

	DEPART	MENT OF COMPU	TER SCIENCE	andereta zandereta (1500 met 164 meteor antereta de la proprio met men 1954 meteor antereta de meteo). La	I PROFESSIONAL SERVICE SAVE
Course Code:	10CT21	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	15.04.2023	Part:	III	Semester:	II
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compos	nent:	Core Course	german film for an analysis film and and an in the heart for the 10 th		
Course Title:	OBJECT OF	RIENTED PROGRA	AMMING WITH	C++	pille. And read

#### SECTION – A (Remembering)

	SECTION – A (Remembering)	
Answe	er ALL the Questions: $(10 \times 1 = 10)$	Marks)
1	How many basic types of inheritance are provided as OOP feature?	CO4
	a) 4 b)3 c)2 d)1	
2	Which type of inheritance results in the diamond problem?	<b>CO4</b>
	a) Single level b) Hybrid c) Hierarchical d) Multilevel	
3	In hierarchical inheritance, all the classes involve some kind of inheritance.	CO4
	a) True b) False	
4	71 0	CO <sub>4</sub>
	a) At least 2 classes b) At most 2 classes c) Exactly 2 classes d) At most 4 classes	
5	If same message is passed to objects of several different classes and all of those can	CO5
	respond in a different way, what is this feature called?	
	a) Inheritance b) Overloading c) Polymorphism d) Overriding	
6	Which type of function among the following shows polymorphism?	CO <sub>5</sub>
	a) Inline function b) Virtual function c) Undefined functions d) Class member	
	functions	
7		CO <sub>5</sub>
	a) Variable pointer b) This pointer c) Null pointer d) Zero pointer	
8	A	CO <sub>5</sub>
	a) Encapsulation b) Abstraction c) Inheritance d) Polymorphism	
9	1 7 1	CO5
	a) Concept of allowing overriding of functions b) Concept of hiding data	
	c) Concept of keeping things in different modules d) Concept of wrapping things into a	
	single unit	G0.
10	the state of the s	CO5
	A. derived B. sub C. super D. subordinate	
	SECTION D (Domombosing)	
Angwa	SECTION – B (Remembering) r any FIVE Questions: $(5 \times 2 = 10)$	Marke)
Aliswo	Define Inheritance	CO4
12	List out the types inheritance	CO4
13	Define Pointer	CO5
14	Write the syntax of THIS pointer	CO5
15	Write about Virtual function	CO5
16	Define Pure Virtual function	CO5
17	List out the types of Access Specifier	CO5
	**	

# SECTION - C (Understanding)

Answe	r any THREE Questions:	(3 X 6= 18 Marks)
18	Explain about the single inheritance with example	CO4
19	Explain about Access Specifier	CO4
20	Discuss about THIS pointer with example	CO5
	Write about Virtual function with explanation	CO5
	Difference between virtual function and pure virtual function	CO5
	SECTION - D (Applying)	
Answe	r any ONE Question:	(1X 12=12 Marks)
23	Explain about the pure virtual function with example	. CO4
24	Explain about Multiple inheritance with example	CO5



	A STATE OF THE STA	DEPARTMENT OF COMPUTER SCIENCE					
	Course Code:	10CT22	Programme:	B.Sc. Computer Science	CIA:	Ш	
	Date:	19.04.2023	Part:	III	Semester:	II	
Activities (references)	<b>Duration:</b> 2 Hours		Academic Year:	2022-23	Max. Marks:	50	
	Study Component:		Core Course				
	Course Title:	DATA STRU	CTURE			emenualina de ar	

