VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234 DEPARTMENT OF COMPUTER SCIENCE

ſ

٦

			DEPARTI	MENT OF COMPU	TER SCIENCE		
		Course Code:	10CT21	Programme:	B.Sc. Computer Science	CIA:	II
	I)	Date:	06.03.2023	Part:	III	Semester:	II
FANDHEA	RIHEAD	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
		Study Component:		Core Course			
Course Title: OBJECT ORIENTED PROGRAMMING WITH C++							

SECTION – A (Remembering)

Answei	• ALL the Questions: $(10 \times 1 = 10 \text{ M})$	(arks)
1	Function overloading is also similar to which of the following?	CO2
	A. operator overloading B. constructor overloading C. destructor overloading D. none	
2	function has access to all private and protected members of the class for which it is a	CO2
	friend.	
2	A. Friend. B. Member. C. Nonmember. D. Void.	000
3	A Is a variable that receives the value.	02
4	is the process of using the same name for two or more functions	CO2
-	A Function overloading B Operator overloading C Default function D Constructors	02
5	A constructor that accepts parameters is called the default constructor.	CO3
Ľ	A. one B.Two C.Three D.No	000
6	Destructor has the same name as the constructor and it is preceded by	CO3
	A. ! B.? C.~ D. &	
7	Which of the following gets called when an object goes out of scope?	CO3
	A. constructor B. destructor C. main D. virtual function	
8	A function with the same name as the class, but preceded with a tilde character (~) is	CO3
	called of that class.	
	A. constructor B. destructor C. function D. object	
9	used to make a copy of one class object from another class object of the same	CO3
	class type.	
	A. constructor B. copy constructor C.destructor D. default constructor	
10	Base class is also called as	CO4
	A. derived B. sub C. super D. subordinate	
	SECTION – B (Remembering)	
Answei	five Questions: (5 X 2 = 10 M)	larks)
11	Define Class	CO2
12	Define Methods	CO2
13	Define Array	CO2
14	List out the types of Constructor	CO3
15	Write about Destructor	CO3
16	Define Constructor	CO3
17	List out the types inheritance	CO4
	SECTION – C (Understanding)	
Answei	any THREE Questions: $(3 \times 6 = 18 \text{ M})$	larks)
18	Explain about Class and Object with example	CO2
19	Explain about Constructor with Example	CO3
20	Discuss about Destructor.	CO3
21	Write about copy constructor with explanation	CO3
22	Difference between Constructor and Methods	CO3
	SECTION – D (Applying)	
Answei	(1X 12=12 M)	arks)
23	Difference between constructor and destructor	CO3
24	Explain about inheritance and its types with example	CO4

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

.....

