

ma todayx paper...

All mcqz were from handoutx mostly from boundry fill algorithm n from last 2 lecturex....

Q1. define rotation in 2d ? (2)

Q2. describe the diagram that is On the page # 200 2nd diagram... (5)

q3. formula to find length of the vector.

q4. write a c program to draw a circle using polar coordinatx

baqi yaad nh..... :/

yeah aik question tha find the projection of vector (5,6,8) on yz plane... something lyk that....

20 mcqs mostly were from last lectures.

6 long qs:

write the two techniques of triangle rasterization. 2 marks

ek tha k in 2-D can a polygon be divided if yes then write the reason?

what is the taxonomy of the families of the projection? shayd 5 mrks ka tha

write the following formula in column 2? 5 marks

ek table given tha jiske ek side par names or dusri side par unke formulas likhne the in 3-D?

translation $P' =$

scaling $P' =$

rotation $P' =$

shear $P' =$

composite transition $P' =$

CS602 Current Midterm Papers:

Paper 1

ma todayx paper...

All mcqz were from handoutx mostly from boundry fill algorithm n from last 2 lecturex....

Q1. define rotation in 2d ? (2)

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Paper 2

20 mcqs mostly were from last lectures.

6 long qs:

write the two techniques of triangle rasterization. 2 marks

ek tha k in 2-D can a polygon be divided if yes then write the reason?

what is the taxonomy of the families of the projection? shayd 5 mrks ka tha

write the following formula in column 2? 5 marks

ek table given tha jiske ek side par names or dusri side par unke formulas likhne the in 3-D?

translation $P' =$

scaling $P' =$

rotation $P' =$

shear $P' =$

composite transition $P' =$

baki yaad naiiiiiiiiiii

Paper 3

My today paper
My today paper

Two special type of oblique projection (5)
aik Question tha jis main composite translation find karnie the (5)
character of 3-D (3)
write c++ code of rotation (x1,x2)(y1,y2) (2)
aik question main just translation find karnie the (2)
3 number ka aik or qustion hai woh mujay yad nhi ah raha hai
or MCQ mostly were in Projection and last 5-6 chapters nothing in old chapters
jis nay last 6-7 chapter kar liay achay say 100% they can solve the paper
Best of Luck others

Cs602 latest midterm Solve paper by LIBRIANSMINE with 100% passing guaranty by me

MCQs almost from attach file
long Question
projection techniques
translation on according to 3d
clipping algorithm
diferance in sutherland lian barsky algorithm
trival clipping acceptance/reject test
I was a programing code
CS602_Solved_Mid_Term_Paper-Spring_2013

Today paper of CS602 on 25-5-2013 at 11:00am

BC090200975

Total MCQs 20 of each one maks

Two question of 2 marksis

Two question of 3 marks

Two question of 5 marks

MCQ'S

1. Interlacing the horizontal refresh_____
2. Tessellation can be adaptive to the _____ degree of curvature of a surface.

Local

Static

Global

Variable

1. DDA stands for_____

Digital Differential Analyzer

1. The _____ test are performed for the midpoints b/w pixwls near the circle parth at each sampling step.

Parabolla function

Ellipse funtion

Circle funtion

None of the above

1. The actual filling process in boundary filling algorith begins when a point _____ of the figured is selected.

Outside the boundary

Inside the boundary

At boundary

None of the above

1. Discard a line with both endpoints outside clipping boundary is called as _____

Trivial accept

Trivial reject

Total outside

None of the above

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

Flickering

Snow

Distortion

None of the above

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

Circle

Parabola

Hyperbola

Ellipse

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

Scane-line Filling

Floodfill

Both of the above

None of the above

1. The dot product of two vectors A & B is _____ if the angle b/w them is less than 90 or greater than 270.

Greater than zero

Less than zero

Equal to zero

None of the above

1. The axonometric projection is _____ where the direction of projection makes same angle with all axes.

DIMETRIC

Isometric

Oblique

Trimetric

1. The _____ technique has the direction of projection perpendicular to the viewing plane, but the viewing direction is NOT perpendicular to one of the principle faces.

We can draw the circle using _____

Pentane

Hexane

Trident

Octant

1. _____ direct view storage tube maintains the picture display.

