Question # 1 of 10 (Start time: 08:04:29 PM) Total Marks: 1

Sutherland-Hodgeman clipping algorithm clips any polygon against a concave clip pol
lygon

Select correct option:

True

False

Question # 2 of 10 (Start time: 08:05:36 PM) Total Marks: 1

There are _____ basic types of polygon.

Select correct option:

2

3

4

5

Question # 3 of 10 (Start time: 08:06:30 PM) Total Marks: 1

Dot product of two vectors result in _____ quantity.

Select correct option:

Scalar

Vectors

Magnitude

Value

Question # 4 of 10 (Start time: 08:07:18 PM) Total Marks: 1

(x^2 / a^2) + (y^2 / b^2) = 1 is an equation of _____.

Select correct option:

Parabola

Hyperbola

Ellipse

Circle

Question # 5 of 10 (Start time: 08:08:30 PM) Total Marks: 1

In Trivial acceptance/reject test there are four bits of nine regions, Bit1 represents condition _____.

Select correct option:

Outside half plane of left edge, to the left of left edge X < Xmin

Outside half plane of right edge, to the right of right edge X > Xmax

Outside half plane of bottom edge, below bottom edge Y < Ymin

Outside half plane of top edge, above top edge Y > Ymax

Question # 6 of 10 (Start time: 08:09:42 PM) Total Marks: 1

Rotating a point requires

Select correct option:

the coordinates for the point

the rotation angles

Both of above

None of above

Question # 7 of 10 (Start time: 08:10:40 PM) Total Marks: 1

Computer graphics is very helpful in producing graphical representations for scientific visualization.

Select correct option:

True

False

Question # 8 of 10 (Start time: 08:11:02 PM) Total Marks: 1

When scaling factor Sx and Sy are assigned the same value, _____ scaling is produced that maintains relative object proportions.

Select correct option:

Uniform

Unequal

Multiform

Question # 9 of 10 (Start time: 08:12:26 PM) Total Marks: 1

A column matrix is also known as _____.

Select correct option:

Column vector

Row vector

Vector

Simple Matrix

Question # 1 of 10 (Start time: 08:17:06 PM) Total Marks: 1

Boundary Filling Algorithm can work for complex polygons.

Select correct option:

True

False

Question # 2 of 10 (Start time: 08:18:02 PM) Total Marks: 1

Various curve functions are useful in _____.

Select correct option:

Object modeling

Graphics applications

Animation path specifications

All of the given

Question # 3 of 10 (Start time: 08:18:51 PM) Total Marks: 1

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

Select correct option:

True

False

Question # 4 of 10 (Start time: 08:19:57 PM) Total Marks: 1

Shortcoming of Sutherland-Hodgeman Algorithm is concave polygons may be displayed with extensors lines

Select correct option:

True

False

Question # 5 of 10 (Start time: 08:20:42 PM) Total Marks: 1

_____ uses a divide-and-conquer strategy.

Select correct option:

Pipeline Clipping

Sutherland-Hodgeman clipping algorithm

Weiler-Atherton clipping algorithm

None of above

Question # 6 of 10 (Start time: 08:21:25 PM) Total Marks: 1

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

Select correct option:

Outside the boundary

Inside the boundary

At the boundary

Not in the boundry

Question # 7 of 10 (Start time: 08:22:21 PM) Total Marks: 1

Rotation performed around a fixed point called _____.

Select correct option:

x point rotation

y point rotation

Point of origin

Piviot point rotation

Question # 8 of 10 (Start time: 08:23:15 PM) Total Marks: 1

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

Select correct option:

Circle

Hyperbola

Parabola

Ellipse

Question # 9 of 10 (Start time: 08:24:40 PM) Total Marks: 1

Vectors can be multiplied in a way

Select correct option:

Dot Product

Cross Product

Both of above

None of above

Question # 10 of 10 (Start time: 08:26:05 PM) Total Marks: 1

_____ is used for circumference of a circle.

Select correct option:

2 * r

2 * pi * c

2 * pi

None of the given option

Question # 1 of 10 (Start time: 08:27:44 PM) Total Marks: 1

The process of moving points in space is called _____.

