13MCA34

	ž
	acı
	둳
	na
	as malp
	g,
	#e
	ĭ
ĸ	ten eg, $42+8 = 50$, will be trea
ğ	_
ğ	₹
ğ	ć
3	Š
30	ος.
Ξ	Ŧ
ā	4
ᇹ	ρĵ
e r	ü
Ξ	£
등	£
8	S
₫	0
SS	lati
Ĕ	줐
magonal cross lines on the remaining blank pages	×
ğ	<u>٧</u>
ಶ	ğ
ð	ř
raw d	Ħ
2	큹
≥	to evaluat
롲	٥
3	ᆵ
ᇍ	g
듣	ap
ತ್ತ	ation, appeal to
Ę.	atio
₹	2
Ĕ	Ħ
=	lenti
হ	Ξ
00	0
	E
음	त्
Ē	šVE
ဒ	7.
₹*	£
ote : I Un completing your answers, compulsorily di	- Ç
<u> </u>	« \
<u>ള</u>	
0	

USN										

Third Semester MCA Degree Examination, Dec.2014/Jan.2015 **Computer Graphics**

		Computer Graphics	
Tim	ie: 3	hrs. Max. Max. Max. Max. Max. Max. Max. Max	arks:100
		Note: Answer any FIVE full questions.	0
94			1.7
0/1/	a.	Differentiate between open GL core library open GL utility and open GL utility ki	t()
ાં		<u>, , , , , , , , , , , , , , , , , , , </u>	(06 Marks)
21101	b.	List the statement needed to setup an open GL display window whose lower-lost	
ılpra		paral position (100,100) and with a window aspect ratio 300×300 .	(04 Marks)
= 50, will be treated as malpractice.	C.	Explain the open GL display call back routine with an example.	(03 Marks)
g D	d.	Explain open GL point functions and line functions briefly with examples.	(07 Marks)
eage age	_	Water and American Street Street	
<u>၌</u> 2	a. L	Write a program to create a chess board using DDA line drawing algorithm.	(07 Marks)
<u>=</u>	b.	Write mid point circle drawing algorithm which exhibits 8-way symmetry.	(07 Marks)
≱ ວັ	c.	Explain boundary all algorithm in brief.	(06 Marks)
<u>.</u> 3		Explain two dimensions manslation, scaling, rotation, effection transformations.	(00 M - 1)
. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 2 9 2	a. b.		
,	U.	What is composite transformation? Show that the composition of two rotations	
<u>ವ</u>		and two scaling is multiplicative by concatending the matrix representations	`
		$R(\theta_2)$ and (S_{x_1}, S_{y_1}) (S_{x_2}, S_{y_2}) .	(06 Marks)
	c.	Explain about general pivot point rotation.	(05 Marks)
4	a.	Explain 3-dimensional rotation transformation.	(03 Marks)
5	b.	Explain 3-dimensional reflections and shearing pansformations.	(06 Marks)
<u> </u>	c.	Explain Affine transformations.	(03 Marks)
ಕ 5	d.	Write a program to create (without using built-in function) a triangle by imp	_
i da		scaling algorithm by zooming / un-zooming i) x-axis (ii) y-axis iii) xy-pl	
5		What do you man by view north Eurlain 2 D viewing transformation nine line	(08 Marks)
2 3	a. b.	What do you mean by view port? Explain 2-D viewing transformation pipe line. Explain cohen-sutherland line clipping algorithm.	(05 Marks)
<u> </u>	c.	Explain Liang Barsky line clipping algorithm.	(08 Marks) (07 Marks)
រិ រ	С.	Explain Charg-Daisky line cupping algorithm.	(U/ MINIKS)
6	a.	Define rojection, depth cueing and surface rendering in 3-dimensional veying.	(06 Marks)
Ů	b.	What are the three-dimensional viewing co-ordinate parameters? Explain in prief.	
		Explain the 3-dimensional transformation matrices from world to viewing co-ordinate from world to view wor	
	_C	The state of the s	X(08 Marks)
7.		Explain the following:	<i>i</i> ?. (
124		i) Orthogonal projection	7,7,
My.		ii) Oblique parallel projections.	(10 Marks)
	b.	Explain perspective projections.	(05 Mařks)
i	c.	Explain 3-dimensional screen co-ordinates.	(05 Marks) 🖍
8	a.	What is Bezier spline curve? Derive an equation for Bezier curve.	(08 Marks)
	b.	What is computer animation? Explain the basic approach to design a animation see	-
	0	XX7 '4 1 4 4	(06 Marks)
	c.	Write short notes on:	
		i) Traditional animation technique.	
		ii) General computer-animation functions.	(06 Marks)