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If you want to learn computer programming then contact with me

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Join FB group for VU help www.facebook.com/groups/vu1234/

CS602 Final Term Paper 2018 shared by Student

Done my paper tday

Most of MCQS were from past papers

Abou 5/6 were new

No subjective was from past i have just remembered some

What is storyboard

Difference between glLoadIdentity() and glLoadMatrix

function of gluLookAt()

A question was about translation points were given

A question was about Rotation points were given

A question was to write two dimensional rotational matrix when angle is 60

What is Phong Shading and how to shine animation by it

A question was about to calculate the color contribution

2 questions bhool gaey sorry



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MY TODAY'S PAPER

80% MCQ's ARE FROM PAST PAPERS LIKE MOAAZ AND VU STUDENTS MEGA FILE...

QUESTIONS I REMEBERED:

DESCRIBE TWO-DIMENSIONAL EVALUATOR? (3 MARKS)

GIVE glRotate FUNCTION SIGNATURE? (3MARKS)

WHAT ARE THE USE OF glut HEADER IN PROGRAMS? EXPLAIN (3 MARKS)

WRITE A NOTE ON glut Library Functions? (5 MARKS)

WHAT IS TANGENT VECTOR OF THE CURVES AND ALSO WRITE ITS MATHEMATICAL FORMULATION (5 MARKS) FOLLOWING ARE THE CASES OF THE TRANSFORMATIONS.ARE YOU AGREE WITH THESE CASES TO BE GENERATE DIFFERENT RESULTS? CASE#1 OBJECT IS ROTATE FIRST THEN TRANSLATED. CASE#2 OBJECT IS TRANSLATE FIRST THEN ROTATED.

7. SCALING OF THE GAME CHARACTER 7 TIMES BIGGER THAN THE ORIGINAL SOMETHING IS 50 (I DONT REMEMBER WHAT IS 50 ABOUT). (5 MARKS)

SIZE OF THE CHARACTER AND ITS

OTHERS ARE VERY DIFFICULT TO REMEMBER BECAUSE OF THE MATRIX AND MATHEMATICAL EQUATIONS TYPE QUESTIONS...

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my today paper 16 july

total 52 q

4 Q 2marks

4 Q 3marks

4 Q 5marks

mcqs 40 normal not to tough

in three marks q graph are shown tell the dimension

one q logN/logS write the name of dimension



types of transforamtion

emission term what you understand define 5mark

boundary filling algorithm pesedo code 5mark

ambient light 2marks

bersham line algorithm 3marks

one figure is shown explain the operation its from opengl operation 5mark

kush yaad nahi best of luck for exam

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Q:what is "emission?

Q:what is evaluator?

Q:What is difference between glLoadIdentity function and glLoadMatrix function?

Q;glRotate ka syntax likna ta?

Q;what is different b/w triangle strip and fan?draw diagram?

Q:what is matrix negation and why we need it?

Q;why sutherland algorithms is not so good explain?



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CS602 16 July

- 1. Write three OpenGL transformation routines.3Marks
- 2. Write three that can be use between glBegin & glEnd. 3 Marks
- 3. How polygon omissions can speed up the process of rendering. 5 marks
- 4. Write the pseudo code for boundary filling algorithms? 5Marks
- 5. How many control Points are required for Bezier curve, how can we calculate them? 5 Marks

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5 marks:

Can we use SCAN system in Televisions? explain. Also list down the name of systems.

How light attenuation can be calculate? [see page # 285, handouts]

How many control Points are required for Bezier curve, how can we calculate them?

A question about "Perspective Projection"? [see page # 261, Lecture 28]

3 marks:

what time of unit is used in animation [see page # 426]

A code was given and asked that why it is not good for filling circle? [to answer this your algorithms should be conceptually clear]

2 marks:

what time of unit is used by animator in animation? [repeated question, see page # 426]

what is clipping polygon? why it is used? describe briefly

Name 4 areas where openGl is used.

