

CS602-COMPUTER GRAPHICS MID TERM MCQS

Prepared by: JUNAID MALIK

AL-JUNAID TECH INSTITUTE



www.vulmshelp.com



Language Courses Training Available

I'm providing paid courses in different languages within 3 Months, Certificate will be awarded after completion.

- HTML
- CSS
- JAVASCRIPT
- BOOTSTRAPS
- IQUERY
- PHP MYSQL
- NODES.JS
- REACT JS

LMS Handling Services

LMS Activities Paid Task

Assignments 95% Results

Quizes 95% Results

GDB 95% Results

For CS619 Project Feel Free To Contact With Me

Ph# 0304-1659294
Email: junaidfazal08@gmail.com

AL-JUNAID INSTITUTE OF GROUP

1 ----- is a point which make the code simpler and all other point is taken from this point.

1. Angle
2. Line
3. **Pivot**
4. Pixel

2. Computer graphic application can be found in almost all is areas except

1. Medicine in virtual surgery
2. Games
3. **Multi-threading**
4. Simulation

3. Twice the radius of circle is called as -----.

1. Area
2. **Diameter**
3. 2π Radian
4. Circumference

4 ----- are the fundamental geometric entities within a given data structure.

1. Pixels
2. Points
3. Vectors
4. **Primitives**

5. Plasma panel display use a gas mixture and phosphorus coating for showing display

1. **True**
2. False

6. In ----- Polygon filling technique the filling is done from interior point towards boundary

1. Scan- line

AL-JUNAID INSTITUTE OF GROUP

2. **Boundary**
 3. Edge
 4. Simple
7. In right hand rule z----- is beyond the region and -----behind it
1. Positive, positive
 2. **Negative, positive**
 3. Positive, negative
 4. Negative, negative
8. matrix addition can be done if two matrices have the same number of -----and-----
--
1. Column, Transpose
 2. Vectors, Rows
 3. Dimension, vectors
 4. **Rows, column**
9. ----- of a matrix are the new matrix whose rows are the column of the original
1. Inverse
 2. Zero
 3. Vector
 4. **Transpose**
10. In perspective ,projection, for correct for correct view..... Should pass through the middle of the screen
1. X-axis
 2. Y-axis
 3. **Z-axis**
 4. X-axis-axis
11. In translation every point the object is translated by the

AL-JUNAID INSTITUTE OF GROUP

1. Same amount
2. 90 degree
3. Right angle
4. Force

12----- Algorithm make calculation for an octant of a circle area and draw the whole circle

1. Cartesian Coordinates
2. Slopecircle
3. ASCII values
4. Polar coordinates

13. This projection technique has the direction of projection perpendicular to the viewing direction is perpendicular to one of the principle faces

1. Axonometric parallel projection
2. Oblique parallel projection
3. Orthographic parallel projection
4. Oblique projection

14. The mirror image for a 2D reflection is generated by rotating the object ----- about the reflection axis

1. 360 degree
2. 180 deg
3. 190 deg
4. 120 deg

15. The ordering of vertices goes ----- in a triangle

1. Top bottom
2. Bottom to top
3. Clockwise

AL-JUNAID INSTITUTE OF GROUP

4. Counter-clockwise

16. In mode 3, each pixel occupies -----bit/bits in VDU memory

1. 3 Bytes
2. 4 Bytes
3. 2 Bytes
4. 6 Bytes

17. Translation move objects without -----

1. Scaling
2. Rotation
3. Deformation
4. Scaling and Rotation

18. Drawing a-----triangle , we add only two parts to the flat triangle routine

1. Flat
2. Texture
3. Gouraud
4. Environments

19. was first person who studied the ellipse

1. Menaechmus
2. Apollonius
3. Einstein
4. Archimedes

20. is the set of points that are equidistant from its origin.

1. Line
2. Parabola
3. Circle
4. Ellipse

AL-JUNAID INSTITUTE OF GROUP

21. Three or more point that lie on the same line are called-----

1. Singular
2. **Collinear**
3. Line slop
4. Line slop and singular

22. Monochrome adapter can display-----

1. Only Games
2. Text Grapics
3. Only Graphics
4. **Only Text**

23. In Sutherland and Hodgman, s polygon clipping algorithm what will be saved for wholly inside visible

Region

1. Intersection
2. **Endpoint**
3. Intersection and endpoint
4. Nothing will be saved

24. In Raster – scan system electron beam draw a line from left to right and then back to left end to draw next line this effect is known as-----

1. Vertical Retrace
2. **Horizontal Retrace**
3. Interlaced
4. Non-interlaced

25. In ----- Projection the direction of projection make equal angles with all three principal axis

1. **Isometric**

AL-JUNAID INSTITUTE OF GROUP

2. Diametric
3. Trimetric
4. Tetrametric

26. Monochrome Adapter (MA) is a single color adapter——

- **True** **PG # 38**
- False

27. We can explain relationship between X, Y and Z coordinates using the left hand rule.

- **False**
- True

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

- **True**
- False

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

- **False**
- True

30. $(x^2 / a^2) - (y^2 / b^2) = 1$ is an equation of_____.