	SECTION - A (Remembering)	
Answe	er ALL the Questions:	(10 X 1 = 10 Marks)
1	Accessing and processing each array elements is called  a) sorting b) traversing c) searching d) merging.	CO4
2	Allocating memory for arrays during program compilation is  a) dynamic memory allocation b) memory allocation	CO4
	c) static allocation d) random allocation	
3	is not a technique of tree traversal.	CO4
	a) pre-order b) post-order c) prefix d) in-order	CO4
4	The length of the string can be listed as an additional item ina) base pointer b) pointer array c) node d) record	
5	involves maintaining two tables in memory.	CO5
	a) Arranging b) Bonding c) Combing d) Chaining.	C03
6	An is a well defined list of steps for solving a problem.	CO5
_	a) Algorithm b) Program c) Procedure d) Process.	CO3
7	The is used in an elegant sorting algorithm.	CO5
0	a) Heap sort b) Quick sort c) Merge sort d) Radix	sort.
= 8	Each entry in a linked list is a called a	CO5
9	a) Link b) Node c) Data Structure d) Avail	
	If every node u in G is adjacent to every other node v in G, A graph is said to a) isolate b) complete c) finite d) Strongly connected.	O be CO5
10	A vertex of degree one is called	CO5
	a) pedant b) isolated vertex c) null vertex d) colore	d vertex
A '	SECTION – B (Remembering)	
	any FIVE Questions:	(5 X 2 = 10 Marks)
	Define Queue	CO4
	List out the types queue	CO4
	Give the parts of a queue  Define a graph	CO5
	List the types of sorting	CO5
	Distinguish adaptive and non-adaptive sorting	CO5
	List out the types tree structures	CO5
17	SECTION – C (Understanding)	CO5
Answer	any THREE Questions:	(3 X 6= 18 Marks)
	Discuss the characteristics of a Queue	(5 A 0- 16 Marks) CO4
19	Explain the operations in Queue	CO4
20	Write a program in C to insert an element at the beginning of a Linked List	CO5
21	Discuss on the characteristics of Merge sort.	CO5
22	Write a note on Warshall's algorithm	CO5
	SECTION – D (Applying)	
Answer	any ONE Question:	(1X 12 = 12 Marks)
23	Explain about Binary trees and types of tree traversal techniques	CO4
24	Explain in detail the working of Insertion sort with an example	CO5

TOWN	TO THE
	3

	DEPART!	MENT OF COMPU	TER SCIENCE		
Course Code:	10AE21	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	20.04.2023	Part:	III	Semester:	II
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compos	nent:	Ability Enhancer	nent Course		
Course Title:	STATISTICS	S AND NUMERICA	L METHODS	A THE RESIDENCE OF THE PROPERTY OF THE PROPERT	

## **SECTION – A (Remembering)**

	SECTION - A (Remembering)	
Answe	er ALL the Questions:	(10 X 1 = 10 Marks)
1	Which among the following is a sample space obtained while tossing a coin to	thrice? CO2
	$a)\{(H,T),(T,H),(T,T),(H,H)\}$ $b)\{(H,H,H),(H,T,T),(T,T,T)\}$	
	$c)\{(H,H),(T,T)\}$	
	d){(H,H,H),(H,H,T),(H,T,T),(T,H,T),(H,T,H),(T,T,H),(T,H,H),(T,T,T)}	
2	In a random experiment of selecting a red bead from a bag with five beads	CO2
	of colours red, white, blue, green and yellow, probability of "getting a red be	ad" is
	a) 1/6 b) 1/5 c) 3/5 d) 1/3	
3	Classical definition of probability gives that if the elementary events of a	CO2
	random experiment are mutually exclusive, exhaustive and equally likely, the	n
	a)P(A)=Number of outcomes of A/ Total number of outcomes	
	b)P(A)=Number of elements in A	
	c)P(A)=Number of elements in S/ Number of outcomes of A	
	d) None of the above	
4	The data collected by questionnaires are	CO2
	a)Primary data. b)Secondary data. c)Published data. d) Grouped data.	
5	Classical definition of probability is applicable only when the following hold	s true CO3
	i) Sample space is finite, ii) Events are mutually exclusive, iii) Events are	
	equally likely, iv) Events are exhaustive	
	a) i, ii b)ii, iii, iv c)i, ii, iii, iv d) i	
6	Phenomenon of Statistical Regularity is observed when	CO3
	a) Number of trials of a random experiment increases	
	b) Number of trials of a random experiment is kept minimal	
	c) Relative frequencies approach divergent values	
	d) None of these	
7	If $A=\{1\}$ and $B=\{2,3\}$ in $S=\{1,2,3,5,6\}$ , which is the event representing the	CO3
	occurrence of exactly one of events A,B?	
	a){1,2,3} b){} c){2,3} d)S	
8	In a random experiment of rolling a die and observing the number shown	CO3
	up, let A be the event "odd number showing up". Then Ac=	
	a){1,2,3,6} b){1} c){1,3,5} d){2,6}	
9	Which of the given sets are not an event of the sample space $S = \{a, 1, 2, 3, z\}$	CO3
	a) $\{a, z\}$ b) $\{1,2,3\}$ c) $\{\}$ d) $\{a, b\}$	
10	Which of the following is not a characteristic of a random experiment?	CO3
	a) Number of outcomes is 2 or more	
	b) All outcomes are not known in advance	
	c) Outcome obtained in a particular trial is not known in advance	
	d) Experiment can be repeated under identical conditions	