MCQs.



term fractals is derived from..... [page#347, lecture 40]

Prepare transformation as much as you can. complete

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Asslam O Aliakum

today,s paper is 40 mcqs and 13 question

long question are:

what is gamut? 2 marks

define and explain refraction of light? 2 marks

what are tradeoff between the display speed and quality of image when subdividing in case of polygon and surface? 2marks

what two aspects of timing in an animation? 2 marks

differentiate between reflection and shear in context of 3d transformation? 3 marks

give traditional light calculation equation? 3 marks

differentiate between the function using gl and glu prefixes of glut library? 3marks

write down simplified third degree of bezier curve? 3marks

write down three routines for modeling transformation? 3 marks

write pseudo code or a function in C++, which will take tx and ty as parameter and translate points x1,y1 and x2, y2? 3 marks

what do you understand by the term "emission"? 5 marks

write down the uses of glut library? 5 marks

explain oren nayer diffuse reaction? How it is different from limbertian diffuse shading? Marks



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MCQ's 95% from mooaz file. exam was easy

formula for calculating diffuse light

bezier cure defination

matrix for rotation and scalaing (5)

properties of triangles in lambertian model

thats all i remember

CS602 Final Term Paper 2017 shared by Student

Feb 25, 2017 at 2:00pm

Mcq's where all-most from past papers,

- 1. What time of unit is used in animation (2)
- 2. Which function is used to change to the size of the Current Window
- 3. Write down about modeling transformation berifly
- 4. 3rd degree equation of bazier
- 5. utility library functions
- 6. Lighting equation se related th
- 7. Aik question OpenGl se related tha
- 8. What is the light attenuation formula and how can be calculated

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MCQs are totally from past papers.

Key difference between gl and glu?

Write a note on utility of glut library? 5 marks

Difference between glLoadIdentity and glLoadMatrix? 5 marks

Tangent vector parametric equation?

Find a Vnorm of a vector (2,3,4)? 2 marks

What is meant by evaluator? 2 marks

Write the most common names of three lighting schemes that have a effects on colors?

Define why the refractive index of fused quartz changes as wavelength increases?



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cs602 todays paper
aik ax bx cx ki values find krni thi
bezier curve ki equation likhni thi 3rd degree ki
aik curve dia hua tha k ye uniform ha ya ni
scaling or rotating matrices ka ques tha
spot ligt ka tha
backscattering or retro scattering sy tha
which projection is used for real pictures
or environmental mapping ka b aik ques tha or spot light k live do library packages btany thy

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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

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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

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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

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today my paper CS602
mcqs 40 mostly from past papers
DDA abbreviated for
None of the given
Discrete data analyzer
Digital data analyzer
Digital differential analyzer (Page 54)
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 (Page 150)
Impossible
Tessellation can be adaptive to the degree of curvature of a surface. Local (Page 170) Static Global Variable
We can draw the circle using Pentane Hexane Tridant
Trident Octobre (Page 62)
Octant (Page 63)
polygons are basically concave polygons that may have self-intersecting edges. Complex (Page 79) Hybrid



Convex and Hybrid

----- reflection is the effect of reflecting light toward the direction from which it came, no matter the orientation of the surface.

- ► Forward scattering
- ▶ Diffuse Lambertian
- **▶** Backscattering
- ► Retro (Page 293)
- 1) In class, we discussed physically-based simulation. In order to maintain a simulation, a set of variables must be maintained called "state variables". State variables are those variables which must be maintained from one time-step to the next in a simulation to maintain correct simulation. Of all of the following variables, only one is NOT a state variable. Which is it?
- a) mass
- b) position
- c) velocity

d) acceleration

Which of the following properties of rational Bezier curves fails if the weight assigned to a control point is negative?

- ► End-point interpolation
- ► Variation Diminishing

Symmetry

► Convex-Hull

A series of _____ computer operations convert an object's three-dimensional coordinates to pixel positions on the screen. Transformations, which are represented by matrix multiplication, include modeling, viewing, and projection operations. Such operations include rotation, translation, scaling, reflecting, orthographic projection, and perspective projection.

Three (Page 371)

Two

Four

Ten

When obtaining normals for a triangle, which of the following mathematical constructs is NOT used? Vector normalization



Vector cross products Vector dot products Point-Point subtraction

The traditional approach in real-time computer graphics has been to calculate lighting at a vertex as a sum of the light.