- Circle
- Parabola
- **Hyperbola**
- Ellipse

PG # 70

31. There are_____basic types of polygon.

AL-JUNAID INSTITUTE OF GROUP

- 2
- **3** PG # 81
- 4
- 10 0304-1659294

32. _____ Polygons are basically concave polygons that may have self-intersecting edges.

- **Complex** PG # 81
- None of the given
- Hybrid
- Convex

33. The actual filling process in boundary filling algorithm begins when a point _____ of the figure is selected.

- Outside the boundary
- **Inside the boundary** PG # 102
- At boundary
- None of the give

AL-JUNAID INSTITUTE OF GROUP

34. In Trivial acceptance/reject test there are four bits of nine regions, Bit 1 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 $X > X_{max}$
- Outside half plane of bottom edge, below bottom edge $Y < Y_{min}$
- **Outside half plane of top edge, above top edge $Y > Y_{max}$**
PG # 143

35. 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 $X > X_{max}$
- **Outside half plane of bottom edge, below bottom edge $Y < Y_{min}$**
PG # 143
- Outside half plane of top edge, above top edge $Y > Y_{max}$

36. In Trivial acceptance/reject test there are four bits of nine regions, Bit 3 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 $X > X_{max}$**
PG # 143

AL-JUNAID INSTITUTE OF GROUP

- Outside half plane of bottom edge, below bottom edge $Y < Y_{min}$
- Outside half plane of top edge, above top edge $Y > Y_{max}$

37. In Trivial acceptance/reject test there are four bits of nine regions, Bit 4 represents condition __.

- **Outside half plane of left edge, to the left of left edge $X < X_{min}$**

PG # 143

- Outside half plane of right edge, to the right of right edge $X > X_{max}$
- Outside half plane of bottom edge, below bottom edge $Y < Y_{min}$
- Outside half plane of top edge, above top edge $Y > Y_{max}$

38. Polygons consisting of _____ can cause problems when rendering.

- **Non-co-planar vertices**

PG # 169

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

39. The homogeneous coordinates for 3D translation can be expressed as ____.

- None of the given 0304-1659294
- $P' = T(tx, tx, tx) + P$

AL-JUNAID INSTITUTE OF GROUP

o $P' = T(0, 0, 0) + P$

o $P' = T(tx, ty, tz) \cdot P$

PG # 179

40. _____ is the tendency of the text to flash as it moves up or down.

o **Flickering**

PG # 38

o Snow

o Distortion

o None of the given

0304-1659294

41. _____ is the flurry of bright dots that can appear anywhere on the screen.

o Flickering

o **Snow effect**

PG # 38

o Distortion

o None of the given

42. In video text memory, _____ are used to display a character.

o **2 bytes**

PG # 43

o 4 bytes

o 8 bytes

o 16 bytes

43. In _____ algorithm, old color must be read before it is invoked.

o Scan line filling

AL-JUNAID INSTITUTE OF GROUP

○ **Flood fill**

PG # 104

- Both scan line and flood fill
- None of the given

44. In _____ transformation one coordinate is held fixed and the other coordinate or coordinates are shifted.

- Rotation
- Reflection

○ **Shear**

AL-JUNAID INSTITUTE OF GROUP

- None of the given

45. The dot product of two vectors A and B is ____, 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

46. In _____ 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

47. First step of triangle rasterization is to be able to __ a solid filled

AL-JUNAID INSTITUTE OF GROUP

triangle.

- Rotate
- **Render**
- Redraw
- None of the given

PG # 216

48. If the value of scaling factors S_x and S_y is greater than 1, then size of objects will be

_____.

- Reduced
- **Enlarged**
- Remain same
- None of the given

PG # 121

49. Interlacing the horizontal refresh_____.

- 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**

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

- **False**
- True

AL-JUNAID INSTITUTE OF GROUP

AL-JUNAID INSTITUTE OF GROUP

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

- **False** PG # 102
- True 0304-1659294

52. 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 _____ when viewed from the outside.