Г

		DEPART	MENT OF COMPU	TER SCIENCE		
	Course Code:	10CT22	Programme:	B.Sc. Computer Science	CIA:	II
) Date:	09.03.2023	Part:	III	Semester:	II
HANDHEARTHEA	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
	Study Compo	nent:	Core Course			
	Course Title:	DATA STRUC	CTURE			A
		SECT	ION – A (Remember	ring)		
Answer A	ALL the Questions:				(10 X 1 = 10 Ma)	rks)
1	What type of memory	allocation is ref	erred for linked list?			CO2
	a) Static b) S	econdary c)	Dynamic d) m	nain		
2	. The for	r a linked list is	pointer variable that lo	ocates the beginning of	f the list.	C O2
	a) Anchor b) B	Base c)	Footer d) He	eader		
3	In linked list each eler	ment has	field.			C O2
	a) 4 b) 3	c) 2	d) 1			
4	The circular linked lis	t form a circular	·		(C O2
	a) Ring b) ang	le c) Chain d	l) clock			
5	The data structure req	uired to check w	hether an expression	contains balanced pare	enthesis is?	C O3
	a) queue b) stac	k c) linked list	d) file			
6	is not a techni	que of tree trave	ersal.			C O3
	a) pre-order b) po	ost-order d	c) prefix d) in-or	rder		
7	Accessing and process	sing each array e	elements is called	·	(203
0	a) sorting b) tr	aversing	c) searching d) merg	ging		
8	involves mainta	uning two tables	in memory.		(203
0	a) Arranging	b) Bonding	c) Combing	d) Chaining		001
9.	A tree is a finite set of	[tions d) nodes		(203
10	a) loops b) doll	nams. c) tunc	uons d) nodes	a terminal node or		201
10	a) a tree b) a li	ist c) a no	de d) a leaf		·	204
			de d <i>y</i> a lear.			
		SECT	ION – B (Remember	ring)		_ 、
Answer a	any FIVE Questions:				(5 X 2 = 10 Ma)	rks)
11	List the attributes of a	singly linked lis	st?			202
12	List the types of linked	lists?				202
13	What does a node conta	in in a linked list?				202
14	Define a Leaf node in a	tree?				203
15	List the types of tree dat	ta structures?	taa			CO3
10	List the components of a	a graph data struc	ture?			CO3
17	Define sorting?	SECT	ION C (Understand	d')	(204
Anoma	my TIDEE Augustion	SECI	ION – C (Understand	aing)	() V (10 Ma	-
	Discuss briefly on the o	18. perations of a sing	rly linked list?		$(3 \land 0 = 10 \text{ Ma})$	TKS)
10 10	Write a note on the type	of linked list wi	th a neat diagram?			CO2
20	Illustrate the search one	ration using a bin	ary search tree?			CO3
20	Illustrate the working of	f bubble sort with	an example?			203
22	Distinguish Push and Pu	all operations in st	tack?			CO3
		SEC	CTION – D (Annlvin	g)		
Answer	any ONE Question:	510		<i>י</i> פי	(1 X 12= 12 Ma	rks)
23	Explain the characteri	stics of stack and	d its operations?			CO3
24	Explain in details the ch	aracteristics of lir	iked list and its operatio	ons?		CO4
<i>_</i> ··	* · · · · · · · ·		- F			•

