

Class Test - II Session-July-Dec, 2021 Month-December

Sem- CSE 5th Subject- Computer Graphics (Professional Ellective-I) Code-C022531(022)
Time Allowed: 2 hrs Max Marks: 40

Note: - 1. PART1 is Compulsory and Attempt any 4 questions from PART2.

2. Each question of PART1 carries 2 Marks and 8 marks for PART2.

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Q.N.	Questions	Marks	Levels of Bloom's	COs
	PARTI			
	For approximation type curve			
	(a) Strenght of pull for all the control points should be 1			
Q1	(b) Strenght of pull of all the control points should be less than 1	[2]	Remembering	CQ4
	(c) Strenght of pull of atleast one control points should be less than		s	
	(d) All the control points must have same strength of pull.			
Q2	Discuss the concept of morphing in animation	[2]	Remembering	CO5
Q	Generate parametric equation of a circle.	[2]	Remembering	CO4
2	In z-buffer algorithm what is the initial value of depth buffer (Zdepth) and surface buffer (Isur) that are used to store depth and surface intensity of a pixel p(x,y) respectively (a) Zdepth=0, Isurf=1 (b) Zdepth=0, Isurf= surface Intestity (c) Zdepth=0, Isurf= 1 (d) Zdepth=0, Isurf= Background intensity	[2]	Remembering	CO3
	PART II			
Q1	Draw a Bezier curve of order 3, with 4 control points $A(1,1)$, $B(2,3)$, $C(4,3)$ & $D(6,4)$	[8]	Applying	C04
S2	Find the intersection point of a line PQ, P(10,30), Q(80,90) against a window whose lower left corner is at (20,20) and upper right corner is at (90,70).	[8]	Applying	CO3
Q3	Discribe various properties of B-Spline Curve.	[8]	Understanding	CO4
2	Define Animation. discuss the sequence of steps to generate an animation	[8]	Understanding	C05
S	Give a focus on working principle of depth sort method	[8]	Understanding	соз

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Time Allowed: 2 hrs Max Marks: 40

Note:-	Note: - 1. PARTI is Compulsory and Attempt any 4 questions from PART2. 2. Each question of PART1 carries 2 Marks and 8 marks for PART2.		Levels of
Q.N.	Questions	Marks	Bloom's taxonomy
	PART I		*
	For approximation type curve		
	(a) Strenght of pull for all the control points should be 1		
Q	(b) Strenght of pull of all the control points should be less than 1	[2]	Remembering
	(c) Strenght of pull of atleast one control points should be less than		
	(d) All the control points must have same strength of pull.		
Q2	Discuss the concept of morphing in animation	[2]	Remembering
Q3	Generate parametric equation of a circle.	[2]	Remembering
Q	In z-buffer algorithm what is the initial value of depth buffer (Z _{depth})and surface buffer (I _{surf}) that are used to store depth and surface intensity of a pixel p(x,y) respectively (a) Z _{depth} =0, I _{surf} =1 (b) Z _{depth} =0, I _{surf} = surface Intesity (c) Z _{depth} =0, I _{surf} =1 (d) Z _{depth} =0, I _{surf} = Background intensity	[2]	Remembering
	PART II		
Q1	Draw a Bezier curve of order 3, with 4 control points A(1,1), B(2,3), C(4,3) & D(6,4)	[8]	Applying
82	Find the intersection point of a line PQ, P(10,30), Q(80,90) against a window whose lower left corner is at (20,20) and upper right corner is at (90,70).	[8]	Applying
ପ୍ତ	Discribe various properties of B-Spline Curve.	[8]	Understanding
2	Define Animation. discuss the sequence of steps to generate an animation	[8]	Understanding
ଝ	Give a focus on working principle of depth sort method	[8]	Understanding



Class Test - II Session-July - Dec, 2021 Month- December

Sem-CSE 5th Subject- Formal Languages and Automata Theory Code-C022513(022) Time Allowed: 2 hrs Max Marks: 40