- Perpendicular
- Parallel
- **Clockwise** PG # 208
- Anticlockwise

53. We can not explain relationship between X, Y and Z coordinates using the left hand rule.

- False
- **True**

54. A _____ 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

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

AL-JUNAID INSTITUTE OF GROUP

- False

○ **True**

PG # 180

56. The boundary-fill method requires the coordinates of_.

- Starting point
- Filling colour
- Boundary colour

○ **All of the given**

PG # 102

57. Both Boundary Filling and Flood filling algorithms are_ than scan line filling algorithm.

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

58. Discard a line with both endpoints outside clipping boundaries is called as ____.

○ **Trivial Reject**

PG # 142

- Trivial Accept
- None of the given
- Total outside

AL-JUNAID INSTITUTE OF GROUP

59. 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

60. If the polygons are filled, line-clipping techniques are sufficient to clip it.

☐ True AL-JUNAID INSTITUTE OF GROUP

☐ **False**

PG # 248

61. According to the architecture of raster graphics system, display processor memory will act as_____.

☐ Video controller

☐ **System memory**

PG # 36

☐ Frame buffer

☐ None of the given

62. Various curve functions are useful in_____.

☐ Object modeling

☐ Graphics applications

☐ **All of the given**

PG # 69

☐ Animation path specifications

63. _____ transformation produces shape distortions as if objects were composed of layers that are caused to slide over each other.

AL-JUNAID INSTITUTE OF GROUP

- Translation
- Reflection
- **Shear**
- Rotation

PG # 129

65. In _____ projection, lines which are perpendicular to the projection plane are projected at _____.

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

PG # 199

66. 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**
- None of the given

PG # 194

67. Computer Graphics are used in _____.

- Game development
- Movies development
- Simulations

AL-JUNAID INSTITUTE OF GROUP

AL-JUNAID INSTITUTE OF GROUP

○ **All of the given**

PG # 6

68. $(x^2 / a^2) + (y^2 / b^2) = 1$ is an equation of__.

- Parabola
- Hyperbola
- **Ellipse**
- Circle

PG # 70

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

- Rotation
- **Translation**
- Reflection
- Scaling factor

PG # 118

70. Boundary Filling Algorithm cannot work for_____polygons.

- Convex
- Concave
- Complex
- **All of the given**

71. To move a _____ from one location to another, we translate the center

point and redraw the same using new center point.

AL-JUNAID INSTITUTE OF GROUP

- Arc
- Parabola
- All of the given
- **Circle** **PG # 119**

72. For modifying object shapes, _____ transformations can be used.

- Rotation
- Translation
- **Shearing** **PG # 192**
- both translation and shearing

73. The boundary-fill method requires _____.

- Coordinates of starting point
- Filling colour 0304-1659294
- Boundary colour
- **All of the given** **PG # 102**

74. In 2D transformations, two successive rotations applied to a point P can be denoted as--- --.

- **$P' = R(\Theta_1 + \Theta_2) \cdot P$** **PG # 124**
- $P' = (R(\Theta_1) - R(\Theta_2)) \cdot P$
- $P' = R(\Theta_1 \times \Theta_2) \cdot P$
- $P' = R(\Theta_1) \cdot P$

76. We can draw 8 points corresponding to each (x, y) point in

AL-JUNAID INSTITUTE OF GROUP

drawing_____algorithm.

- Triangle
- Parabola
- **Circle**
- Hyperbola

AL-JUNAID INSTITUTE OF GROUP

77. If a line connecting any two points within a polygon does not intersect any

edge, then it will be a
_____polygon.

- **Convex**
- Concave
- Complex
- Hybrid

PG # 79

78. A column matrix is also known as____. (Choose best suitable answer)

- **Column vector**
- Row vector
- Vector
- Unit vector

PG # 107

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

- **Possible**

PG # 150

AL-JUNAID INSTITUTE OF GROUP

- Impossible
- sometimes impossible
- sometimes possible

80. We can explain relationship between X. Y and Z coordinates using_____.

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

81. The homogeneous coordinates for 3D translation can be expressed as

.o $P' = T(0, 0, 0) - P$

- $P' = T(tx, tx, tx) + P$
- $P' = T(0, 0, 0) + P$
- **$P' = T(tx, ty, tz) \cdot P$**

PG # 179

82.A _____system (or frame) is an affine, euclidean vector space.

- Number
- **Coordinate**
- Unit
- Vector

83.A three-dimensional reflection can be performed relative to a selected reflection -----.

- Point

AL-JUNAID INSTITUTE OF GROUP

- Plane
- **Axis**
- Both Axis and plane

PG # 191