Select correct option:

Redering

Modeling

Meshing

None of above

Question # 2 of 10 (Start time: 08:28:33 PM) Total Marks: 1

Global coordinate systems can be defined with respect to local coordinate system

Select correct option:

True

False

Question # 4 of 10 (Start time: 08:30:06 PM) Total Marks: 1

A two dimensional rotation is applied to an object by repositioning it along a _____ path in the XY plane

Select correct option:

Straight

Circular

Oval

Ellipse

Question # 5 of 10 (Start time: 08:31:13 PM) Total Marks: 1

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

Select correct option:

2 bytes

4 bytes

8 bytes

16 bytes

Question # 6 of 10 (Start time: 08:32:34 PM) Total Marks: 1

In 2D transformation, two successive rotations can be performed in any order (rotation 1 then rotation 2 or rotation 2 then rotation 1).

Select correct option:

True

False

Question # 7 of 10 (Start time: 08:33:15 PM) Total Marks: 1

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

Select correct option:

Rotation

Reflection

Shear

Scaling

Question # 8 of 10 (Start time: 08:33:57 PM) Total Marks: 1

Computer Graphics are used in _____.

Select correct option:

Game development

Movies development

Simulations

All of the given

Question # 9 of 10 (Start time: 08:34:17 PM) Total Marks: 1

_____ is the process of describing an object or scene so that we can construct an image of it

Select correct option:

Rendering

Modeling

Meshing

None of above

Question # 10 of 10 (Start time: 08:34:57 PM) Total Marks: 1

Both Boundary Filling and Flood filling algorithms are _____ as compared to scan line filling algorithm.

Select correct option:

Better

Worse

Almost same

Good

Question # 1 of 10 (Start time: 08:38:26 PM) Total Marks: 1

If a line connecting any two points within a polygon does not intersect any edge, then it will be a _____ polygon(s).

Select correct option:

Convex

Concave

Complex

Concave and Complex

Question # 2 of 10 (Start time: 08:39:36 PM) Total Marks: 1

(x^2 / a^2) – (y^2 / b^2) = 1 is an equation of _____.

Select correct option:

Circle

Parabola

Hyperbola

Ellipse

Question # 3 of 10 (Start time: 08:40:20 PM) Total Marks: 1

Dot product of two vectors result in _____ quantity.

Select correct option:

Scalar

Vectors

Magnitude

Value

Question # 4 of 10 (Start time: 08:41:34 PM) Total Marks: 1

In 2D transformations, two successive rotations applied to a point P can be denoted as_____ (Where ? represents theta).

Select correct option:

P' = R(?1 + ?2) . P

P' = (R(?1) + R(?2)) . P

P' = R(?1 x ?2) . P

P' = R(?1) . P

Question # 5 of 10 (Start time: 08:42:53 PM) Total Marks: 1

By preserving the original shape of an object with a scaling is called _____ scaling.

Select correct option:

parallel

vertical

horizental

none of given

Question # 6 of 10 (Start time: 08:44:24 PM) Total Marks: 1

Tomography is the technique used in _____.

Select correct option:

X-rays photography

Pixel paint

Entertainment

Artis's paintbrush

Question # 7 of 10 (Start time: 08:47:14 PM) Total Marks: 1

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

Select correct option:

Hyperbola

Parabola

Circle

Line

Question # 8 of 10 (Start time: 08:48:08 PM) Total Marks: 1

(x^2 / a^2) + (y^2 / b^2) = 1 is an equation of _____.

Select correct option:

Parabola

Hyperbola

Ellipse

Circle

Question # 9 of 10 (Start time: 08:48:38 PM) Total Marks: 1

In 2D transformation, two successive rotations can be performed in any order (rotation 1 then rotation 2 or rotation 2 then rotation 1).

Select correct option:

True

False

Question # 10 of 10 (Start time: 08:49:21 PM) Total Marks: 1

A unit vector has zero magnitude.

Select correct option:

True

False

Saving...

Question # 1 of 10 (Start time: 08:51:28 PM) Total Marks: 1

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

Select correct option:

2 bytes

4 bytes

8 bytes

16 bytes

Question # 2 of 10 (Start time: 08:52:52 PM) Total Marks: 1

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.

Select correct option:

Rotation

Translation

Reflection

Scaling factor

Question # 3 of 10 (Start time: 08:53:28 PM) Total Marks: 1

DDA abbreviated for _____.