### SECTION - B (Remembering)

Answe	r any FIV	E Quest	ions:				8)		$(5 \times 2 = 10)$	Mark
11	Define s	tatistics								CO
12	Write a f	formula	of range							CO
13	Draw a	Venn Di	agram for	$A \cup B$						CO
14	Draw a V	Venn Di	agram for	$A \cap B$						CO
15			$(B) \neq (B -$		$A = \{10,$	11,12,13}	$B = \{13,$	14,15}		CO
16	Define p	robabili	ty							CO
17	Define E	ent								CO
				SECTIO	N – C (Ur	iderstand	ing)			
Answe	r any THI	REE Qu	estions:						$(3 \times 6 = 18 \text{ M})$	Mark
18	If Two c	oins toss	sed find the	e probabili	ity that (i)	At least or	ne head (ii	) all possib	le of Tails	CO
	(iii) Mor	e than o	ne head							
19	If three o	oins are	tossed fin	d the prob	ability of (	(i) More th	an one he	ad (ii) At le	east two Tail	CO
	(iii) Exac	ctly two	Tail							
20	A randor	n variab	le X has th	ne followir	ng probabi	lity function	on find K			CO
	Value	0	1	2	3	4	5	6	7	
	of x									
	P(x)	0	K	2k	2k	3k	K <sup>2</sup>	2K <sup>2</sup>	$7K^2 + k$	
21	Write for	rmulas o	f Algebra	of sets						CO
22	Explain a	about di	screte mas	s function	and contin	uous rand	om variab	le		CO
	•									
				SECT	ION – D (	Applying	)			
Anguya	rany ON	F Quest	ion						$(1 \times 12 = 12)$	Marks

Answer any ONE Question:

(1X 12=12 Marks)

- 23 State and prove addition theorem probability through (i) Venn Diagram and (ii) set theory CO2
- 24 Three groups of children contain respectively 3 girls and 1boy, 2girls and 2boys, and 1girl and 3boys. One child is selected at random from each group. Show that the three selected consist of 1girl and 2boys is 13/32.

MANAGEMENT .		
	W	<b>不</b>
-	*	۵)

	DEPART	MENT OF COMPU	TER SCIENCE	,	
Course Code:	10GE21	Programme:	B.A./B.Sc.	CIA:	Ш
Date:	17.04.2023	Part:	IV	Semester:	II
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compo	nent:	General Elective	Course		
Course Title:	WEB PROGI	RAMMING			2000