Ambient

Ambient, diffuse, and specular (Page 281)

Specular

Diffuse, and specular

- 1) Which of the following parts of our Bezier curve discussion was compared to 3D projections onto a 2D plane?
- a) End point tangency
- b) deCasteljau subdivision
- c) Degree elevation
- d) Swept surfaces
- e) Rational Beziers (i.e. weights)
- 1) In class, we discussed 3 forms of Fractals. Which one required some randomness and several thousand loop executions to give a result?
- a) Non-linear fractals
- b) Iterated Function Systems
- c) L-Systems

An independent consortium, the OpenGL Architecture Review Board, guides the OpenGL specification. With broad industry support, OpenGL is the only truly open, vendor-neutral, ------ graphics standard. Tertiary

Binary

Single platform

Multiplatform (Page 301)

Refractive index is a function of temperature, mostly due to changes in ------ of materials with changes in temperature. A simple correction can be applied in most circumstances to allow us to use a value given at one



temperature at another.
Density (Page 300)
pressure
nature
volume

The attenuation formula is f =-----, where C, L and Q are the constant, linear and quadratic attenuation factors and d is the distance between the vertex being lit and the light source.

1/(C + Ld + Qd2)

1/(C + Ld + Qd)

1/(C + L + d + Qd2)

1/(Cd + Ld + Qd2)

A parametric curve is one whose defining equations are given in terms of a -----, common, independent variable called the parametric variable.

Triple

Double

Single (Page 325)

None of the given

To ensure a smooth transition from one section of a piecewise _______ to the next, we can impose various continuity conditions at the connection points non parametric curve parametric curve polygon vector (not confirm)

- 1) Which of the following properties of Bezier curves guarantees that any affine transform performed on the control points also directly applies to the curve itself?
- a) Coordinate System Independence
- b) Convex-Hull
- c) Symmetry
- d) Variation Diminishing
- e) End-point interpolation

Best of Luck



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50% quizz from moiz file

41 to 52 question

parallel light

How light attenuation can be calculated? [See page # 285, handouts]

How many control Points are required for Bezier curve, how can we calculate them?

why use glBegin and glend

difference b/w 2nd degree 3rd degree curve

rotation and scaling calculate the value given thi

rotation matrix formula

calculate value x4=ax+bx+cx+dx

cubic ka tha

how transfer tempratue meteral one to other.

tangent formula

Bezier curve ka tha

topic yehi thy bs



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CS602 Current Paper

24 August Spring 2015

Total Questions = 52

Total Marks = 80

Total 1 Mark MCQ = 40

Total 2 Marks Short Questions = 4

Total 3 Marks Short Questions = 4

Total 5 Marks Long Questions = 4

Complete paper

Paper was very easy and short mostly from Past papers.

MCQ 30 – 35 from Past papers

6 to 8 Mcqs was from Mid term simple and easy . 3 to 4 Mcqs was new from Handouts

Question No: 1 (Marks: 1) - Please choose one

----- reflection is the effect of reflecting light toward the direction from which it came, no matter the orientation of the surface.

- ► Forward scattering
- **▶** Diffuse Lambertian
- **▶** Backscattering
- **▶** Retro (Page 293)

Ouestion No: 2 (Marks: 1) - Please choose one

The reflected light wave turns out to be a ------case since light is reflected at the same angle as the incident wave (when the surface is smooth and uniform, as we'll assume for now).

- ► Abnormal
- **►** Complex
- **► Simple (Page 296)**
- **▶** Unknown

Question No: 3 (Marks: 1) - Please choose one

_____ sets the reshape callback for the *current window*. The reshape callback is triggered when a window is reshaped.

- **▶** glutMainLoop
- **▶** glutIdleFunc
- **▶** glutReshapeFunc (Page 312)



▶ glutDisplayFunc

Question No: 4 (Marks: 1) - Please choose one

An orthogonal set of vectors-----

- ► Must be a set of linearly independent vectors
- ► Must be a set of linearly dependent vectors
- ► Must be made up of the basis vectors (e1, e2, and e3)
- ► Can be made up of any set of vectors

Question No: 5 (Marks: 1) - Please choose one

Bezier curve is numerically the ----- of all the polynomial-based curves used in these applications.

- ► None of the given
- ► Most stable (Page 338)
- ► Less stable
- ► Most unstable

Question No: 6 (Marks: 1) - Please choose one

Bezier curve is the ideal standard for representing the ----- piecewise polynomial curves.

- ► None of the given
- ► Non complex
- ► Most complex
- ► More complex (Page 338)

Question No: 7 (Marks: 1) - Please choose one

Keep polygon orientations consistent to make sure that when viewed from the outside, all the polygons on the surface are oriented in the ----- direction.