Select correct option:

Discrete data analyzer

Digital data analyzer

Digital differential analyzer

Different Analog differential analyzers

Question # 4 of 10 (Start time: 08:54:33 PM) Total Marks: 1

A scaling transformation alters the _____ of an object.

Select correct option:

Shape

Position

Size

Rotation

Question # 5 of 10 (Start time: 08:55:07 PM) Total Marks: 1

A column matrix is also known as _____.

Select correct option:

Column vector

Row vector

Vector

Simple Matrix

Question # 6 of 10 (Start time: 08:55:38 PM) Total Marks: 1

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

Select correct option:

Hyperbola

Parabola

Circle

Line

Question # 7 of 10 (Start time: 08:56:19 PM) Total Marks: 1

We can draw eight points corresponding to each (x , y) point calculation in _____ drawing algorithm.

Select correct option:

Sutherland

Mid Clipping

Mid Point Circle

Sutherland Clipping

Question # 8 of 10 (Start time: 08:57:31 PM) Total Marks: 1

We can take transpose of any matrix.

Select correct option:

True

False

Question # 9 of 10 (Start time: 08:58:13 PM) Total Marks: 1

According to the architecture of raster graphics system, display processor memory will act as _____.

Select correct option:

Video controller

System memory

Frame buffer

Video controller and System memory

Question # 10 of 10 (Start time: 08:59:24 PM) Total Marks: 1

Vectors can be multiplied in a way

Select correct option:

Dot Product

Cross Product

Both of above

None of above

[9:01:12 PM] Rosiiii.....: 3

Question # 1 of 10 (Start time: 09:03:22 PM) Total Marks: 1

Parity is a concept used to determine which _____ lie within a polygon.

Select correct option:

Edge

Vertices

Pixels

Points

Question # 4 of 10 (Start time: 09:06:42 PM) Total Marks: 1

Computer Graphics are used in _____.

Select correct option:

Game development

Movies development

Simulations

All of the given

Question # 5 of 10 (Start time: 09:07:18 PM) Total Marks: 1

In 2D transformation, two successive rotations can be performed in any order (rotation 1 then rotation 2 or rotation 2 then rotation 1).

Select correct option:

True

False

Question # 6 of 10 (Start time: 09:07:47 PM) Total Marks: 1

_____ is used to move a point, or a set of points, linearly in space

Select correct option:

Transformation

Translation

Scaling

None of above

Question # 7 of 10 (Start time: 09:08:48 PM) Total Marks: 1

Rotating a point requires

Select correct option:

the coordinates for the point

the rotation angles

Both of above

None of above

Question # 8 of 10 (Start time: 09:09:27 PM) Total Marks: 1

Monochrome Adapter (MA) is a single color adapter

Select correct option:

True

False

Question # 9 of 10 (Start time: 09:10:01 PM) Total Marks: 1

"Computer Graphics" and "Computer Vision" are,

Select correct option:

Same fields

Totally different fields

Interrelated fields

None of the given

Question # 10 of 10 (Start time: 09:11:16 PM) Total Marks: 1

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

Select correct option:

2 bytes

4 bytes

8 bytes

16 bytes

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

Select correct option:

Outside half plane of left edge, to the left of left edge X < Xmin

Outside half plane of right edge, to the right of right edge X > Xmax

Outside half plane of bottom edge, below bottom edge Y < Ymin

Outside half plane of top edge, above top edge Y > Ymax

Question # 3 of 10 (Start time: 11:16:59 PM) Total Marks: 1

In 2D transformation, _____ can be achieved by rotating the object about 180 degrees.

Select correct option:

Translation

Scaling

Shear

Reflection

sec(s)

Question # 4 of 10 (Start time: 11:18:22 PM) Total Marks: 1

If the values of scaling factors sx and sy are less than 1, then size of object will be _____.

Select correct option:

Reduced

Remain same

Enlarged

Shear

Question # 5 of 10 (Start time: 11:18:58 PM) Total Marks: 1

If the direction of projection is (at 90) perpendicular to the projection plane then it is

Select correct option:

Perspective Projection

Parallel Projection

Oblique Projection

none of given(orthogonal projection)

Question # 7 of 10 (Start time: 11:20:34 PM) Total Marks: 1

Concave polygons are a superset of _____ polygons, having fewer restrictions than _____ polygons.