Electron gun

Proton gun

Flood gun

All of the above

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

Arc

Parabola

Circle

All of the above

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

Possible

Impossible

Sometimes impossible

None of the above

1. If the polygons are _____ line clipping techniques are sufficient for clipping.

Filled
Unfilled
Half filled
All of the above

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

Non-coplanar vertices
Co-planar vertices
Any vertices
None of the above

SUBJECTIVE:

We want to scale an object two times the existing x-axis and y-axis. Write the scaling matrix for this transformation. (2 MARKS)

What we must consider before rotation of a point? (2 MARKS)

How can we find distance between two 3D points using mathematical notation? (3 MARKS)

Write final expression of composite rotation matrix. (3 MARKS)

Write points of difference between Cavalier and cabinet. (5 MARKS)

Write the formulas of the following: (5 MARKS)

translation P' =
scaling P' =
rotation P' =
composite transition P' =

Also concern following past papers for preparation:

PAST PAPERS:

Total MCQs 20 of each one marks

Two question of 2 marks

Two question of 3 marks

Two question of 5 marks

Q1. define rotation in 2d ? (2)

Q2. describe the diagram that is on the page # 200 2nd diagram... (5)

q3. formula to find length of the vector.

q4. write a c program to draw a circle using polar coordinates

on December 12, 2012 at 10:52am

Today CS602 Midterm Term Paper

Total Question = 26

Total Mcqs of 1 marks of each = 20

Total 2 Marks Question = 2

Total 3 Marks Question = 2

Total 5 Marks Question = 2

write the two techniques of triangle rasterization. 2 marks

Can a polygon in 2-D be divided if yes then write the reason?

What is the taxonomy of the families of the projection? 5 marks

Write the following formula in column 2? 5 marks

Table given the side par names or dusri side par unke formulas likhne in 3-D?

translation P' =
scaling P' =
rotation P' =
shear P' =
composite transition P' =

What is meant by the viewing Frustum? (2)

In 3D graphics what we consider before the rotation of a point? (2)

- Clock wise rule Walter Atherton Polygon clipping method.....(3)
- Texture mapped triangle Rasterization.....(5)
- Reflection in 2D transformation.....(3)
- Diff. b/w Local and Global Coordinate system.....(5)

Current paper 2012 solved

21.
Sol:

22.
Sol:

- • Local coordinate systems can be defined with respect to global coordinate system
- • Locations can be relative to any of these coordinate systems
- • Locations can be translated or "transformed" from one coordinate system to another.

23.
Sol:

The Viewing Frustum

A viewing frustum is 3-D volume in a scene positioned relative to the viewport's camera. The shape of the volume affects how models are projected from camera space onto the screen.

In [3D computer graphics](#), the **viewing frustum** or **view frustum** is the region of space in the modeled world that may appear on the screen; it is the field of view of the notional camera. The exact shape of this region varies depending on what kind of camera lens is being simulated

24.
Sol:

25.
Sol:

26.
Sol:

scaling

26.

Sol:
Formula to solve this question
 $x' = x.Sx$
 $y' = y.Sy$

25.
Sol:

Rendering - The process of computing a two dimensional image using a combination of a three-dimensional database, scene characteristics, and viewing transformations. Various algorithms can be employed for rendering, depending on the needs of the application.

23.

Sol:

22.

Sol:

Axonometric projections are orthographic projections in which the direction of projection is not parallel to any of the three principal axes. *Non orthographic parallel projections are called oblique parallel projection.*

21.

Sol:

we can find a matrix for any sequence of transformation as a composite transformation matrix by calculating the matrix product of the individual transformations.

CS602 - May – June 2013 - MidTerm

Aaj ka paper MGT501

SUBJECTIVE

21: We have performed the reflection of an object about x-axis, you are required to find the transformation matrix of that object. (2)

22: What is the difference between local coordinate and global coordinate system? (2)

23: We have three vertices at points (x_1, y_1) , (x_2, y_2) , and (x_3, y_3) . Write pseudo code to draw a triangle. (3)

24: Describe the characteristics of 3-D coordinate system. (3)

25: Apply the following transformations on the point $P(x,y) = (4,5)$ (5 Marks)

1. Translate using $T_x = 3$ and $T_y = 2$
2. Scale using $S_x = 2$ and $S_y = 1$

26: Derive the formula for calculating unit vector from a given 3D vector $\langle x,y,z \rangle$ (5 Marks)

CS602 - May – June 2013 - MidTerm

Aaj ka paper CS602

OBJECTIVE

1: There are _____ basic types of polygon.

