| 1 CS602-Computer Graphics | Solved MCQ(S) | Oct <br> 18,2017 |
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| Virtual University | From Midterm Papers (1 TO 22 Lectures) | BY Arslan |



In the Name of Allāh, the Most Gracious, the Most Merciful

## MidTerm Papers Solved MCQS with Reference (1 to 22 lectures)

1. Monochrome Adapter (MA) is a single color adapter

○ True PG \# 38

- False

2. We can explain relationship between $\mathrm{X}, \mathrm{Y}$ and Z coordinates using the left hand rule.

- False
- True

3. The last column of an affine transform matrix does not affect vectors.

- True
- False

4. Plasma-panel Displays use a gas mixture and phosphorus coating for showing display.

- False
- True

5. $\left(x^{2} / a^{2}\right)-\left(y^{2} / b^{2}\right)=1$ is an equation of $\qquad$ .

- Circle
- Parabola
- Hyperbola PG \# 70
- Ellipse

6. There are $\qquad$ basic types of polygon.
$\circ 2$

- 3

PG \# 81

- 4
- 10

7. $\qquad$ Polygons are basically concave polygons that may have self-intersecting edges.

- Complex


## PG \# 81

- None of the given
- Hybrid
- Convex

8. The actual filling process in boundary filling algorithm begins when a point $\qquad$ of the figure is selected.

- Outside the boundary
- Inside the boundary PG \# 102
- At boundary
- None of the given

9. In Trivial acceptance/reject test there are four bits of nine regions, Bit 1 represents condition $\qquad$ .

- Outside half plane of left edge, to the left of left edge $\mathrm{X}<\mathrm{Xmin}$
- Outside half plane of right edge, to the right of right edge $\mathrm{X}>\mathrm{Xrnax}$
- Outside half plane of bottom edge, below bottom edge $\mathrm{Y}<\mathrm{Ymin}$
$\circ$ Outside half plane of top edge, above top edge $Y>$ Ymax PG \# 143

10. In Trivial acceptance/reject test there are four bits of nine regions, Bit 2 represents condition

- Outside half plane of left edge, to the left of left edge $X<X \min$
- Outside half plane of right edge, to the right of right edge $\mathrm{X}>\mathrm{X} \max$
- Outside half plane of bottom edge, below bottom edge Y < Ymin

PG \# 143

- Outside half plane of top edge, above top edge $\mathrm{Y}>\mathrm{Ymax}$

11. In Trivial acceptance/reject test there are four bits of nine regions, Bit 3 represents condition $\qquad$ .

- Outside half plane of left edge, to the left of left edge $\mathrm{X}<\mathrm{Xmin}$
$\circ$ Outside half plane of right edge, to the right of right edge $X>X \max$
PG \# 143
- Outside half plane of bottom edge, below bottom edge $\mathrm{Y}<\mathrm{Ymin}$
- Outside half plane of top edge, above top edge $\mathrm{Y}>\mathrm{Ymax}$

12. In Trivial acceptance/reject test there are four bits of nine regions, Bit 4 represents condition $\qquad$ .
$\circ$ Outside half plane of left edge, to the left of left edge $X<X \min$

- Outside half plane of right edge, to the right of right edge $\mathrm{X}>\mathrm{X} \max$
- Outside half plane of bottom edge, below bottom edge $\mathrm{Y}<\mathrm{Ymin}$
- Outside half plane of top edge, above top edge $\mathrm{Y}>\mathrm{Ymax}$

13. Polygons consisting of $\qquad$ can cause problems when rendering.

- Non-co-planar vertices

PG \# 169

- Co-planar vertices
- On any vertex
- None of the given

14. The homogeneous coordinates for 3D translation can be expressed as $\qquad$ .

- None of the given
- $\quad P^{\prime}=T(t x, t x, t x)+P$
- $\quad P^{\prime}=T(0,0,0)+P$
- $\mathbf{P}^{\prime}=\mathbf{T}(t x, t y, t z) . P$

PG \# 179
15. $\qquad$ is the tendency of the text to flash as it moves up or down.

- Flickering PG \# 38
- Snow
- Distortion
- None of the given

16. $\qquad$ is the flurry of bright dots that can appear anywhere on the screen.

