffer algorithm
- C. subdivision method
- D. back-face removal

ANSWER: B

242. In \_\_\_\_\_ year Z- buffer algorithm are described.

- A. 1995
- B. 1974
- C. 1945
- D. 1981

ANSWER: B

243. Z -buffer algorithm are \_\_\_\_\_.

- A. Simplest algorithm
- B. Complex algorithm
- C. Largest algorithm
- D. Poor algorithm.

ANSWER: A

244. The painter algorithm are based on the property of \_\_\_\_\_.

- A. Polygon buffer
- B. Frame buffer
- C. Depth buffer
- D. area buffer

ANSWER: B

245. \_\_\_\_\_ type of projection does not have the projection rays parallel to each other.

- A. axonometric projection
- B. oblique projection
- C. orthographic projection
- D. perspective projection

ANSWER: D

246. \_\_\_\_\_ are the three principal planes in orthographic projection.

- A. front, top, profile

- B. back, top, profile
- C. top, front, right side
- D. frontal, horizontal, profile

ANSWER: D

247. The painter algorithm were developed on \_\_\_\_\_

- A. 1972 by Newell
- B. 1972 by Evans
- C. 1974 by Cat mull
- D. 1976 by Evans

ANSWER: A

248. All the hidden surface algorithms employee image space approach except\_\_\_\_\_.

- A. Back face removal
- B. Depth buffer method
- C. Scan line method
- D. Depth sort method

ANSWER: A

249. \_\_\_\_\_are the two types of projections give a pictorial view of the object without convergence.

- A. orthographic and perspective
- B. oblique and axonometric
- C. perspective and oblique
- D. isometric and orthographic

ANSWER: B

250. The name of a visible surface detection algorithm is \_\_\_\_\_.

- A. Back face detection
- B. Back face removal
- C. Ray tracing
- D. Area tracing

ANSWER: A