- 3
- 2
- 4
- 10

2: DDA abbreviated for _____.

- None of the given
- Discrete data analyzer
- Digital data analyzer
- Digital differential analyzer

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

- Outside the boundary

- Inside the boundary
- At boundary
- None of the given

4: ...

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

5: ...

- Scaling
- Rotation
- Deformation
- None of the above

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

- None of the given
- Total (*inside (maybe)*)
- Trivial Reject
- Trivial Accept

7: In Trivial acceptance/rejection test there are four bits of nine regions, Bit2 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 $Y > Y_{\max}$

8: _____ projection is obtained by projecting points along parallel lines that are not perpendicular to the projection plane.

- ...
- Perspective
- Orthographic
- Oblique

9: 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)
- Less than zero (0)
- Equal to Zero (0)
- None of the given

10: 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.

- A...metric Parallel Projection
- Oblique Parallel Projection
- Orthographic Parallel Projection
- None of the given

11: ...

- x-axis
- y-axis
- z-axis
- None of the given

12: Orthographic projections that show more than one side of an object are called _____ projections.

- Cavalier
- Cabinet
- Axonometric
- Perspective

13: Computer Graphics are used in _____.

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

14: “Computer Graphics” and “Computer Vision” are _____.

- Same fields
- Interrelated fields
- None of the given
- Totally different fields

15: Plasma-panel displays use a gas mixture that usually includes _____.

- ...
- Zinc
- ...
- Iron

16: ...

- Electron gun
- Proton gun
- Flood gun
- All of the given

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

(Choose best suitable answer)

- Pixels
- None of the given
- Vertices
- Edges

18: We can take transpose of _____.

- matrix with 1 row 1 column
- matrix with 2 rows 3 columns
- matrix with 3 rows 2 columns
- any matrix

19: If the polygons are _____, line-clipping techniques are sufficient for clipping.

- filled
- unfilled
- half filled
- All of the given

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

- Sometimes impossible
 - None of the given
 - Possible
 - Impossible
-

AOA every one ,

total 26 question thy overall paper thek tha mushkil nhi tha,
mcq,s 14 or 15 were from past moaz files, read all the meterial and all files , not jst moaz,
and subjective were very easy ,

Describe clipping polygon ?

what is meant by locality in the plane?

frustum viewing figure was given ,tell the presoective tranformation in the figure?

write homogenous corodinate rotation?write the matrix of its.

orthographic ki definition given thi , name btan ath a, aur us ki types bhi btani thi ,axonometric , isometric ,etc,

one more q was 5 marks about matrix of rotation transformation , xc and yc given find their values,,

subjective file men jo matrix k q hn un ko lazmi kren ,

aur matrix related q ap ko any chaen ,

objective k liye , 162 page pe jo definition woh bhi lazmi kren.

best of luck for the paper ,

-
- 1.reflection about y axis.2 marks
 - 2.which project used in engineering.2 marks
 - 3.rotation about z axis.page 179.3
 - 4.composite rotation formula.3.
 - 5.formulas of basic transformation TRANS rotation
- scaling composite rot.5
- 6.3d rotaion
- roll
pitch
yaw matrix
page 178.5
paper is v easy.mcqs were also easy

my today's ppr. gud luck

1. Textured triangle and flat triangle. Which one most difficult to render.
2. **a C program that is used to draw an ellipse by using parametric polar form of ellipse having center at 60th row and 60th column and semi major axis a=50 (pixels) and semi minor axis b=20 (pixels).**
3. **Formula to calculate length of vector $\langle x,y,z \rangle$**
4. **two successive scaling operations on an object; you are required to write the Concatenating transformation matrices of that object.**
5. Locality with respect to a Plane?

my today cs602 paper...