Q4	Q3	Q2	Q1		Q4	Q3	Q2	Q1		Q.N.	Note: -
Design a TM that accepts: $L=\{0^n1^n n>=1\}$.	Design a PDA which accepts a language: L={anbn/n>=1}.	$E \rightarrow E + T/T$, $T \rightarrow T * F/F$, $F \rightarrow (E)/a$. Convert this grammer into GNF.	Explain Chomsky classification of grammer?	PART II	Write definition of Push Down Automata?	Define Npda and Dpda.	Write the name of different types of grammer.	Define derivation and language.	PART I	Questions	All questions from PART1 and PART2 are compulsory. Each question of PART1 carries 2 Marks and 8 marks for PART2
8	<u>®</u>	8	8		[2]	[2]	[2]	[2]		Marks	n of PAR
Creating	Creating	Applying	Understanding		Remembering	Remembering	Remembering	Remembering		Levels of Bloom's taxonomy	TI carries 2 Marks an
CQ4	C04	C03	C03		C04	CQ4	CO3	СОЗ		cos	48



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Sem-CSE 5th Subject- Formal Languages and Automata Theory Code-C022513(022) Time Allowed: 2 hrs Max Marks: 40

Note: All questions from PART1 and PART2 are compulsory. Each question of PART1 carries 2 Marks and 8 marks for PART2

Creating	Design a TM that accepts: $L=\{0^n1^n n>=1\}$.	Design a	Q
•	Design a PDA which accepts a $L=\{a^nb^{3n}/n>=1\}$.	Design a PDA $L=\{a^nb^3n/n>=1\}.$	Q
	$E \rightarrow E + T/T$, $T \rightarrow T * F/F$, $F \rightarrow (E)/a$. Convert this grammer into GNF.	E→ E+T this gran	Q2
	Explain Chomsky classification of grammer?	Explain (Q1
	PART II		
[2]	Write definition of Push Down Automata?	Write de	Q4
[2]	Define Npda and Dpda.	Define N	Q3
[2]	Write the name of different types of grammer.	Write the	Q2
[2]	Define derivation and language.	Define de	2
	PART I		
Marks	Questions		Q.N.

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Sem- CSE 5th Subject- Data Analytics with Python Course Code: C022514(022) Time Allowed: 2 hrs Max Marks: 40	Class Test - II Session-JULY-DEC 2021 Month-December	Department of Computer Science & Engineering	Shri Shankaracharya Institute of Professional Management & Technology

CO3	Understanding	[4]	Illustrate matplotlib library.	Q1
CO2	***************************************			QI
C03	Understanding	[8]	Write code for following functions- 1) append() 2) pop() 3) copy() 4) extend()	Q4
CO3	Applying	[8]	Briefly describe the stacked array in numpy. Give a suitable example to show the concept of stacked array.	ය
CO3	Remembering	[8]	Explain the concept of broadcasting with a suitable example.	Q2
СОЗ	Understanding	[4]	Illustrate vectorization with a suitable example	QI
Cos	taxonomy	Marks	PART I	
	RT II Levels of Bloom's	from PA	Note: - All questions from PART I are compulsory and Attempt any 4 from PART II O.N. Onestions	Note:
		? 40	Time Allowed: 2 hrs Max Mark	



Class Test – II Session- JULY-DEC 2021 Month-December

Sem- CSE 5th Subject- Data Analytics with Python Course Code: C022514(022)

Time Allowed: 2 hrs Max Marks: 40

Note:	Note: - All questions from PART I are compulsory and Attempt any 4 from PART II	from PA	RT II	
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	Cos
	PARTI			
Q1	Illustrate vectorization with a suitable example	[4]	Understanding	СОЗ
Q2	Explain the concept of broadcasting with a suitable example.	[8]	Remembering	CO3
Q3	Briefly describe the stacked array in numpy. Give a suitable example to show the concept of stacked array.	8	Applying	63
2	Write code for following functions- 5) append() 6) pop() 7) copy() 8) extend()	[8]	Understanding	C03
	PART II			
QI	Illustrate matplotlib library.	4	Understanding	CO5
	Explain the legends in a plot. Also write code for following-			
22	4) To change the locations of a legend.5) To create multiple legends.6) To change the colors of legend items.		Applying	500
Q.	Write a program to set the different properties of a plot.	[8]	Applying	COS
2	Explain the pie chart. Also write code for bar chart in horizontal orientation.	[8]	Remembering	COS

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Class Test - II Session-July - Dec, 2021 Month-DEC

Time Allowed: 2 hrs Max Marks: 40

Sem-CSE 5th (Section A & B) Subject-Computer Networks; Code-C022512(022)