### SECTION - A (Remembering)

	SECTION	- A (Remembering)		
Answe	r ALL the Questions:		$(10 \times 1 = 10 \times 1)$	(Iarks)
	<b> tag indicates</b>		·	CO1
	A. Bold B. Font	C. Text	D. paragraph	
2	<tr> tag used to represent</tr>		1 0 1	CO1
_	A. Table row B. table cold		D. none	
3	Which one of the following is unordered			CO2
3	A. <ul> B. <ol></ol></ul>	C. <li></li>	D <di></di>	002
4	Which tag is used for adding image?	C. LIP	D. 4DD	CO2
4	A. <a href=""> B. <img src<="" td=""/><td>C <tevt></tevt></td><td>D. <frame/></td><td>002</td></a>	C <tevt></tevt>	D. <frame/>	002
_	Which tag is used for linking documen		D. Tame	CO3
5	•		D. <html></html>	COS
	3		D. \HIML	CO2
6	An Xpath expression is specified using		75.1 (1.1	CO <sub>3</sub>
	A. curly braces. B. square braces.			
7	1) Ever element cre			CO4
	A. type='checkbox' B. type='chkbox'	• •	D. type='chk box'.	
8	in a form causes chan	_		CO4
	A. Method = 'post'. B. Method = 'get'	C. Method = 'change	'. D. Method = 'action'.	
9	is intended to define the c	ontent of the document.		CO <sub>5</sub>
	A. CSS. B. HTML.	C. XML.	D. DHTML	
10	The action attribute in the tag is t	he path to a script that pro	cesses the form data.	CO <sub>5</sub>
	A. type. B. form. C.	text. D. select.		
	· ·	-B (Remembering)		
Answer	any FIVE Questions:		$(5 \times 2 = 10 \text{ N})$	Iarks)
11	Define HTML.			CO <sub>1</sub>
12	Write a short note on <marquee>?</marquee>			CO <sub>1</sub>
13	EXPAND HTML and HTTP?			CO <sub>2</sub>
	What is table row tag?			CO3
15	Define row span and column span.			CO3 CO4
16	Write any two-browser name?			CO4
17	<u> </u>	- C (Understanding)		COS
Ancure	any THREE Questions:	- C (Onderstanding)	(3 X 6= 18 M	farks)
	Briefly discuss about the structure of H	TML.	(0 11 0 10 10	CO1
19	Discuss about unordered list with examp			CO <sub>2</sub>
20	How to create a table? Explain with a sin			CO <sub>3</sub>
21	Explain about Frame tag with suitable ex			CO <sub>4</sub>
22	Briefly discuss about radio button and cl			CO <sub>5</sub>
		N – D (Applying)		
	any ONE Question:		(1X 12 = 12 N)	
23	How to create list with types and suitable	e example program.		CO1
24	Write a HTML program to display your			CO3
	&	z&&&&&		

	~	~
	W.	<b>         </b>
(	*	3
1	TAXU III	

	DEPART	MENT OF COMPU	TER SCIENCE		
Course Code:	10CT41	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	15.04.2023	Part:	III	Semester:	IV
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compo	nent:	Core Course	per una una procesa (-p. 1.) Apar. Add un un un anno a una una un a		
Course Title:	RELATIONA	L DATABASE MA	NAGEMENT SY	STEM	

## SECTION – A (Remembering)

	SECTION – A (Remembering)	
Answe	r ALL the Questions: $(10 \times 1 = 10 \times 1$	Iarks)
1	With which type of SQL Server recovery model, is no logging done?	CO4
	a) Differential recovery b) Full recovery c)Bulk-logged recovery d)Simple recovery	CO4
2	Which of the following is valid SQL for an Index?	
	a) CREATE INDEX ID b) CHANGE INDEX ID c) ADD INDEX ID	CO4
	d) REMOVE INDEX ID	
3	To remove duplicate rows from the results of an SQL SELECT statement, the	
	qualifier specified must be included.	CO <sub>4</sub>
	a) ONLY b) UNIQUE c) DISTINCT d) SINGLE	
4	TCL stands for:	
	a) Transaction control languages b) Transaction command languages	CO <sub>4</sub>
	c) Transaction connect languages d) None of these	
5	In a one-to-many relationship, the entity that is on the one side of the relationship is called	
	an entity.	CO <sub>5</sub>
	a) parent b) child c) instance d) Subtype.	
6	Which command that allows the removal of all rows from a table but flushes a table more	
	efficiently since no rollback information is retained:	CO <sub>5</sub>
	a) TRUNCATE b) CREATE c) DROP d) ALTER	
7	operator merges the result sets of two component queries:	CO5
	a) UNION b) UNION ALL c) INTERSECT d) MINUS	
8	is preferred method for enforcing data integrity	CO5
	a) Constraints b) Stored Procedure c) Triggers d) Cursors	
9	A table space is further broken down into	CO5
	a) Tablespace b) Segments c) Extents d) Blocks	
10	Which constraint that identifies a column or combination of columns as a unique key:	CO5
	a) IS NULL b) NOT NULL c) UNIQUE d) NONE	
	SECTION – B (Remembering)	
	r any FIVE Questions: $(5 \times 2 = 10 \text{ M})$	-
11	Define a Transaction in RDBMS.	CO4
12	List out the types of Hashing	CO4 CO5
13	Define Data Dictionary	CO5
14	Define Concurrency control	CO5
15	List the types of concurrency control mechanisms  Distinguish between a Client and a Server system	CO5
16	Distinguish between a Client and a Server system	CO5
17	Define Deadlock?	003