20 MCQZ

two questions 2 marks ke, 2 question 3 marks ke, 2 question 5 marks ke

1: differentiate between stripe of triangle and triangle fan? 2 marks

2: metrix of reflection about x-axis? 2 marks

3: what meant by viewing frustum? 3 marks

4: final metrix of composite rotation 3 marks

5: grouph given tha perspective transformation batani thi....5 marks

6: c code of hyperbola ka.....5 marks

My Today's paper 9-6-14

20 MCQs

2 questions of 2-2 marks

i) 2 matrices diye gay thay jinhy theta k sth unhy multiply karna tha

ii) Composite rotation ka formula pura krna tha

$$P' = R(\theta_2) \cdot \{R(\theta_1) \cdot P\}$$

2 questions of 3-3 marks

i) Describe viewing frustum.

ii) Aik matrix dia gya tha usay step wise translate kar k btana tha

$$[w \ 0 \ 0 \ 0]$$

$$h \ 0 \ 0 \ 0$$

$$0 \ Q \ 0 \ 0$$

$$0 \ -Q(Z_{near}) \ 0 \ 0$$

2 questions of 5-5 marks

i) Aik table dia gya tha jis may tranlation P' , rotation = Scaling= or scaling composite kee equations likhni thi

ii)

Questions from the Mid Term Exam of CS602

June 25, 2015 11:00 AM

1. Why do we need 3-dimensional pictures? **2 Marks**
2. Which projection gives the most realistic view of object? **2 Marks**
3. How can we find the distance between two 3D points using mathematical notation? **3 Marks**
4. Two composite rotations $R(\theta_2)$ and $R(\theta_1)$ are performed to a point P, you are required to write the final expression of composite rotation matrix to the point P. **3 Marks**
5. Derive the formula for calculating Unit vector from a given 3D vector $\langle x, y, z \rangle$. **5 Marks**

-
- Why do we need 3-dimensional pictures? **2 Marks**

A: Its need for real world pic displaying. Its just a fancy term for a system that measures objects with width, height, n depth.

- Which projection gives the most realistic view of object? **2 Marks**

A: Perspective projection gives a more realistic view of the objects in the scene.

- How can we find the distance between two 3D points using mathematical notation? **3 Marks**

A: distance = $\sqrt{dx^2+dy^2+dz^2}$

- Two composite rotations $R(\theta_2)$ and $R(\theta_1)$ are performed to a point P, you are required to write the final expression of composite rotation matrix to the point P. **3 Marks**

A: $P' = R(\theta_1+\theta_2) \cdot p$

- Derive the formula for calculating Unit vector from a given 3D vector $\langle x, y, z \rangle$. **5 Marks**

A: Unit vector = $\langle x,y,z \rangle / \text{length} = |x/\text{length}, y/\text{length}, z/\text{length}|$

Mine today ppr .. All mcqs fom Moaaz File Thanks God

Subjectiv b exy thy..

Q. Which type of projection is used in engineering drawings.

Q What is the difference between local and global coordinate system?

Q. If point $(x.,y)$ is rotated about axix anti clockwise at theta .. what will be new values?

Q. Differentiate between cabinet and car . whtvr ..

Q .Dicuss following w.r.t equation:

- a line intersects a plane

- a line does not intersect plane

Q. Discuss 4 cases of clipping edge w.r.t .. S ka jo algorithm tha wo .

Anyways all da bxt !

Q. Which type of projection is used in engineering drawings.

A: Parallel Projection

Q What is the difference between local and global coordinate system?

A:

- **local coordinate systems r defined with respect to global coordinate system**
- **locations r relative to any of these coordinate systems**
- **locations can b tranlated r tranformed from 1 coordinate system to another.**

Q. If point (x.,y) is rotated about axix anti clockwise at theta .. what will be new values?

A: Positive angle of rotation will b anticlockwise.

P' = [x' y'] R=[cosθ -sinθ sinθ cosθ] P = [x y]

Q. Differentiate between cabinet and car . whtvr ..

A: Cavalier: All lines perpendicular to the projection plan are projected no change in length.

Cabinet: Lines with are perpendicular to the projection plan are projected at 1/2 length.

Q .Dicuss following w.r.t eqution:

- a line intersects a plane

- a line does not intersect plane

Q. Discuss 4 cases of clipping edge w.r.t .. S ka jo algorithm tha wo .

A: If clipping Rectangle is denoted by dashed lines and Line is defined by using point 1 and point 2.

Case i: For each boundary b in [L(left),R(right),T(top),B(bottom)]

If P1 outside and p2 inside

Intersect point (p1')

point p2.

Case ii: For each boundary b in [L(left), R(right),T(top),B(bottom)]

If p1 and p2 inside.

point p2

Case iii: For each boundary b in [L(left), R(right),T(top),B(bottom)]

If p1 and p2 outside.