- Flickering
- Snow effect

PG \# 38

- Distortion
- None of the given

17. In video text memory, $\qquad$ are used to display a character.

- 2 bytes

PG \# 43

- 4 bytes
- 8 bytes
- 16 bytes

18. In $\qquad$ algorithm, old color must be read before it is invoked.

- Scan line filling
- Flood fill PG \# 104
- Both scan line and flood fill
- None of the given

19. In $\qquad$ transformation one coordinate is held fixed and the other coordinate or coordinates are shifted.

- Rotation
- Reflection
- Shear


## Click Here For More Detail

- None of the given

20. The dot product of two vectors $A$ and $B$ is $\qquad$ , if the angle between them is less than 90 or greater than 270 degrees.

- Greater than zero (0)

PG \# 177

- Less than zero (0)
- Equal to Zero (0)
- None of the given

21. In $\qquad$ projection, all lines perpendicular to the projection plane are projected with no change in length.

- Cavalier and Cabinet
- Cabinet
- Cavalier

PG \# 199

- None of the given

22. First step of triangle rasterization is to be able to $\qquad$ a solid filled triangle.

- Rotate
- Render

PG \# 216

- Redraw
- None of the given

23. If the value of scaling factors $S_{x}$ and $S_{y}$ is greater than 1 , then size of objects will be $\qquad$ .

- Reduced
- Enlarged PG \# 121
- Remain same
- None of the given

If we have scaling factor $>1$ then the object size will be increased than original size; whereas; in reverse case that is scaling factor < 1 the object size will be decreased than original size and obviously there will be no change occur in size for scaling factor equal 1 .
24. Interlacing the horizontal refresh $\qquad$ .

- Is no longer used in any system
- Is necessary because of the shape of the rods in the human eye
- Is distracting and can cause eye fatigue
- Fools the human eye into thinking the horizontal refresh rate is faster

25. It is safe to assume that all raster-type monitors can accept the same input

- False
- True

26. Both Boundary Filling and Flood filling algorithms are non-recursive techniques.

- False

PG \# 102

- True

27. When defining a mesh of triangles that define the boundary of a solid, you set it up so that all of the triangles along the skin are ordered $\qquad$ when viewed from the outside.

- Perpendicular
- Parallel
- Clockwise

PG \# 208

- Anticlockwise

28. We can not explain relationship between $\mathrm{X}, \mathrm{Y}$ and Z coordinates using the left hand rule.

- False
- True

29. A $\qquad$ is the set of all points $(x, y)$ that are the same distance from the directrix and focus not on the directrix.

- Circle
- Hyperbola
- Parabola PG \# 73

30. Rotating a point requires that you know the coordinates for the point, and also know the rotation angles.

- False
- True

PG \# 180
31. The boundary-fill method requires the coordinates of $\qquad$ .

- Starting point
- Filling colour
- Boundary colour
- All of the given PG \# 102

The boundary-fill method requires the coordinates of a starting point, a fill color, and a boundary color as arguments.
32. Both Boundary Filling and Flood filling algorithms are $\qquad$ than scan line filling algorithm.

- None of the given
- Better
- Worse
- Almost same

33. Discard a line with both endpoints outside clipping boundaries is called as $\qquad$ .

- Trivial Reject

PG \# 142

- Trivial Accept
- None of the given
- Total outside

34. Because clipping against one edge is independent of all others, so it is impossible to arrange the clipping stages in a pipeline.

- True
- False

PG \# 150
Because clipping against one edge is independent of all others, it is possible to arrange the clipping stages in a pipeline.
35. If the polygons are filled, line-clipping techniques are sufficient to clip it.

- True
- False

PG \# 248
If the polygons are unfilled, line-clipping techniques are sufficient however, if the polygons are filled, the process in more complicated.
36. According to the architecture of raster graphics system, display processor memory will act as $\qquad$ .

- Video controller
- System memory

PG \# 36

- Frame buffer
- None of the given

37. Various curve functions are useful in $\qquad$ .

- Object modeling
- Graphics applications
- All of the given

PG \# 69

- Animation path specifications

Various curve functions are useful in object modeling, animation path specifications, data, function graphing, and other graphics applications.
38. $\qquad$ transformation produces shape distortions as if objects were composed of layers that are caused to slide over each other.