Note: -	- Ouestion A & B is mandatory and Attempt any two questions from C_iD &E in each part.	ns from	C,D &E in each par	Α
Q.N.	Questions	Marks	Levels of Bloom's taxonomy	Cos
	PART I			
QA	Draw and explain in brief about Flow control	[2]	Understanding	C04
QB	Make Differentiate between TCP and UDP.	[2]	Remembering	C04
99	Describe the basic services provided by the transport layer?	[8]	Understanding	C04
Q	Define the term IPv4 and IPv6? Expllain its working in detail	[8]	Remembering	C03
QE	In classful addressing how is an IP address in class A, Class B and Class C divided?	8	Understanding	C03
	PART II			
QA	Draw the architecture of message mail format.	[2]	Remembering	COS
Ов	Discuss simple mail transfer protocol	[2]	Understanding	COS
99	Draw and explain the architecture of application layer	[8]	Understanding	CO5
QD	Define firewall.explain different types of firewall.	[8]	Understanding	CO5
QE	Define the term cryptography and explain its various types in detail.	8	Understanding	CO5



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, (Class Test - II Session- July - Dec, 2021 Month-DEC	Month-	DEC	
		s: 40		
Q.N.	Questions		Levels of Bloom's taxonomy	Cos
	PARTI			
QA	Draw and explain in brief about Flow control	[2]	Understanding	CQ4
QВ	Make Differentiate between TCP and UDP.	[2]	Remembering	C04
QC	Describe the basic services provided by the transport layer?	[8]	Understanding	C04
QD	Define the term IPv4 and IPv6? Expllain its working in detail	[8]	Remembering	C03
QE	In classful addressing how is an IP address in class A, Class B and Class C divided?	[8]	Understanding	CO3
	PART II			
QA	Draw the architecture of message mail format.	[2]	Remembering	COS
Qв	Discuss simple mail transfer protocol	[2]	Understanding	303
QC	Draw and explain the architecture of application layer	[8]	Understanding	COS
QD	Define firewall.explain different types of firewall.	[8]	Understanding	300
QE	Define the term cryptography and explain its various types in detail.	[8]	Understanding	COS



Class Test - II Session- July - Dec, 2021 Month-December

Sem-CSE 5th (A+B) Subject- Microprocessor and Interface Code-C022511(022) Time Allowed: 2 hrs Max Marks: 40

nie: - Attempt any 5 question, All questions carry equal marks.

Q.N.	Q.N. Questions	Marks	Levels of Bloom's	COs
-	Explain maximum mode system block diagram of 8086 and also draw its read and write cycle timing diagram?	[8]	Understanding	СОЗ
2.	Write a program to find largest number from a block of 20 bytes. Starting memory location of the byte stored is 2000H: 0400H.	[8]	Applying	соз
ω	Explain interrupt structure of 8086 microprocessor in detail with Interrupt vector table?	[8]	Understanding	соз
4.	Interface two chips of 32K*8 ROM and four chips of 32K*8 RAM with 8086, according to the following maps ROM1 and ROM 2 F0000H- FFFFFH RAM 1 and RAM 2 D0000H- DFFFFH RAM 3 and RAM 4 E0000H-EFFFFH	[8]	Applying	C04
5.	Explain architecture of DMA and also explains its operating modes?	<u>®</u>	Remembering	CO4
6.	Draw the architecture of 8254 and explain its control word register?	8	Understanding	CO4



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Sem- CSE 5th (A+B) Subject- Microprocessor and Interface Code-C022511(022)

Time Allowed: 2 hrs Max Marks: 40

N.	Questions	Marks	Levels of Bloom's	cos
-	Explain maximum mode system block diagram of 8086 and also draw its read and write cycle timing diagram?	[8]	Understanding	соз
2.	Write a program to find largest number from a block of 20 bytes. Starting memory location of the byte stored is 2000H: 0400H.	[8]	Applying	СО3
ω	Explain interrupt structure of 8086 microprocessor in detail with Interrupt vector table?	[8]	Understanding	соз
4.	Interface two chips of 32K*8 ROM and four chips of 32K*8 RAM with 8086, according to the following maps ROM1 and ROM 2 F0000H- FFFFFH RAM 1 and RAM 2 D0000H- DFFFFH RAM 3 and RAM 4 E0000H-EFFFFH	[8]	Applying	CO4
5.	Explain architecture of DMA and also explains its operating modes?	<u>®</u>	Remembering	CO4
6.	Draw the architecture of 8254 and explain its control word register?	[8]	Understanding	CO4