Do nothing

Case iv: For each boundary b in [L(left),R(right),T(top),B(bottom)]

If p2 outside and p1 inside.

intersection only point(p2') only.

Today Paper @ 12:30 PM..

18 of 20 MCQs from past papers..

Subjective ::

1). Differentiate b/w Reflection transformation and Shear transformation in 3-D system? 2

2). Explain 3-D Coordinate System? 3

3). Difference b/w Orthographic and Oblique Projections? 3

4). Differentiate b/w Cavalier and Cabinet Projection? 5

5). Give formula for

- Translation P' =
- Rotation P' =
- Shear P' =
- etc

Today my paper
total question 26
20 mcq..... 14 To 15 MCQ from moiz file

6 question

2 question 2 marks

2 question 3 marks

2 question 5 marks

3 question of matrix and other question from last chapters.....

Best of luck to all students

Q: why do we need a three dimension picture? 2 marks

Ans: its need for real word picture displaying, its just a fancy tram for a system that measure the object with width height and depth.

Q: which projection give a most realistic view of object? 2 marks

ANS: prospective projection give a most realistic view of object in the scene.

Q: How can we find the distance between two 3D points using mathematical notation? **3 Marks**

ANS: distance = $\sqrt{dx^2+dy^2+dz^2}$

Q: Two composite rotations $R(\theta_2)$ and $R(\theta_1)$ are performed to a point P, you are required to write the final expression of composite rotation matrix to the point P. **Marks 3.**

$P' = R(\theta_1 + \theta_2) \cdot P$

Q: derive the formula for calculating Unit vector from a given 3D vector $\langle x, y, z \rangle$. **Marks5**

ANS: A: Unit vector = $\langle x,y,z \rangle / \text{length} = |x|/\text{length}, |y|/\text{length}, |z|/\text{length}|$

Which type of projection is used in engineering drawings.

orthographic projection

Q What is the difference between local and global coordinate system?

Local coordinate systems can be defined with respect to global coordinate system

- Locations can be relative to any of these coordinate systems
- Locations can be translated or "transformed" from one coordinate system to another.

Differentiate b/w Cavalier and Cabinet Projection? 5

Cavalier

$\text{Alpha} = 45^\circ$, $\tan(\text{Alpha}) = 1 \Rightarrow L1 = 1$ this is a Cavalier projection such that all lines perpendicular to the projection plane are projected with no change in length.

Cabinet

Lines which are perpendicular to the projection plane are projected at $1/2$ length. This is a Cabinet projection.

Q .Dicuss following w.r.t equation:

- a line intersects a plane
- a line does not intersect plane

Discuss 4 cases of clipping edge

The clip boundary determines a visible and invisible region. The edges from vertex i to vertex i+1 can be one of four types:

- Case 1 : Wholly inside visible region - save endpoint
- Case 2 : Exit visible region - save the intersection
- Case 3 : Wholly outside visible region - save nothing
- Case 4 : Enter visible region - save intersection and endpoint

1). Differentiate b/w Reflection transformation and Shear transformation in 3-D system?

Reflection

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

Shears

Shearing transformations can be used to modify object shapes.

2). Explain 3-D Coordinate System? 3

3D Cartesian coordinate systems

- Direction and magnitude along three axes, with reference to an origin
- Locations are defined by x, y, z triples
- Can define cubes, cones, spheres, etc.,
- Can have multiple origins and transform coordinates among them

Difference b/w Orthographic and Oblique Projections? 3

orthographic projection

If the direction of projection is perpendicular to the projection plane then it is an orthographic projection.

Oblique Projection

If the direction of projection is not perpendicular to the projection plane then it is an Oblique projection

5). Give formula for

- Translation $P' = P + T$
- Rotation $P' = R \cdot P$
- Scaling: $P' = S \cdot P$
- Shear $P' = y' = y$

1: explain axonometric projection in the content of computer graphics ? (2 marks)

Axonometric projections are orthographic projections in which the direction of projection is not parallel to any of the three principal axes.

The dot product of 2 vectors is a scalar

4: explain orthographical projection and what meant by term oblique parallel projection? (marks 3)

Orthographic Projection

If the direction of projection is perpendicular to the projection plane then it is an orthographic projection.

oblique parallel

Non orthographic parallel projections are called oblique parallel projection.

Define Vector Normalization?

“Normalizing” a vector means shrinking or stretching it so its magnitude is 1. A simple way is normalize by dividing by its magnitude:

my paper

MCQs from moaz file ...