- ► None of the given
- ► Neither
- **▶** Different
- **▶** Same (page 345)

Question No: 8 (Marks: 1) - Please choose one

A polygon is usually defined by a sequence of ----- and Edges.

- ► Ending lines
- **▶** Points
- ► Vertices (Page 248)
- ► Edges

Question No: 9 (Marks: 1) - Please choose one

____ can be defined as a mapping of point P(x, y, z) onto its image P'(x', y', z') in the view plane which constitutes the display surface.

- ► Mapping plane
- ► Three Coordinate Planes



- ► View plane
- ► Projection (Page 193)

Question No: 10 (Marks: 1) - Please choose one

The reflected light wave turns out to be a / an _____ case since light is reflected at the same angle as the incident wave (when the surface is smooth and uniform, as we'll assume for now).

- **▶** Unknown
- ► Simple (Page 296)
- **►** Complex
- ► Abnormal

Question No: 11 (Marks: 1) - Please choose one

----- sets the global idle callback to be "func" so a GLUT program can perform background processing tasks or continuous animation when window system events are not being received.

glutIdle function (Page 313)

glutKeyboardFunc

glutReshapeFunc

glutDisplayFunc

Question # 12 (Total Marks: 1) Select correct option:

One problem with Gouraud shading is that the ----- intensities can never be greater than the intensities at the edges.

Triangles (Page 246)

Squares

Rectangles

Polygons

Question #13 (Total Marks: 1) Select correct option:

In order to get a more realistic representation of lighting, we'll need to understand how light passes through a medium and how hitting the boundary layer at the ------ of two media can affect light's properties.

Intersection (Page 296)

Union

Endpoints

Edges

Question #14 (Total Marks: 1) Select correct option:

Lambertian shading was used mostly back when computers weren't fast enough to do _____ in real time. Phong shading

Processing

Shading

Gouraud shading (Page 245)

Question #15 (Total Marks: 1) Select correct option:

glutReshapeWindow requests a change in the size of the current window. The width and height parameters are size extents in pixels. The width and height must be ------ values.



Neutral Negative

Positive (Page 311)

None of the given

Question # 16 (Total Marks: 1) Select correct option:

Refractive index is a function of temperature, mostly due to changes in ------ of materials with changes in temperature. A simple correction can be applied in most circumstances to allow us to use a value given at one temperature at another.

Density (Page 300)

pressure

nature

volume

Question #17 (Total Marks: 1) Select correct option:

If we assign a different value to the parametric variable for the intermediate point, then we obtain different values for the coefficients. This, in turn, means that a different curve is produced, although it passes through the ------ three points.

isolate

different

same (Page 328)

none

Question #18 (Total Marks: 1) Select correct option:

The attenuation formula is f =-----, where C, L and Q are the constant, linear and quadratic attenuation factors and d is the distance between the vertex being lit and the light source.

1/(C + Ld + Qd2)

1/(C + Ld + Qd)

1/(C + L + d + Qd2)

1/(Cd + Ld + Qd2)

Question #19 (Total Marks: 1) Select correct option:

End points and an intermediate point on the curve, then we now ------ quantities that we can express in terms of these coefficients (3 points x 3 coordinates each), and we can use these three points to define a unique curve.

Six

Three

Two

Nine (Page 326)

Question #20 (Total Marks: 1) Select correct option:

A parametric curve is one whose defining equations are given in terms of a -----, common, independent



variable called the parametric variable.

Triple

Double

Single (Page 325)

None of the given

Question # 21 (Total Marks: 1) Select correct option:

If the current matrix (according to glMatrixMode) is multiplied by the translation matrix, with the product replacing the current matrix. That is, if M is the current matrix and T is the translation matrix, then M is replaced with ------.

M-T

M+T

M/T

M*T (Page 317)

Question #22 (Total Marks: 1) Select correct option:

Imagine a curve in three-dimensional space, each point on the curve has a unique set of coordinates: a specific x value, y value, and z value. Each coordinate is controlled by a ------ parametric equation.

Opposite

Similar

Separate (Page 325)

Question #23 (Total Marks: 1) Select correct option:

Bezier curve can represent the more complex piecewise _____ curve.

Polynomial (Page 338)

Exponential

Cubic

None of above

Question #24 (Total Marks: 1) Select correct option:

The value returned is a unique small integer identifier for the window. The range of allocated identifiers starts at -----. This window identifier can be used when calling glutSetWindow.