Select correct option:

Hybrid, Complex

Concave, Complex

Convex, Convex

Complex, Complex

Quiz Start Time: 11:16 PM

Time Left 88

sec(s)

Question # 8 of 10 (Start time: 11:21:36 PM) Total Marks: 1

Twice the radius of circle is called as _____.

Select correct option:

Area

Diameter

2*Pi Radian

Circumference

Question # 9 of 10 (Start time: 11:22:37 PM) Total Marks: 1

A two dimensional rotation is applied to an object by repositioning it along a _____ path in the XY plane

Select correct option:

Straight

Circular

Oval

Ellipse

The process of subdivision an entity or surface into one or more non-overlapping primitives.

Select correct option:

Rendering

Modeling

Meshing

None of above(tesselation)

Question # 4 of 10 (Start time: 11:25:40 PM) Total Marks: 1

In 2D transformation, _____ can be achieved by rotating the object about 180 degrees.

Select correct option:

Translation

Scaling

Shear

Reflection

Question # 5 of 10 (Start time: 11:26:29 PM) Total Marks: 1

Save a line with both endpoints inside all clipping boundaries is called as _____.

Select correct option:

Total inside

Trivial reject

Trivial accept

Total outside

Question # 6 of 10 (Start time: 11:27:07 PM) Total Marks: 1

In Trivial acceptance/reject test there are four bits of nine regions, Bit3 represents condition _____.

Outside half plane of left edge, to the left of left edge X < Xmin

Outside half plane of right edge, to the right of right edge X > Xmax

Outside half plane of bottom edge, below bottom edge Y < Ymin

Outside half plane of top edge, above top edge Y > Ymax

_____ is used to move a point, or a set of points, linearly in space

Select correct option:

Transformation

Translation

Scaling

None of above

Question # 1 of 10 (Start time: 11:32:20 PM) Total Marks: 1

Three or more points that lie on the same line are called _____.

Select correct option:

Singular

Collinear

Line slop

Line slop and Singular

Question # 2 of 10 (Start time: 11:33:16 PM) Total Marks: 1

Computer Graphics are used in _____.

Select correct option:

Game development

Movies development

Simulations

All of the given

Question # 5 of 10 (Start time: 11:35:32 PM) Total Marks: 1

Global coordinate systems can be defined with respect to local coordinate system

Select correct option:

True

False

Question # 6 of 10 (Start time: 11:35:59 PM) Total Marks: 1

By preserving the original shape of an object with a scaling is called _____ scaling.

Select correct option:

parallel

vertical

horizental

none of given

Question # 7 of 10 (Start time: 11:36:17 PM) Total Marks: 1

We can draw the circle using _____.

Select correct option:

Pentane

Hexanes

Trident

Octants

Question # 8 of 10 (Start time: 11:36:51 PM) Total Marks: 1

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

Select correct option:

Hyperbola

Parabola

Circle

Line

Question # 9 of 10 (Start time: 11:37:10 PM) Total Marks: 1

Translation moves objects without _____.

Select correct option:

Scaling

Rotation

Deformation

Scaling and Rotation

Question # 10 of 10 (Start time: 11:37:50 PM) Total Marks: 1

Which of the following is NOT a modern application for Computer Graphics ----------

Select correct option:

Computer Aided Geometric Design

Video Games

Stop-motion animation

Scientific Visualization

Question#1

Rotating a point requires

- The coordinates for the point
- The rotation angles
- **Both of above** **Page No 175**
- None of above

Question#2

In Trimetric the direction of projection makes unequal angle with the three principal axes

- **True** **Page No 192**
- False

Question#3

We can draw the circle

- Pentane
- Hexanes
- Trident
- **Octants** **Page No 61**

Question#4

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

- Rotation
- Translation
- Reflection
- **Shear** **Page No 124**

Question#5

_____ is the process of describing an object or scene so that we can construct an image of it

- Rendering
- **Modeling** **Page No 159**
- Meshing
- None of above

Question#6

Boundary Filling Algorithm can work for complex polygons.