1: explain axonometric projection in the content of computer graphics ? (2 marks)

2: dot product of two vectors ? (2 marks)

3: two successive rotations are applied to a point P to produce the transformed position P the expression for P is given $p' = R(\theta_2) \cdot \{R(\theta_1), p\}$

you are required to find the expression for final composite rotation matrix ? (3 marks)

4: explain orthographical projection and what meant by term oblique parallel projection? (marks 3)

5: write a C program that is used to draw an ellipse by using parametric polar form of ellipse having at 60th row and 60th column and semi major axis $A = 50$ pixels and semi minor axis $B = 20$ pixels (marks 5)

is paper me kisi kisi ko coding b aa rahi unfortunately mujy b aa gai

Q#1 projection method?

Q#2 page 154 diagram given do explain?

Q#3 vector normalization find?

Q#4 rotation in 2d on 45 degree

Q#5 oblique cases explain

Q#6 coding

quizz changed not from past paper

-
- MCQ'S were easy, and from Past Papers

Subjective: I think that 60% Subjective were from current papers.

Note that page No I have mentioned is from updated handout. You can download it from vu lms.

Q1: Differentiate between triangle fan and triangle strips? Marks 2

Answer: (Page 209)

Triangle Strips

The first three elements indicate the first triangle.

Each new element is combined with the first element and the current last element to form a new triangle.

Triangle fans

The first three elements define the first triangle.

Each subsequent element is combined with the two elements before it, in clockwise order, to create a new triangle.

Q2: Name the Clipping Case of following Diagram? Marks 2

(This Diagram was given)

Answer: (Page 154)

Case 3 of polygon clipping: Wholly outside visible region - save nothing

Explain:

For each boundary b in [L (Left), R (Right), T (Top), B (Bottom)]

If P_1 outside and P_2 outside

Do nothing

Q3: Define Viewing Frustum? Marks 3

Answer: (Page 205)

A viewing frustum is 3-D volume in a scene positioned relative to the viewport's camera. The shape of the volume affects how models are projected from camera space onto the screen. The most common type of projection, a perspective projection, is responsible for making objects near the camera appear bigger than objects in the distance. For perspective viewing, the viewing frustum can be visualized as a pyramid, with the camera positioned at the tip. This pyramid is intersected by a front and back clipping plane. The volume within the pyramid between the front and back clipping planes is the viewing frustum. Objects are visible only when they are in this volume.

Q4: We Have four vertices at points (x_1, y_1) , (x_2, y_2) , (x_3, y_3) , (x_4, y_4) , write pseudo code to draw a rectangular? Marks 3

Q5: Write formulas? Marks 5

Translation P' =

Scaling P' =

Rotation P' =

Shear P' =

Composite Rotation P' =

Answer:

Translation $P' = P + T$

Scaling $P' = S \cdot P$

Rotation $P' = R \cdot P$

Composite Rotation:

Q6: Explain the given diagram of Viewing Frustum? Marks 5

Answer: Page 205

In this illustration, the variable D is the distance from the camera to the origin of the space that was defined in the last part of the geometry pipeline—the viewing transformation. This is the space around which you arrange the limits of your viewing frustum. For information about how this D variable is used to build the projection matrix

The Matrix

In *the viewing frustum*, the distance between the camera and the origin of the viewing transformation space is defined arbitrarily as D , so the projection matrix looks like:

The viewing matrix translates the camera to the origin by translating in the z direction by

- D . The translation matrix is as follows:

Multiplying the translation matrix by the projection matrix ($T \cdot P$) gives the composite projection matrix. It looks like:

My today's paper

Q:What is meant by projection in computer graphics?(2)

Q:What are the characteristics of 1D coordinate plane.?(2)

Q:1 question of writing Pseudo Code.(3)

Q:1 question was about writing equations.(3)

Q:Discuss following w.r.t equation:(5)

- a line intersects a plane

- a line does not intersect plane

Q. Discuss 4 cases of clipping edge(5)

All the best...!

assalam o alaikum

agr kisi k pas in questions ka ans hai to plzzz shhare

5: write a C program that is used to draw an ellipse by using parametric polar form of ellipse having at 60th row and 60th column and semi major axis $A = 50$ pixels and semi minor axis $B = 20$ pixels (marks 5)

Discuss following w.r.t equation: (5)

- a line intersects a plane

- a line does not intersect plane

Today Paper

Total Questions = 26

Total Marks = 40

Total MCQs of 1 Mark = 20

Short Subjective Question of 2 Marks = 2

Subjective Question of 3 Marks = 2

Subjective Questions of 5 Marks = 2

projection techniques

translation on according to 3d

clipping algorithm

distance in sutherland lian barsky algorithm

trivial clipping acceptance/reject test

My today's paper

Total 26 questions thy.