# SECTION - C (Understanding)

Answer any THREE Questions:	(3 X 6= 18 Marks)
18 Discuss the types of transaction states in RDBMS	CO4
19 Explain the ACID properties of transaction management	CO4
20 Write a note on SELECT operation in query processing	CO5
21 Discuss on the recoverability mechanisms	CO5
22 Write a note on Lock based protocols	CO5
SECTION - D (Applying)	
Answer any ONE Question:	(1X 12= 12 Marks)
23 Explain in detail the Indexing and B++ tree indexing in files	CO4
24 Explain in detail the characteristics and types of Client Server architecture	CO5

	_
TOWN THE PROPERTY OF THE PROPE	<b>深</b>
	(1)
MAID I	

	DEPART	MENT OF COMPU	TER SCIENCE	and construction to the construction of humanifest of the little field of the little f	anies it care arrespond
Course Code:	10CT42	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	19.04.2023	Part:	III	Semester:	IV
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compos	nent:	Core Course	THE RESERVE OF THE PROPERTY OF	and the second s	
Course Title:	DOT NET PI	ROGRAMMING	* — «Изпания применто не и пересона на примента на примента на примента на примента на примента на примента на На примента на	1999-1946 (M. Mir adria) Malig yalahnga (1997-1944 (M. M. M	1

	SECTION – A (Remembering)	
Answe		10 Marks)
	Which is the first event triggered when a user requests an ASP.NET page?	CO4
	a) Loadb)Init c) PreInit d) PreLoad Protocol	
2	Which of the following is not an ASP.NET component?	CO4
	a) LinkCounter b) Counter c) AdRotator d) File Access	
3	0 ) 1222 12 1000	CO4
	a) Cache b) Server c) Database d) Cookies	
4	Which protocol is used to call a web service?	CO4
	a) SOAP Protocol b) HTTP Protocol c)TCP Protocold) FTP	
5	ADO.NET stands for ?	CO5
	a) ActiveX Data Object b) All Data Object c) Access Data Object d) ActiveX DataSet Object	
6		~~=
U	a) DefaultSetName b) DefaultViewManager c) DataSetName d) SetName	CO5
7	The DataReader object is an alternative to the?	CO5
,	d) DataSet b) DataAdapterc) Both A and B d) None of the above	COS
8	To use the .NET Framework Data Provider for SQL Server, an application must reference the	he CO5
	namespace.	
	a) System.Data.Client b) System.Data.SqlClient	
	c) System.Data.Sql d) None of the mentioned	
9	Which is a property of the DataGrid control?	CO5
4.0	a)DataMember b) DataSource c)DataQuery d) All of the above.	
10	In a connection string represents name of the database	CO5
	a) Data Source b) Initial Catalog c) Catalog Initial d) Database	
Angrea	SECTION – B (Remembering)  any FIVE Questions: $(5 \times 2 = 1)$	1037 1 )
	Define ASP .NER? $(5 \times 2 = 1)$	10 Marks)
	What do you mean by web server?	CO4
	What is database?	CO4 CO5
	How to create table in database?	CO5
	What is ADO .NET?	CO5
	Define Data Reader.	CO5
17	Explain about Data Set.	CO5
	SECTION – C (Understanding)	003
Answer		8 Marks)
18	Explain the Web services with VB.NET	CO4
19	Discusses about the Library Function in VB.NET	CO4
20	Write a VB.NET program factorial number.	CO5
21	What are the Special features of ADO.NET?	CO5
22	Difference between ADO and ADO.NET	CO5
	SECTION – D (Applying)	
	any ONE Question: (1X 12= 1	
23	Explain about the Web applications with ASP.NET	<b>CO4</b>
24	What is Relational Database with create Table, Record insertion, Displaying Data, Deleting	CO5
	data, Modifying data, Drop table query with example.	