	VIVEKAN	ANDA COLL	EGE, TIRUVEDAN MENT OF COMPL	XAM WEST - 6252 ITER SCIENCE	234			
~~~~	Course Code:	10AE21	Programme:	B.Sc. Computer Science	CIA:	II		
	Date:	10.03.2023	Part:	III	Semester:	II		
	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50		
HAND HEART HEAD	Study Component:		Ability Enhancement Course					
	<b>Course Title:</b>	STATISTICS	ISTICS AND NUMERICAL METHODS					
		•						

### **SECTION – A (Remembering)**

Answer	$\mathbf{ALL} \text{ the Questions:} \qquad (10 \text{ X } 1 = 10 \text{ N})$	larks)
1	In the Gauss elimination method for solving a system of linear algebraic equations,	CO5
	triangularzation leads to	
	a) Diagonal Matrix b) Lower triangular matrix	
	c) Upper triangular matrix d) singular matrix	
2	Using Bisection method, negative root of $x3 - 4x + 9 = 0$ correct to three decimal places is	CO5
	a) -2.506 b) -2.706 c)-2.406 d) -2.206	
3	If population census for the years 1931, 1941, 1951, 1961 and 1971 is given and if we	CO5
	want to estimate the population for the year 1935 then method is	
	used.	
	(a) Forward difference (b) backward difference	
	(c) Newton's divided difference (d) Lagrangian	
4	Statistical population may consist of	CO5
_	a) Infinite number of items b) finite number of items c) either a or b d) neither a or b	001
5	Which of the following is not an example for primary data	CO1
	a) Mailed questionnaire b) local correspondence c) indirect oral investigation	
6	a) survey reports in news paper $rule is applicable only when n is a multiple of 3$	CO1
0	rule is applicable only when it is a multiple of 5.	COI
7	is used to denote the process of finding the values inside the interval(X(), Xn)	CO1
,	a Interpolation b Extrapolation c Iterative d Polynomial equation	COI
8	The degree of $y(x)$ in Trapezoidal Rule is	CO1
0	A 1 B 2 C 3 D 6	COI
9	Simpson's one third rule degree is	CO1
-	A. one B. two C. 4 D. 6	001
10	What is the simple arithmetic mean of 15,0,6,0,9?	<b>CO2</b>
	a)20 b)15 c)10 d)60	
	<b>SECTION – B (Remembering)</b>	
Answer	T any FIVE Questions: $(5 \times 2 = 10 \times 10^{-5})$	larks)
11	Write procedure to solve Lagrange's interpolation	CO5
12	Write a formula of Newton divided differences	CO5
13	List out methods to solve unequal interval	CO5
14	Write a formula of find mean	CO1
15	Write a formula of find median	CO1
16	Write a formula of find mode	<b>CO1</b>

**CO2** 

17 Write a formula of find Mean Deviation

## **SECTION – C (Understanding)**

## Answer any **THREE** Questions:

)

## **SECTION – D (Applying)**

## Answer any **ONE** Question:

## 23 Find Mean, Median for the following data

X	0-10	10-20	20-30	30-40	40-50	50-60
f	12	18	27	20	17	6

## 24 Find mean deviation for the following data

Х	20-30	30-40	40-50	50-60	60-70	70-80	80-90
f	3	61	132	153	140	51	2

CO1

(1X 12= 12 Marks)

(3 X 6= 18 Marks)

**CO2** 

/		VIVENA	DEPARTM	EGE, TIKOVEDAR	ER SCIENCE	<b>0</b> +	
		Octores Octor		<b>D</b>	B.Sc. Computer		
	TANK	Course Code:	10C141	Programme:	Science		11
		Date:	06.03.2023	Part:	III	Semester:	IV
		Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
HANDH	ARTHEAD	Study Compon	ient:	Core Course			
		<b>Course Title:</b>	RELATIONA	L DATABASE MAI	NAGEMENT SYSTI	CM	
			SECT	TION – A (Remember	ing)		
Ans	wer A	LL the Questions:			<u>s</u> )	(10 X 1 = 10 Ma)	arks)
1	Which	n level of Abstractio	n describes how	data are stored in the d	atabase?	``	COY
•	a) Phy	vsical level b)	View level	c) Abstraction leve	el d) Logical level		02
2	a) Refere	ation key b) Foreign	rectly related to	 Primary key d)	Candidate key	•	CO2
3	The al	bility to modify a sc	hema definition i	n a level without affect	ting a schema definition	n in another	<b>a a</b>
	level i	is called a)	Data instance	b) Data Model c) Da	ata structure d) Data	independence	CO2
4	ER M	odel belongs to					
	a) Phy	/sical data Model	b) Record b odel d) All of ab	based logical Model			CO2
5	Which	forms are based or	the concept of f	unctional dependency?			~~~
	a) 1N	F b) 2NF	c) 3	SNF d)	4NF		CO3
6	The n	umber of attributes i	in relation is calle	ed as its			CO3
7	a) Car	is a collection of	Degree c)	perform a single logic	Entity al function in a database	e application	
,	a) Que	ery b) Transaction	n c) Primary Ke	ey d) Referential int	tegrity	e apprication	CO3
8	Refere	ential integrity const	traints are also ca	lled as			
	a) Fur	nctional dependencie	es b) S	Subset dependencies			CO3
9	c) Sup Third	normal form is base	d) t d on the concept	of			
,	a) Clo	sure Dependency	b) Transi	tive Dependency			CO3
4.0	c) Not	rmal Dependency	d) Functio	onal Dependency			
10	Files l	known to be storing	the database itsel	If is called	d) Indices		CO4
	a) Dai	a dictionary 0)	SECT	FION – B (Remember	ing)		
Ans	wer an	y FIVE Questions:	:		-	(5 X 2 = 10 Ma)	ırks)
11	Give t	the use of Data Defin	nition Language				C <b>O2</b>
12	Define	e a trigger.					CO2
13	Define	e referential integrity	у.				CO2
14 15	L ist th	e infinalization.	orms				CO3
15	Expar	nd RAID.	51113.				CO3
17	What	is meant by data dic	ctionary?				CO4
		·	SECT	ION – C (Understand	ling)		
Ans	wer an	y THREE Questio	ns:			(3 X 6= 18 Ma	ırks)
18	Write	a note on the basic s	structure of SQL.				C <b>O</b> 2
19 20	Distin	guish between doma	ain constraints an	d integrity constraints.			CO3
20 21	Write	a brief note on emb	edded SQL.				CO3
21 22	Brief	a note Functional de	ependencies?				CO3
	21101		SE	CTION – D (Applying	g)		
Ans	wer an	y ONE Question:		× 11 V 8	<u>.</u>	(1X 12= 12 Ma	ırks)
23	Expla	in in detail about the	e features of SQL	and give examples on	DDL commands.		CO3

**

24

**CO4** 

24 Explain in detail Normalization and its types.

## VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

		DEPARTM	IENT OF COMPUT	ER SCIENCE		
	Course Code:	10CT42	Programme:	B.Sc. Comput	ter CIA:	II
				Science		
	Date:	09.03.2023	Part:		Semester:	
FAND HEAT	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
	Study Compon	nent:	Core Course			
	Course Title:	DOT NET P	ROGRAMMING			
		SECT	ION – A (Remember	ring)		
Answer	• ALL the Question	s:	× ×	8/	(10 X 1 = 10 Mark	(s)
1	What is the value	of the index for t	the first element in a V	/B.NET array?	CO	)2
	a)0 b) 1	1 c) 2	d) 3			
2	Which method wil	ll return the num	ber of elements in an	array?	CO	)2
-	a) Dimension	b) Lo	ength c) N	lumber.	d) Size.	
3	What is the syntax	of dynamic arra	iy?	,	Ċ	)2
	a) Dim Array_nam	ne(new_size)	b) Redim A	array_name(new_	size)	
Λ	c) Dim Array_nam	ne(size)	d) Redim A	array_name(size)	C	<b>`</b>
4	How many types of	of array?	4) <b>5</b>			J2
5	d/2 $U/2Which of the follo$	+ C) S wing language y	u) J vas developed as the f	irst nurely object	programming C(	73
3	language?	wing language v	vas developed as the f	list putery object		<b>J</b> 3
	a) SmallTalk	h)C++	c)Kotlin	d)Iava	1	
6	Which among the	following featur	e does not come unde	r the concept of C	DOPS? CO	)3
0	a) Data binding	b) Data hidi	ng c) Platform inder	bendent d) Me	ssage passing	
7	Which functions are	e declared inside a	class have to be defined	d separately outside	e the class? C(	)3
	a) Static function	b) Const fur	ctions c) Inline fu	unction d) Me	mber function	
8	How many types of	of access specifie	es are provided in OO	P (C++)?	CO	)3
	a) 4	b) 3	c) 2 d) 1			
9	The point at which	n an exception is	thrown is called the _	•	CO	)3
	a) Default point	b) In	voking point c) C	Calling point	d) Throw point	~ .
10	ASP was introduce	ed in?	> 1000	1) 200	CC	)4
	a) 1997	D) 1998	C) 1999	d) 200	0	
Answer	any FIVE Questio	SEC I	ION – D (Keineinber	ring)	(5 X 2 – 10 Mark	<b>7C</b> )
Allswei 11	Define Events	MIS.			$(3 \land 2 = 10 \text{ what } \text{c})$	ר) אופי
11	What do you mean	hy Scroll Bar C	ontrol?			גע זב
12	What is Array?					$\frac{12}{12}$
13	Define Class					)3
15	What polymorphis	sm?			C	)3
16	Define Inheritance.				C	)3
17	Explain about De	legates			CO	)4
	1	SECT	ION – C (Understan	ding)		
Answer	any <b>THREE</b> Ques	stions:	,	0,	(3 X 6= 18 Mark	(s)
18	Explain the Date T	ime Picker in VB	B.NET.		CO	)2
19	Discusses about th	e Boxing and U	Inboxing		CO	)3
20	Write a VB.NET p	program Armstro	ong number or not.		CO	)3
21	Discusses about of	constructor			CO	)3
22	Explain the function	on with example		-)	CO	J3
	a	SE	UTION – D (Applyin	ig)		
Answer	any <b>ONE</b> Questio	on:		<b>1</b> • .•	(1X 12= 12 Mark	(S)
23	Write a string man	npulation progra	m using vb.net windo	ws application.	CO	J3
24	Discuses about Ex	ception Handling	g with example.		C	J4

	VIVEKAN	ANDA COLL	EGE, TIRUVEDAF	KAM WEST - 6252	234			
	DEPARTMENT OF COMPUTER SCIENCE							
~~~~	Course Code:	10AE41	Programme:	B.Sc. Computer Science	CIA:	II		
	Date:	10.03.2023	Part:	III	Semester:	IV		
	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50		
HANDHEARTHEAD	Study Component:		Ability Enhancement Course					
	Course Title:	NUMERICA	AL METHODS FOR COMPUTER SCIENCE					
		CE CE		• \				