10 Mcqs past papers (Mouaz File) mn sy thy r subjective koe b past papers mn sy nae tha. Paper kafi mushkil tha. Mostly last 16 to 22 lecturs mn sy tha subjective. Kch subjectives mgy yad hn mn bta deti hn.

1. Briefly define two methods of projection. Marks 2
2. Write down which type of professionals uses y-up verses z-up coordinate system? Marks 2
3. Write the characteristics of 3D coordinate system. Marks 3
4. If (y_c, x_c) r the centers of a matrix then find out the result of that. Marks 5
5. One question was of explaining about the given diagram of 3D image. Marks 5
1 or tha 3 marks wala question wo mgy bhul gy

My Paper

19-12-2015

About 6 - 7 MCQS From Moaz File.

Subjective Questions ..

- Trivial Accept
- Trivial Reject
- Shear Definition and explain
- Write the formulas of "Translation" "Scaling" "Rotation" "Composite Rotation"
- Types of parallel projections and explain

Remember Me in Your Prayers:

Q1. define rotation in 2d ? (2)

Q2. describe the diagram that is On the page # 200 2nd diagram... (5)

q3. formula to find length of the vector.

q4. write a c program to draw a circle using polar coordinates.

Q5. write the two techniques of triangle rasterization. 2 marks

ek tha k in 2-D can a polygon be divided if yes then write the reason?

what is the taxonomy of the families of the projection? shayd 5 mrks ka tha

write the following formula in column 2? 5 marks

Today My Computer Graphics Papers

MCQ from past papers some new

More then one side for viewing

*Perspective *axonometric *cabinet *caralier

flat fill triangle first sort of vertices.....

triangle can be used effect of lighting over a surface

area of picture selected for viewing called.....

IBM introduce VGA has color planes/.....1,2,3,4....

..... is used for circumference of a circle

$*2r *2 \pi * 2\pi r * 2 \pi C$

explain relationship between x,y and z coordinate using...

Left hand rule *right hand rule *jar rule * pump rule

Question

text mapped triangle rasterization explain 5 mark

vector length formula derive

concatenation of two matrix

final expression of composite rotation matrix to the point P

baqi bol gya...

best of lck....

remember my in in prayer

My CS_602 midterm paper 28 may 2016

Paper bht easy tha.

MCQS from quizzes and past papers

Q: what happen if we multiply a vector by a positive or negative scalar? 2 marks

Q: find the transpose of the matrix. 2 marks

Q: write the Pseudo code of distance between two points? 3 marks

Q: what is meant by translation in 3-D? explain with example 5 marks

Q: write the properties of matrices? 5marks

Cs602. mcqs saray k sray past paper se thy .

Q1. Modeling term define in 3D coordinator

Q2. Derive the vector formulaa

Q3. Derive the vector formula in 3D

Q4. Circle ko define krna tha x, y or eight or btani the us ki with daigram

Q5. Traslate wala tha aik

Asslam o ALaikum My Today Paper Of cs602

All Mcqs From Past paper

Subjective:

U=(2,3,4) V=(5,6,7) Cross product U.V ? (2)

Difference Between Local And Global (2)

Bit 1 and Bit 2 Ko define krna ta through the Diagram(3)

Scan line ka Procedure Likhna ta? (3)

3D Ko brifely Define krna ta ? (5)

Aik Martix Dya hoa ta (5)

Good luck

Remember me In your Prayers

triangle strips and triangle fans 2 marks.

describe rotation and scaling 5 marks.

mcqs 17/20 from mooaz file.

rectangle clipping and triangle clipping 5 marks

baki yad ni

My Today Paper (CS602)

MCQs were almost mostly from past papers ...