- True
- **False (Not Sure)**

Question#7

Concave polygons are superset of_____ polygons, having fewer restrictions than _____ polygons.

- Hybrid, Complex
- Concave, Complex
- **Convex, Convex Page No. 79**
- Complex, Complex

Question#8

Incomplete

Question#9

A unit vector has zero magnitude.

- True
- **False Page No.169**

Question#10

Each hyperbola consists of two _____.

- Vertices
- Nodes
- **Branches Page No. 70**
- Points

Question#1

Parity is a concept used to determine which _____ lie within a polygon.

- Edge
- Vertices
- Pixels Page No.80
- Points

Question#2

Various curve functions are useful in _____.

- Object modeling
- Graphics applications
- Animation path specifications
- **All of the given Page No.69**

Question#3

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

- Complex Page No.79
- Hybrid
- Convex
- Convex and Hybrid

Question#4

Concave polygons are a superset of _____ polygons, having fewer restrictions than _____ polygons.

- Hybrid, Complex
- Concave, Complex
- Convex, Convex Page No.79
- Complex, Complex

Question#5

There are _____ basic types of polygon.

- 2
- **3 Page No.81**
- 4
- 5

Question#5

Both Boundary Filling and Flood filling algorithms are _____ as compared to scan

line filling algorithm.

- **Better (not sure)**
- Worse
- Almost same
- Good

Question#5

We can draw eight points corresponding to each (x , y) point calculation in _____ drawing algorithm.

- Sutherland
- Mid Clipping
- **Midpoint Circle Page No.61**
- Sutherland Clipping

Question#6

The horizontal refresh ----------

- Is no longer used in any system
- Is distracting and can cause eye fatigue
- Eye into thinking the horizontal refresh rate is faster

Question#7

Computer graphics is very helpful in producing graphical representations for scientific visualization.

- **True Page No.9**
- False

Question#8

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

- **2 bytes Pages No.43**
- 4 bytes
- 8 bytes
- 16 bytes

Question # 3 of 10 (Start time: 05:54:29 AM)
Twice the radius of circle is called as _____.

1. Area
2. **Diameter** **Page No.59**
3. 2*Pi Radian
4. Circumference

Question # 5 of 10 (Start time: 05:56:14 AM)
Both Boundary Filling and Flood filling algorithms are non-recursive techniques.

1. True
2. **False**

Question # 7 of 10 (Start time: 05:58:54 AM)
We can take transpose of any matrix.

- **True**
- False

Question # 9 of 10 (Start time: 06:01:03 AM)
_____ is the set of points that are equidistant from its origin.

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

Locations can be translated or "transformed" from one coordinate system to another.

- **True Page No.158**
- False

Question

Vectors can be multiplied in a way

- Dot product
- Cross product
- **Both of above**
- None of given

Question

Process of moving points in space is called

- Rendering
- Modeling
- Meshing
- **None of above** **Transformation Page No.173**

Question

Sutherland-Hodgeman clipping algorithm clips any polygon against a concave clip polygon

- True
- **False Page No.243**

Question

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 < Xmin Page No.138**
- Outside half plane of right edge, to the right of right edge X > Xmax
- Outside half plane of bottom edge, below bottom edge Y < Ymin
- Outside half plane of top edge, above top edge Y > Ymax

Question

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 < Xmin

- Outside half plane of right edge, to the right of right edge X > Xmax
- Outside half plane of bottom edge, below bottom edge Y < Ymin
- **Outside half plane of top edge, above top edge Y > Ymax Page No.138**

Question

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 < Xmin
- Outside half plane of right edge, to the right of right edge X > Xmax
- **Outside half plane of bottom edge, below bottom edge Y < Ymin Page No.138**
- Outside half plane of top edge, above top edge Y > Ymax

Question

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 < Xmin
- Outside half plane of right edge, to the right of right edge X > Xmax Page No.138
- Outside half plane of bottom edge, below bottom edge Y < Ymin
- Outside half plane of top edge, above top edge Y > Ymax

Question

The process of subdivision an entity or surface into one or more non-overlapping primitives.