SECTION – A (Remembering) Answer **ALL** the Questions: (10 X 1 = 10 Marks)1 If the value of derivative is required near the middle of the table we use one of the _____ nterpolation CO3 formulas a. Newton Forward Interpolation Formula. b.Central Difference Formula. c.Newton Forward Difference Formula. d.LaGrange's Interpolation Formula. 2 An unequal intervals, we can use _____ to get the derivative value. **CO3** a.Newton Forward Interpolation Formula. b.Newton Backward Interpolation Formula. c.Newton Forward Difference Formula. d.LaGrange's Interpolation Formula _____ defines as "the art of reading between the lines of a table." 3 **CO3** Extrapolation (b) Divided difference (c) Lagrange's (d) Interpolation 4 If population census for the years 1931, 1941, 1951, 1961 and 1971 is given and if we **CO3** want to estimate the population for the year 1935 then method is used. (b) backward difference (a) Forward difference (c) Newton's divided difference (d) Lagrangian **5** ._____ rule is applicable only when n is a multiple of 3. **CO4** A. Weddle's B. Trapezoideal C. Simpson's 1/3 D. Simpson's 3/8 **6** ______ is used to denote the process of finding the values inside the interval(X0, Xn). **CO4** b.Extrapolation. a.Interpolation. c.Iterative. d.Polynomial equation. 7 The degree of y(x) in Trapezoidal Rule is _____. **CO4** A. 1 B. 2 C. 3 D. 6 8 Simpson's one third rule degree is_____. **CO4** A. one B. two C. 4 D 6 **9** What is the value of factorial Zero (0!)? **CO4 B**. 1 C. 2 D. 3 A. 0 **10** Gauss Jacobi method is a _ **CO1** A. direct B. self correcting C. step by step D. indirect