Q1. What do you means by 3D computer graphics? 2

Q2. Why is Liang-Barsky Algorithm is more efficient than The Cohen-Sutherland Line Clipping Algorithm? Describe firefly 2

Q3. What is difference between Translation and Scaling? 5

Q4. What is the term Clipping Lines? Intersection lines ??? 5

Q5. Clipping related tha ??? 3

Q6. Project dya tha, jo k Projection k help sy bnyan krna tha, or Ksi 1 projection k types lkne the ...

Best of Luck ... Dua mn yaad rkna

My today paper cs602 is easy 8 ya 9 mcq from Moazz file

- 1) Rotation se phele kkia use hota hay just batana tha 2 mrks ka
 - 2) Why we need 3d picture 2 marks
 - 3) what is View Frustum 3marks
 - 4) write Initial Step of sutherland hodgman algorithm 3)
 - 5) Daigram the explain krne the 5 mrks
 - 6) Describe two seps of Oblique projection
-

Question No: 21 (Marks: 2)

cURRENT PAPER

Explain the term "Modeling" in context of 3D coordinate system.

Question No: 22 (Marks: 2)

Write down pseudo code which will translate given two points (x_1, y_1) and (x_2, y_2) with $T_x=4$ and $T_y=5$.

Question No: 23 (Marks: 3)

We have three vertices at points (x_1, y_1) , (x_2, y_2) and (x_3, y_3) . Write pseudo code to draw a triangle.

Question No: 24 (Marks: 3)

Write formulas for Environmental Mapping by taking X and Y components of pseudo-normal vectors (perpendicular to vertices).

Question No: 25 (Marks: 5)

Fill in the blank equations in 2nd column by appropriate transformation rule.

Transformation	Equation
Translation	$P' =$
Rotation	$P' =$
Scaling	$P' =$
Composite rotation	$P' =$

Question No: 26 (Marks: 5)

What is meant by Texture Mapped Triangle Rasterization? Explain.

mcqs mostly from past papers moaz file 100 %
global coordinate and local coordinate system..(3)
rotation around z-axis (2)
circle mase tha long question
rik sutherland mase
vnormalization ? (2)

OpenGL camera function command.....2marks
OpenGL command function to change size of window.....2marks
value of refractive index when wavelength of light is changed or increased.....2marks
equation of line and plane...2cases...when they cut & not cut...write equations.....3marks
gl and glu difference.....3marks
parallel lights direction and attenuation equation.....3marks
equation of tangent and how it is drawn.....5marks
equation of normal to plane...3 points given.....5marks
lecture 40...first page figures given...comment on them.....5marks

CS602 20/08/2016

MCQs were from past

5 marks questions

Does change in temperature has any effect on refractive index. Justify your answer with either case.

In Bizere, how many control points are required and how it can be calculated?

Explain cases of Oblique projection.

What is meant by emission?

3 marks questions

Behavior of light in case of backscattering and retro reflection

Write three OpenGL functions/routines used for modeling transformation

If $P(u)$ has a restriction $0 < u < 1$ then What type of curve can be build or what can't be?

Difference b/w oblique projection and orthographic projection

2 marks questions

Write glut header file

2 properties of triangle in lambertian shadr

What is meant by evaluator

MY tOdays CS602 ppr.....

1_ what makes OpenGL most widely adopted Graphics standard

2_figure this or viewing frustum sy related btana tha

3_describe four steps necessary required for calculating all the lighting contributions to get the find color.

4_Elaborate the term "Icosahedron" with example.

5_name three OpenGL functions that are used for modeling transformation

6_key difference b/w gl and glu,

7_lighting equation with attenuation factor and also give attenuation equation.

8_es qstn main cOde deya huwa tha

9_ye wala qstn yad nai.....

10_describe fractal

11_describe three axonometric projection.

12_rOtaion metrix for transformation find krna tha

Just done my paper now on 09-12-2017 9.30 AM

Total Question were 24

18 MCQS

3 questions were 3 Marks

three were 5 marks

Games main cmputer graphics ki importance and any 4 popular games k naam(3 marks)

A point in a plane and us ki position ki koi si 3 cases btany thy (3 marks)

Aik question image rendering ka tha (5 marks)

Aik question psedu code ka tha.(5 marks)

Aik question 2 successive rotations ka tha aour us ki final matrix ki equation likhni thi (5 marks)

MCQs total past papers sy thy

Main ny tamam old papers ko mila kr aik file bunaie thi sary k sary MCQs usi main sy thy.

File upload kr rha hon