- Rendering
- Modeling
- Meshing
- **None of above Page No. 162**

Question

Shortcoming of Sutherland-Hodgeman Algorithm is concave polygons may be displayed with extensors lines

- **True Page No.150**
- False

A * B – |A| * |B| * cos(?) where ? is the angle between the two vectors

- **Cross Product**
- **Dot Product Page No.171**

Question

_____is used to move a point, or a set of points, linearly in space

- Transformation
- Translation Page No.173
- Scaling
- None of above

Question

Save a line with both endpoints inside all clipping boundaries.

- **Trivial Accept Page No.137**
- Total inside
- Trivial Reject
- Total outside

_____uses a divide and conquer strategy.

- **Sutherland Hodgman clipping Algorithm Page No.244**
- Pipeline clipping
- Weiler-Atherton algorithm
- None of above

Question No.01:

Each number that makes up a matrix is called an _____ of the matrix.

- **Element Page No.101**
- Variable
- Value
- Component

Question No.02:

Which one of the following step is not involved to write pixel using video BIOS services.

- Setting desired video mode
- Using BIOS service to set color of a screen pixel
- Calling BIOS interrupt to execute the process of writing pixel.
- **Using OpenGL service to set color of a screen pixel Page No.45**

Question No.03:

Shadow mask methods can display a _____ range of colors.

- Small
- **Wide Page No.29**
- Random
- Crazy

Question No.04

Using Cohen-Sutherland line clipping, it is impossible for a vertex to be labeled 1111.

- **True (Not Sure)**
- False

Question No.05

Intensity of the electron beam is controlled by setting _____ levels on the control grid, a metal cylinder that fits over the cathode.

- Amplitude
- Current
- **Voltage Page No.26**
- Electron

Question

Sutherland-Hodgeman clipping algorithm clips any polygon against a concave clip polygon

Select correct option:

- **True Page No141**
- False

Question

(x^2 / a^2) + (y^2 / b^2) − 1 is an equation of _____.

Select correct option:

- Parabola
- Hyperbola
- **Ellipse Page No.65**
- Circle

Question # 8 of 10 (Start time: 08:11:02 PM) Total Marks: 1

When scaling factor Sx and Sy are assigned the same value, _____ scaling is produced that maintains relative object proportions.

Select correct option:

- **Uniform Page No.116**
- Unequal
- Multiform

Question # 1 of 10 (Start time: 08:17:06 PM) Total Marks: 1

Boundary Filling Algorithm can work for complex polygons.

Select correct option:

- True
- **False (Not Sure)**

Question

Rotation performed around a fixed point called _____.

Select correct option:

- x point rotation
- y point rotation
- Point of origin
- **Piviot point rotation Page No.114**

Question # 4 of 10 (Start time: 08:30:06 PM) Total Marks: 1

A two dimensional rotation is applied to an object by repositioning it along a _____ path in the XY plane

Select correct option:

- Straight
- **Circular**
- Oval
- Ellipse

Question # 3 of 10 (Start time: 08:53:28 PM) Total Marks: 1

DDA abbreviated for _____.

Select correct option:

- Discrete data analyzer
- Digital data analyzer
- Digital differential analyzer Page No.54
- Different Analog differential analyzers

Question # 4 of 10 (Start time: 08:54:33 PM) Total Marks: 1

A scaling transformation alters the _____ of an object.

Select correct option:

- Shape
- Position
- **Size Page No.13**
- Rotation

Question # 5 of 10 (Start time: 08:42:53 PM) Total Marks: 1

By preserving the original shape of an object with a scaling is called _____ scaling.

Select correct option:

- parallel
- vertical
- horizental
- **none of given (Not Sure)**

Question # 1
Translation moves objects without _____
. Select correct option:

Scaling
Rotation
Deformation **Page no : 113**
Scaling and Rotation

Question # 2

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

Rotation
Translat ion
Reflecti on
Shear **Page no :124**

Ref: A transformation that distorts the shape of an object such that the transformed shape appears as if the object were composed of internal layers that had been caused to slide over each other is called a shear.