SECTION – B (Remembering)

Answe	r any FIVE Questions:	(5 X 2 = 10 Marks)
11	Write procedure to solve Lagrange's interpolation	CO3
12	Write a formula of Newton divided differences	CO3
13	List out methods to solve unequal interval	CO3
14	Write a formula of Trapezoidal Rule	CO4
15	Write procedure to solve Romberg's method	CO4
16	What is the procedure to apply Simpson's 3/8 rule	CO4
17	How to solve Gauss Elimination method?	C01

SECTION – C (Understanding)

(3 X 6= 18 Marks) CO3

Answer	any THREE Questions:
18	Form divided difference table for the following data

	of the following data							
Х	-2	0	3	5	7	8		
Y=f(x)	-792	108	-72	48	-144	-252		

19	$\int_0^1 \frac{dx}{1+x^2}$ solve the equation using Trapezoidal method where h=0.2	CO4
20	Evaluate $\int_{-3}^{3} x4 dx$ using Simpson's 1/3 rule where h=1.	CO4
21	Evaluate $\int_{-3}^{3} x4 dx$ using Simpson's 3/8 rule where h=1.	CO4
22	Evaluate $\int_0^1 \frac{dx}{1+x^2}$ using Romberg's method where h=0.5.	CO4

SECTION – D (Applying)

Answer	any ONE Question:	(1X 12= 12 Marks)
23	$\int_0^6 \frac{dx}{1+x}$ solve the equation using Trapezoidal rule, Simpson's rule both where h	=1 CO4
24	Solve the system of equations by Gauss Elimination method 2x + 3y - z = 5; $4x + 4y - 3z = 3$; $2x - 3y + 2z = 2$	C01

	VIVEKAN	ANDA COLL	EGE, TIRUVEDAF	XAM WEST - 6252	234			
		DEPARTMENT OF COMPUTER SCIENCE						
	Course Code:	10CT61	Programme:	B.Sc. Computer Science	CIA:	II		
	Date:	09.03.2023	Part:	III	Semester:	VI		
	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50		
AND HEARING	Study Compo	nent:	Core			II VI 50		
	Course Title:	WEB PROGI	RAMMING					

SECTION – A (Remembering)