Three

Two

One (Page 308)

Zero

Question #25 (Total Marks: 1) Select correct option:

Bernstein polynomial functions are the basic functions of curves.

NURBS

Bezier (Page 342)

Both NURBS and Bazier

None of the given



Question #26 (Total Marks: 1) Select correct option:

The matrix generated by gluPerspective is multiplied by the current matrix, just as if glMultMatrix were called with the generated matrix. To load the perspective matrix onto the current matrix stack instead, precede the call to gluPerspective with a call to ------.

glRotated gluPerspective glTranslated

glLoadIdentity

Question #27 (Total Marks: 1) Select correct option:

The ______ functions multiply the current matrix by a rotation matrix. **glRotated** and **glRotatef** (Page 318)

Subjective

5 marks questions

A software company want to make Game using space curves. You as a manager do mathematicular work and formulate according to the scenario. (5 marks)

Brief note on Icosahedron and give example (5 marks)

Brief Note on utility glut libaray . (5marks)

Intensity of light Id Id=(0.2345,0.2436,0.3613) surface color cs=(0.2515,0.3234,0.3424) calculate the color contribution of this surface ? (5 marks)

3 marks Queations

parametric vairable is 0 < u < 1 (ya sahid <= tha not sure) what type of curve will be form and was n't build. (3 marks)

Bazier curve of 2nd degree (3marks)

Values of T (tx = 3, ty = 4) and Point P (4, 3) was given have to calculate translation. (3marks)

3 figures (given in lecture 40) was given, or pocha gia tha key By looking at above three given figures what you can interpret keeping in mind fractal dimensions? (3 marks)



2 marks Questions

T-intersection model surface? (2marks)

Name 4 areas where openGl is used. (2 marks)

One questions was we have 6 changing in size X- axis and Y axis, Scalling Matrix btana tha kuch is trah ka questin tha (2marks)

One question I forget (sorry)

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My current Paper of cs602

MCQs almost moaaz ki file sy thy

or long questions ye hn

Q1: Apply following transformation on the point P(x, y) = (2 3)

1: Translate using Tx = 4 and Ty = 3

2: Scale using Sx = 3 (5 Marks)

Q2: Write the equation that is used for calculation the defuse lighting? (3 Marks)

Q3: X1 = dx

X2 = 1/27 ax + 1/9 bx + 1/3 cx + dx

X3 = 8/27 ax + 4/9 bx + 2/3 cx + dx

X4 = ax + bx + cx + dx

find the values of ax, bx, cx, dx by given data? (5 marks)

Q4: write the errors of glBeing and glEnd functions with reasons? (5 marks)

Q5: suppose you work in a software house and thy want to build a puzzle game.... you are required to write mathematical formulation for the given scenario. (3 marks)

Good Luck To All of you

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50% mcqs was frm moaz file.

Subjective:

Bezier third degree equation

What is Bezier curve explain it. Define its degrees



Translation, transformation, scaling in k conceptual question thy sahi sy statements yad nahi hn so:/

1 question tha k cartoons develop krny hn compny ny cartoons characters k lie kya strategies hun gi jin sy best characters develop ho skain :/

1 question is about diffuse lightening value was given anfle was 90 deg we have to calculate id.

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Second degree and third degree Bezier curve (2)

What are trade-off between the display speed and the quality of the image when subdividing in the cases of polygon and surface (2)

How the world look like in following situation (2)

Without ambient light

With too ambient light

How glut file is included in program for using glut library function (2)

Write down the simplified third degree equation of Bezier curve and retro reflection (3)

Discuss the behavior of light in case of backscattering and retro reflection (3)

It N is the number of small pieces that go into the large one, S is the scale to which the small pieces compare to the large one and D is the direction. (3)

Discuss the purpose of OpenGL (3)

What would you meant by the term "Beizer Curve" (5)

Explain how recursive subdivision function of triangle helps In improving the polygonal mold surface (5)

Computer graphics related software company development required different equations. Same is the case with NextGen Software Company. They are developing software using different curve. You are required to explain parameter equation of a curve manipulation. (5)

Given are the points that lie on a plane P1 (5)

P1 <2.0, 3.0, 4.0>

P2 <1.0, 5.0, 4.0>

P3 <7.0, 6.0, 2.0>

Find the equation normal to the plan P1

today my paper on 1-9-2015