Question # 3
Computer Graphics are used in _____
. Select correct option:

Game development
Movies development
Simulations
All of the given **Page no : 6**

Question # 4
A two dimensional rotation is applied to an object by repositioning it along a _____ path in the XY plane
Select correct option:

Straight
Circular **Page no : 114**
Oval
Ellipse

Question # 5
If the value of scaling factors sx and sy is greater than 1, then size of objects will be _____
. Select correct option:

Reduced
Enlarged **Page no : 116**
Remain same
Shear

Question # 6
Various curve functions are useful in _____
. Select correct option:

Object modeling
Graphics applications
Animation path specifications
All of the given **Page no : 69**

Question # 7

Sutherland-Hodgeman clipping algorithm clips any polygon against a concave clip polygon
Select correct option:

True
False **Page no :141**

Question # 8
In video text memory, _____ are used to display a character. Select correct option:

2 bytes **Page no :43**
4 bytes
8 bytes
16 bytes
Question # 9
Which of the following is NOT a modern application for Computer Graphics ----------
----
Select correct option:

Computer Aided Geometric Design
Video Games
Stop-motion animation **Page no : 6**
Scientific Visualization

Question # 10
A * B = |A| * |B| * cos(?) Where ? is the angle between the two vectors
Select correct option:

Cross Product
Dot Product **Page no : 171**

Question # 12

Cross product of two vectors results in a _____

. Vector **Page no : 173**

Question # 13

Shortcoming of Sutherland-Hodgeman Algorithm is concave polygons may be displayed with extensors lines

True **Page no : 244**

Question # 14

In 2D transformations, two successive rotations applied to a point P can be denoted as_____ (Where ? represents theta).

$P' = R(\theta) \cdot P$ **Page no : 256**

Question # 15

Global coordinate systems can be defined with respect to

local coordinate system. False **Page no :**

158

Question # 16

Locations can be translated or "transformed" from one coordinate system to the other.

True **Page no : 158**

Question # 17

A column matrix is also known as _____

. Column Vector **Page no : 102**

Question # 18

Dot product of two vectors results in_____ quantity.

Scalar

Question # 19

In Trimetric the direction of projection makes unequal angles with the three principal axes

Select correct option:

True **Page no : 192**

False

Question # 20

_____ uses a divide-and-

conquer strategy. Select correct

option:

Pipeline Clipping
Sutherland-Hodgeman clipping algorithm **Page no :244**
Weiler-Atherton clipping algorithm
None of above

Question # 21

Finding unit vector is done by simply dividing each

component by the width. Select correct option:

True
False **Page no : 169**

Question # 22

_____ is the process of describing an object or scene so that we can construct an image of it

Select correct

option:

Rendering
Modeling **Page no : 251**
Meshing
None of above

Question # 23

The process of moving the points so that the POV is at the origin looking down the +Y axis is called

normalization. Select

correct option:

True
False **Page no : 175**

Question # 24

A _____ can be performed relative to a selected reflection axis or with respect to a selected reflection plane.

Select correct option:

rotation
projection
reflection **Page no : 186**
none of given

Question # 25

To show 256 colors , the no of bits required for each pixel are

8 **as per formula 256 takes 2^8 so 8 -bits are required.**
16
32
64

Question #26

25 * 80 resolution with 16 colors supports

Text mode **Page no : 43**
Graphics mode

None

Question#27

Two matrices are said to be equal, if they have

Same order

Same corresponding elements

Same order and same corresponding elements. Page no : 103

Different elements

Question#27

Two points are said to be collinear, if they lie on the

Same line Page no : 53

Different but parallel lines

Either on the same plane or two parallel

planes different plane . **Question#28**

A Polygon is convex, if the line connecting:

Any two points outside the polygon intersects its boundary

Any two points inside the polygon don't intersect any edges of the polygon.

A point inside the boundary with any point outside, does not intersect the polygon boundary

Any two vertices, intersects some edge of polygon. Page no: 78

Question#29

The father of Computer

Graphics is: Robert

Burton

Ivan Sutherland

Pytor Tchaikovsky

Turner Whitted

Question#30

The equation of hyperbola centered at origin (if the transverse axis is along x -axis) can be given as:

x2 b2+ y2

a2-1 = 0 x2

b2+ y2 a2+1

= 0

x2 a2- y2 b2-

1 = 0 x2 b2 -

y2 a2-1 = 0

Question#31

Which of the following statements is not true about flood-fill and boundary-fill? Algorithms?