The state of the s		DEPAR'
-	Course Code:	10AE41
一	Date:	20.04.2023
	Duration:	2 Hours
HAND	Study Compo	nent:
The state of the s	Course Title:	NUMERIC

VIVERANA		MENT OF COMPU		The state of the s	Lane in case transport of the direct liquid 18
Course Code:	10AE41	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	20.04.2023	Part:	III	Semester:	IV
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Compos	nent:	Ability Enhancer	nent Course		
Course Title:	NUMERICA	L METHODS FOR	COMPUTER SO	CIENCE	

## SECTION - A (Remembering)

	SECTION - A (Remembering)	
Answ	ver ALL the Questions: $(10 \times 1 = 10)$	
1	In a ordinary differential equations the first category methods is	CO5
	.a. Taylor Method. b. Euler Method. c. Runge-Kutta Method. d.Pointwise Method.	G0#
2	An unequal intervals, we can use to get the derivative value.	CO5
	a.Newton Forward Interpolation Formula.	
	b.Newton Backward Interpolation Formula.	
	c.Newton Forward Difference Formula.	
	d.LaGrange's Interpolation Formula	
3	If population census for the years 1931, 1941, 1951, 1961 and 1971 is given and if we want to	CO5
	estimate the population for the year 1931 then method is used.	
	(a) Forward difference derivatives (b) backward difference derivatives	
	(c) Newton's divided difference (d) Lagrangian	
4	If population census for the years 1931, 1941, 1951, 1961 and 1971 is given and if we want to	CO5
	estimate the population for the year 1971 then method is used.	
	(a) Forward difference derivatives (b) backward difference derivatives	
	(c) Newton's divided difference (d) Lagrangian	
5	The nth divided difference of a polynomial degree n is	CO <sub>5</sub>
	(a) Zero (b) a Constant (c) a Variable (d) none of these	
6	While finding the root of an equation by the method of false position, the number of iterations	CO <sub>5</sub>
	can be reduced	
	a) start with larger interval b) start with smaller interval c) start randomly	
	d) None of the above	
7	The convergence of which of the following method is sensitive to starting value?	CO <sub>1</sub>
	A) False position b) Gauss seidal method c) Newton-Raphson Method	
	d) All of these	
8	Newton-Raphson method is used to find the root of the equation $x^2 - 2 = 0$ . If iterations are	CO1
	started from - 1, then iterations will be	
	a) cosnyerge to -1 b) converge to $\sqrt{2}$ c) converge to $-\sqrt{2}$ d) No converge	
9	1' 4. the himself on mothed used for finding roots of	CO <sub>1</sub>
	functions?	
	a) converges within a few iterations	
	b) Guaranteed to work for all continuous function	
	c) is faster than the Newton-Raphson method	
	d) Requires that there be no error in determining the sign of function	
10	1 1 C Line a greatern of linear algebraic equations	CO1
	triangularzation leads to	
	a) Diagonal Matrix b) Lower triangular matrix c) Upper triangular matrix	
	d) singular matrix	

# SECTION - B (Remembering)

	(Italiania)	
Answ	ver any FIVE Questions: $(5 \times 2 = 1)$	0 Marks)
11	Write a formula of Regula False	CO5
12	Write a formula of Euler's method	CO5
13	Write a formula of Modified Euler's method	CO5
14	Write a formula of Improved Euler's method	CO5
15	Write steps to solve RK method	CO5
16	Write a formula of Newton Raphson's method	CO1
17	How to solve Bisection method?	CO1
	SECTION – C (Understanding)	
Answ	er any THREE Questions: (3 X 6= 18	3 Marks)
18	Given $y' = -y$ and $y(0) = 1$ Determine the values of y at $x = (0.01)(0.01)(0.04)$	CO5
19	Given $y' = x^2 - y$ , $y(0) = 1$ , find correct to 4 decimal places the value of $y(0.1)$ , by improved Euler's method	CO5
20	Solve the equation $\frac{dy}{dx} = 1 - y$ , given y(0)=0 using Modified Euler's method where x=0.1	CO5
21	Solve the positive root of $x^3 - 4x + 1 = 0$ by Regula False method	·C01
22	Using Newton's method find the root between 0 and 1 of $x^3 = 6x - 4$ correct to four decimal places	CO1
	SECTION - D (Applying)	
Answe	er any ONE Question: (1X 12= 12	Marks)
23	Apply fourth order Range-Kutta method to find $y(0.1)$ given that $y' = x + y$ , $y(0) = 1$ .	CO5
24	Find the positive root of $x^3 - x = 1$ correct to four decimal places by bisection method	CO1