Answer	TALL the Questions: $(10 \times 1 = 10)$	Marks)
1	is network of networks.	CO2
	A. Internet B. Intranet C. Extranet D. Arpanet	
2	WWW stands for	CO2
	A. World Wide Weapon B. World Wide Windows C. World Wide Web	
	D. World Wide Writers	
3	HTTP stands for	CO2
	A. Hypertext Transfer Protocol B. Hypertext Transmission Protocol	
	C. Hyper Text Transfer Program D. Hypertext Traditional Protocol	
4	Which of the following is correct about JavaScript?	CO2
	A. JavaScript is a lightweight, interpreted programming language.	
	B. JavaScript has object-oriented capabilities that allows you to build interactivity into	
	otherwise static HTML pages.	
	C. The general-purpose core of the language has been embedded in Netscape, Internet	
	Explorer, and other web browsers.	
	D. All of the above.	
5	Which built-in method returns the string representation of the number's value?	CO3
	A - toValue() B - toNumber() C - toString() D - None of the above.	
6	Where is the correct place to insert a JavaScript?	CO3
	a) The <head> section b) The <body> section</body></head>	
	c) The <title> section d) Both the <head> section and the <body> section are</body></head></title>	
	correct	
7	How do you write "Hello World" in an alert box?	CO3
	a) alertBox("Hello World"); b) msg("Hello World");	
	c) alert("Hello World"); d) msgBox("Hello World");	
8	How do you create a function in JavaScript?	CO3
	a) function myFunction(){ statements} b) function = myFunction() { statements}	
	c) function:myFunction() { statement } d) function::myFunction() { statements }	
9	How do you call a function named "myFunction"?	CO3
	a) myFunction(); b) function:myFunction(); c) call myFunction();	
	d) call function myFunction();	
10	Which is conjunction operator in javascript?	CO4
	a)+ b)# c)& d)*	

SECTION – B (Remembering)

Answer	any FIVE Questions:	(5 X 2 = 10 Marks)
11	Which tag give the information to browser embedded with HTML	CO2
12	How to create javascript variable name?	CO2

13	How to display a text in browser using javascript?	CO2
14	How do you find length of javascript Array?	CO3
15	Define operators	CO3
16	List out any four javascript build-in functions	CO3
17	List any four php datatypes	CO4

SECTION – C (Understanding)

Answer	any THREE Questions:	(3 X 6= 18 Marks)
18	Discuss on javascript datatypes and literals	CO2
19	Write a procedure to save and run a javascript file	CO3
20	Write a short notes on javascript operators	CO3
21	Write a short notes on simple if else statement using javascript	CO3
22	Discuss on text and password javascript dom elements	CO3

SECTION – D (Applying)

Answer	any ONE Question:	(1X 12= 12 Marks)
23	Discuss on javascript dialog boxes	CO3
24	Write a php program to check palindrome or not	CO4