Both are used for filling of close figure

Both can be implemented as recursive as well as iterative methods

Flood-fill is best for filling of triangle

A complex polygon can be filled with 8 connected approaches

Question#32

Which one is not valid out code to perform trivial accept / reject test in line clipping:

1101

1001

0101

0110

Question#33

Which one of the following is not the graphics library is use:

FastG

L

Open

GL

Direct

X

EasyG

L

Question#34

The circle and ellipse are symmetric across 8 octants.

True

x2 a2- y2 b2-

1 = 0 x2 b2 -

y2 a2-1 = 0

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The circle and ellipse are symmetric across 8 octants.

False **Page no : 66**

True

Question#35

UV light is used in Plasma Panel displays to excite phosphor.

True **Page no : 30**

False

Question#36

Which of the following is not true about matrices?

A + B = B + A

a(A + B) = aA + aB

$(A^T)^T = A^T$ **Page no :107**

A + (B + C) = (A + B) + C

Question#37

According to Odd Parity Rule, a point is inside the polygon, if:

Line from an outside point to this point does not cross the edges odd number of times

Line from any point to this point crosses the edges odd number of times. Page no: 80

Line from an outside point to this point crosses the edges odd number of times Line from this point to any point outside the polygon intersects any edge **Question # 38**

As opposed to direct memory access method, BIOS routines provide an easier and faster method of drawing pixels on screen.

True

False **Page no : 48**

Question # 39

A Polygon is complex, if the line connecting:

Any two points outside the polygon intersects its boundary

Any two points inside the polygon intersects its boundary

A point inside the boundary with any point outside, does not intersect the polygon boundary

Any two vertices, intersects some edge of polygon.

Ref: Complex polygons are basically concave polygons that may have self-intersecting edges. I think no any option is true.

Question # 40

When a point P(x,y) is rotated by θ the coordinates of transformed point P' are given as:

x' = x cos(θ) – y sin(θ), y' = x sin(θ) + y cos(θ) x' = y cos(θ) – x sin(θ), y' = y sin(θ) + x cos(θ) x' = x cos(θ) + y sin(θ), y' = x sin(θ) – y cos(θ) x' = y cos(θ) + x sin(θ), y' = y sin(θ) – x cos(θ)

Question # 41

The amount of time it takes to illuminate a specific location on phosphor coated screen is called Persistence.

True Page no : 27

False

Question # 42

Incremental line drawing algorithm makes use of the equation of straight line.

True Page no : 53

False

Question # 43

In matrix multiplication:

The two matrices must be square

The number of rows of 1st matrix must be the same as the number of columns of the second.

The two matrices must either be row matrices or column matrices

The number of columns of 1st matrix must be the same as the number of rows of the second.

Ref:
http://en.wikipedia.org/wiki/Matrix_multiplication

Question # 44

In Horizontal retrace, after completion of all the pixels in a scan line, the refreshing continues from the 1st pixel of the next scan line.

Tru
e

Fals
e

Question # 45

Parity Rule is used to determine whether a pixel is inside a polygon or not.

True Page no : 80

False

Question # 45

In Pixmap exactly one bit is used to hold color value of each pixel.

True

False Page no : 28

Question # 46

When dot product of two vectors equals zero, this implies that the two vectors are:

Parallel to each other

Orthogonal (perpendicular) to each other. Page no : 172

Intersect each other

Equal to each other

Question # 47

The Boundary Fill and Flood Fill algorithms: Must use 4-connected approach

Must use 8-connected approach

May use 4-connected or 8-connected approach Page no : 100

Must not use recursive approach

Question # 48

Intensity of the electron beam is controlled by setting _____ levels on the control grid, a metal cylinder that fits over the cathode.

Amplitude

Current

Voltage Page no : 26

Electron

Question # 49

Using Cohen-Sutherland line clipping, it is impossible for a vertex to be Labeled 1111.

True

False

Question # 50

Shadow mask methods can display a _____ range of colors.

Small

Wide **Page no : 20**

Rando

m

crazy

Question # 51

Which one of the following step is not involved to write pixel using video BIOS
services.

Setting desired video mode

Using bios service to set color of a screen pixel

Calling bios interrupt to execute the process of writing pixel.

Using OpenGL service to set color of a screen pixel
Page no :45

Question # 52

Each number that makes up a matrix is called an _____
of the matrix. **Element** **Page no : 101**

Variable

Value

Component