- Translation
- Reflection
- Shear

PG \# 129

- Rotation

39. In $\qquad$ projection, lines which are perpendicular to the projection plane are projected at $\qquad$ .

- Cabinet , $1 / 2$ length

PG \# 199

- Cavalier , $1 / 2$ length
- Cabinet, No change in length
- Cavalier, No change in length

40. This projection technique has the direction of projection perpendicular to the viewing plane, and the viewing direction is perpendicular to one of the principle faces.

- Axonometric Parallel Projection
- Oblique Parallel Projection
- Orthographic Parallel Projection

PG \# 194

- None of the given

41. Computer Graphics are used in $\qquad$ .

- Game development
- Movies development
- Simulations
- All of the given


## PG \# 6

42. $\left(x^{2} / a^{2}\right)+\left(y^{2} / b^{2}\right)=1$ is an equation of $\qquad$ .

- Parabola
- Hyperbola
- Ellipse

PG \# 70

- Circle

43. A straight line can be moved to another location by applying $\qquad$ to each of the line endpoints and redrawing the line between the new coordinates.

- Rotation
- Translation

PG \# 118

- Reflection
- Scaling factor

44. Boundary Filling Algorithm cannot work for $\qquad$ polygons.

- Convex
- Concave
- Complex
- All of the given

45. To move a $\qquad$ from one location to another, we translate the center point and redraw the same using new center point.

- Arc
- Parabola
- All of the given
- Circle


## PG \# 119

46. For modifying object shapes, $\qquad$ transformations can be used.

- Rotation
- Translation
- Shearing


## PG \# 192

- both translation and shearing

47. The boundary-fill method requires $\qquad$ .

- Coordinates of starting point
- Filling colour
- Boundary colour
- All of the given PG \# 102

48. In 2D transformations, two successive rotations applied to a point P can be denoted as $\qquad$ .

- $\mathbf{P}^{\prime}=\mathbf{R}\left(\Theta_{1}+\boldsymbol{\theta}_{2}\right) . \mathbf{P}$

PG \# 124

- $\quad P^{\prime}=\left(R\left(\Theta_{1}\right)-R\left(\Theta_{2}\right)\right) . P$
- $P^{\prime}=R\left(\Theta_{1} \times \Theta_{2}\right) . P$
- $\mathrm{P}^{\prime}=\mathrm{R}\left(\Theta_{1}\right) . \mathrm{P}$

49. We can draw 8 points corresponding to each (x.y) point in drawing $\qquad$ algorithm.

- Triangle
- Parabola
- Circle
- Hyperbola

50. If a line connecting any two points within a polygon does not intersect any edge, then it will be a
$\qquad$

- Convex

PG \# 79

- Concave
- Complex
- Hybrid

51. A column matrix is also known as $\qquad$ . (Choose best suitable answer)

- Column vector

PG \# 107

- Row vector
- Vector
- Unit vector

A column matrix is also called column vector and call a row matrix a row vector.
52. Because clipping against one edge is independent of all others, so it is $\qquad$ to arrange the clipping stages in a pipeline.

- Possible

PG \# 150

- Impossible
- sometimes impossible
- sometimes possible

53. We can explain relationship between X . Y and Z coordinates using $\qquad$ .

- Left hand rule
- Pump rule
- Jaw rule
- Right hand rule

54. The homogeneous coordinates for 3D translation can be expressed as $\qquad$ .

- $P^{\prime}=T(0,0,0)-P$
- $P^{\prime}=T(t x, t x, t x)+P$
- $\quad P^{\prime}=T(0,0,0)+P$
- $\mathbf{P}^{\prime}=\mathbf{T}(t x, t y, t z) . \mathbf{P}$


## PG \# 179

55. A $\qquad$ system (or frame) is an affine, euclidean vector space.

- Number
- Coordinate
- Unit
- Vector

56. A three-dimensional reflection can be performed relative to a selected reflection $\qquad$ .

- Point
- Plane
- Axis

PG \# 191

- Both Axis and plane

A three-dimensional reflection can be performed relative to a selected reflection axis or with respect to a selected reflection plane.

Note: Give me a feedback and your Suggestion also If you find any mistake in mcqz plz inform me Viva Contact us Page on our Site. And tell me your answer with references.

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