*	بر	T
		<b>禁</b>
1		(3)

	DEPART	MENT OF COMPU	TER SCIENCE		
Course Code:	10CT61	Programme:	B.Sc. Computer Science	CIA:	III
Date:	19.04.2023	Part:	III	Semester:	VI
Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50
Study Component:		Core			1
Course Title:	WEB PROGI	RAMMING	не-16; арили околого окас од 10 муческим и полицим пос (дерги ок 1994 и реаграмдам) ра	(r. Marchi in 16 : M Mai 1861 M M Altresdaris) — marrethe ad barele e (al trad de salvane - arrere	i and and the brank

**SECTION – A (Remembering)** Answer ALL the Questions: (10 X 1 = 10 Marks)1 PHP is an example of scripting language. **CO4** B) Client-side A) Server-side C) Browser-side D) In-side 2 PHP scripts are enclosed within CO<sub>4</sub> A) <php> . . . </php> B) <?php . . . ?> C) ?php . . . ?php D) ... 3 Which of the following method sends input to a script via a URL? CO<sub>4</sub> A) Get B) Post C) Both D) None 4 PHP's numerically indexed array begin with position . **CO4** B) 2 C) 0 D) -1 5 How many methods are available for the exception class? CO<sub>5</sub> A) 5 B) 6 C) 7 D) 8 **6** What does SPL stand for? CO<sub>5</sub> A) Standard PHP Library B) Source PHP Library C) Standard PHP List D) Source PHP List 7 How many predefined exceptions does SPL provide access to? **CO5** A) 13 B) 14 C) 15 D) 16 8 Which characters is used to access property variables on an object-by-object basis? CO<sub>5</sub>  $C) \rightarrow D)$ . B) =9 Which keyword precedes a method name? CO<sub>5</sub> A) method B) function C) public D) protected 10 Which keyword is used to declare a constant property? CO<sub>5</sub> A) const B) con C) constant D) constant **SECTION - B (Remembering)** Answer any **FIVE** Questions: (5 X 2 = 10 Marks)11 Define PHP. **CO4** 12 What do you mean by HTML with example? **CO4** 13 What is function? CO<sub>5</sub> 14 How to create function CO<sub>5</sub> 15 What is ASP .NET? **CO5** 16 Define Data base. CO<sub>5</sub> 17 Explain about MYSQL. CO<sub>5</sub> SECTION – C (Understanding) Answer any **THREE** Questions: (3 X 6 = 18 Marks)18 Explain the operator with PHP **CO4** 19 Define variable and data type with example **CO4** 20 Write a program in factorial number using php. **CO5** 21 What is function with example program in php? CO<sub>5</sub> 22 Arrays in php with example program. CO<sub>5</sub> **SECTION – D (Applying)** Answer any **ONE** Question: (1X 12 = 12 Marks)23 To create login form using php and MySQL database connection. **CO4** 24 What MYSQL Database is with create Table, Record insertion, Displaying Data, Deleting CO<sub>5</sub> data, Modifying data, Drop table query with example.

	DEPARTMENT OF COMPUTER SCIENCE						
	Course Code:	10EP6A	Programme:	B.Sc. Computer Science	CIA:	Ш	
	Date:	20.04.2023	Part:	III	Semester:	VI	
	Duration:	2 Hours	Academic Year:	2022-23	Max. Marks:	50	
	Study Component:		Elective			<u></u>	
	Course Title:	SOFTWARE	TESTING				