	VIVEKAN	IANDA COLL	EGE, TIRUVEDA	KAM WEST - 625	234	
	Course Code:	10EP6A	Programme:	B.Sc. Computer	CIA:	II
	Date:	10.03.2023	Part:	III	Semester:	VI
	Duration:	2 Hours	Academic Year:	: 2022-23	Max. Marks:	50
ND HEART HEAD	Study Compo	nent:	Elective			
	Course Title:	SOFTWARE	TESTING			-
		SECT	'ION – A (Remembe	ering)		
nswer A	LL the Questions:			-	(10 X 1 = 10 Ma)	arks)
1 (Control flow testing is	s typ	e of testing			CO2
2 I	() Black box b) W	nite box c) Sa atrol graph is a r	and Box d) Clean	room links meet		ററാ
2 J	a = b = 3	(100 graph is a p) 4 d) 7	onit where atleast			02
3 _	coverage refe	rs to executing in	ndividual program sta	atements and observin	ig the outcome	CO2
a) Selection Path b)) Statement c	c) Branch d) Predic	cate		
4 A	An is a collec	tion of all data e	ntities read by the rou	utine whose values are	e fixed prior to	CO2
е 5	is an outgoing	a) Input vector edge from a pod	b) output vector c) predicate d) Path p	bredicate	CO3
З_ а	Leaf node b) Bra	anch c) root r	ode d) statement			05
6 _	uses the co	ntrol flow graph	to detect illogical thi	ngs that can interrupt	the flow of data	CO3
a) Data flow testing	b) Control flo	ow c) Unit testing	d) system testing		
7 _	flow testing is	s performed by a	nalyzing the source c	ode and not by execu	ting the source	CO3
	ode a) Dynamic	b) Static	c) Recursive d) B	ranch		CO2
o 1	$(10^{\circ} \text{ many functanien})$	$\frac{1}{3}$ d) 5		in data now testing?		05
9 _	error occurs v	when a specific in	nput data causes the p	brogram to execute the	e correct	CO3
a) domain b) Com	putation c)	data d) memory	C		
10 _	is a set of value	es for which the	program performs ide	entical computations		CO4
а) variable b) const	ant c) linear fu	inction d) domain			
		SECT	ION – B (Remembe	ering)		
iswer a	ny FIVE Questions:				(5 X 2 = 10 Ma)	arks)
	Define program path?	aronh?				CO2
12 L 13 L	ist the well-known r	graph: oth selection cri	torian			CO_2
13 14 χ	What is meant by cycl	lomatic complex	vity?			CO_2
15 I	ist the types data flo	w anomalies?	ity.			CO3
16 I	ist the types of doma	ain errors?				CO3
17 I	Define integration tes	ting?				CO4
	8	SECT	ION – C (Understan	ding)		
iswer a	ny THREE Question	ns:	× ×	0,	(3 X 6= 18 Ma	arks)
18 I	Discuss briefly the pro-	ocess of generati	ing test input for cont	rol flow testing?		CO2
19 V	Vrite a note on staten	nent coverage cr	iterion?			CO3
20 I	llustrate the predicate	e coverage criter	ion with a neat flow o	liagram?		CO3
21 V	Write a note on test se	election criterion	for domain testing?			CO3
22 E	Brief a note on types	of interfaces?				CO3
		SE	CTION – D (Applyin	ng)		•
swer a	ny ONE Question:	, , . .	.1 1		(1 X 12 = 12 Ma)	irks)
23 E	explain the control flo	ow testing and p	ath selection criteria?			CO3
24 E	explain in details the	types of interfac	e errors ?			UU4

&&&&&&&

	VIVEKAN	ANDA COLLE	GE, TIRUVEDAK	AM WEST - 6252	234	
		DEPARTI	AENT OF COMPUT	D So Computer	T	
	Course Code:	10SB62	Programme:	Science	CIA:	II
	Date:	03.03.2023	Part:	IV	Semester:	VI
	Duration:	1 Hour	Academic Year:	2022-23	Max. Marks:	25
HANDHEARTHEAD	Study Compon	nent:	Skill Based	•		
	Course Title:	CYBER SEC	URITY			
	·	·				
Δnswer	• ALL the Questions		SECTION – A		(5 X 1 – 5 Marks)
Allswei 1	There are	types of comr	outer virus		$(3 \times 1 - 3)$ what is CO_4	, 1
•	a) 5 b) 7	c) 10	d) 12			•
2	A computer	is a maliciou	s code which self-repli	icates by copying its	elf to other CO	4
	programs.		T			
	a) program	b) virus c	c) application	d) worm		
3	Which of the follow	wing is not a type	e of virus?		CO	4
	a) Boot sector	b) Polymorpl	nic c) Multipar	tite d) Trojar	18	
4	What is data encrypt	ption standard (D	DES)?		CO	5
	a) block cipher	b) stream ci	ipher c) bit cip	oher d) byte	cipher	
5	In cryptography, th	ne order of the le	tters in a message is re	arranged by	CO:	5
	a) transpositional c	iphers	b) substitution ciphers	5		
	c) both transpositio	onal ciphers and s	ubstitution ciphers	d) quadratic c	ciphers	
			SECTION – B			
Answer	any TWO Question	ns:			(2 X 2 = 4 Marks)
6	Define Virus				CO	4
7	What is meant by T	Trojans?			CO	4
8	Define worm				CO	4
9	Define Cryptograph	hy.			CO	5
			SECTION – C			
Answer	any ONE Question	:			(1 X 6= 6 Marks)
10	Write about the typ	bes of virus			CO	4
11	Describe about the	Cryptography a	nd Encryption Technic	lues	CO	5
			SECTION – D			
Answer	any ONE Ouestion	:		(1 X 10= 10 Marks)
12	Explain about the c	lifferent between	virus and worm	(CO4	4
13	Explain the MD5 A	Algorithm			CO	5
	•	-				
			8 . 8 . 8 . 8 . 8 . 8 . 8 .			