	SECTION - A (Remembering)	
Answei	ALL the Questions: $(10 \times 1 = 10 \times 1 =$	Iarks)
1	path is a path in which all nodes are distinct	CO4
	a) loop-free b) complete c) Du d) simple	
2	A error occurs when a specific input data causes the program to execute the	
	desired path but the output value is wrong.	CO4
	a) Computation b) domain c) path d) Boolean	
3	A error occurs when a specific input data causes the program to execute a wrong undesired	
	path in the program.	CO4
	a) Computation b) domain c) path d) Boolean	
4	is called also test environment.	CO <sub>4</sub>
	a) workbench b) test bed c) test plan d) test automation	
5	The bin the kinds of test cases that must be executed.	CO <sub>5</sub>
	a) green b) red c) yellow d) white	
6	Which of the below is not a part of the Test Plan?	CO <sub>5</sub>
	a) Schedule b) Risk c) Incident reports d) Entry and exit criteria	
7	Which Test Document is used to define the Exit Criteria of Testing?	CO <sub>5</sub>
	a) Defect Report b) Test Summary Report c) Test Case d) Test Plan	
8	Which of the following testing technique deeply emphasizes on testing of one specific module?	CO <sub>5</sub>
	a) Inter-system testing b) Gorilla Testing c) Breadth Testing d) Fuzz Testing	
9	What is used as a measure of code coverage?	CO <sub>5</sub>
	a)Test Effectiveness b) Trends analysis c) Defects d) Time Spent Testing	
10	Who is Responsible for the Acceptance Testing is	CO <sub>5</sub>
	a) Customer b) Designer c) Software tester d) Developer	
	SECTION - B (Remembering)	\
Answe	r any FIVE Questions: $(5 \times 2 = 10 \times 10^{-5})$	
11	Define a Integration testing	CO4
12	List out the types of system integration techniques	CO <sub>4</sub>
	Define scalability testing	CO <sub>5</sub>
14	Define regression testing	CO <sub>5</sub>
15	What is meant by Beta testing?	CO <sub>5</sub>
16	Distinguish between acceptance testing and performance testing	CO <sub>5</sub>
17	Define Test Case?	<b>CO5</b>
	SECTION – C (Understanding)	
Answe	r any THREE Questions: (3 X 6= 18 M	
18	Discuss the types of integration techniques	CO <sub>4</sub>
19	Explain the following: a) Boot tests b) security test	CO4
20	Write a note on test suite structure.	CO <sub>5</sub>
21	Discuss on the characteristics of automated test cases	CO <sub>5</sub>
22	Write a note on reliability tests during SQA.	CO <sub>5</sub>
44	SECTION – D (Applying)	
Δηςινο	r any ONE Question: (1X 12= 12 M	Iarks)
23	Explain in detail the characteristics of integration testing and types of interface errors?	CO <sub>4</sub>
24	Explain in detail the characteristics of test automation infrastructure?	<b>CO5</b>
24	&&&&&&	

	GUIM	Talk Y
	4	黎
(	<b>#</b>	3
1		

	DEPART	MENT OF COMPU	TER SCIENCE	The state of the s	
Course Code:	10SB62	Programme:	B.Sc. Computer Science	CIA:	Ш
Date:	12.04.2023	Part:	IV	Semester:	VI
<b>Duration:</b>	1 Hour	Academic Year:	2022-23	Max. Marks:	25
Study Component:		Skill Based		The state of the s	-
Course Title:	CYBER SEC	URITY	h-chanters therees and the second	обития по може в нев нер з муже нев по обития я по може соно обития в нев може соно я не нев нев нев нев нев н	NATIONAL SOCIETY SOCIETY

	SECTION – A	***			
Answe	er ALL the Questions:	(5 X 1 = 5 Marks)			
1	What port number does FTP use?	CO2			
	A. 21 B.25 C.23 D.80				
2	A computer is a malicious code which self-replicates by copying i	tself to other CO4			
	programs.				
	a) program b) virus c) application d) worm				
3	Identify the first computer virus among the following.	CO4			
	A. Blaster B. Creeper C. Sasser. D. Both b and c				
4	8 31	CO1			
	A. Phishing B. SQL Injections C. Password Attack D. All of				
5	Identify the malware which does not replicate or clone through an infection	n? <b>CO4</b>			
	A. Trojans B. Worms C. Rootkits D. Virus				
	SECTION – B				
	r any TWO Questions:	$(2 \times 2 = 4 \text{ Marks})$			
	List out the types of Attacks.	CO2 CO4			
	7 What is meant by Trojans?				
8 Write any two example of antivirus software.					
9	Define Cryptography.	CO5			
	SECTION - C				
Answe	r any ONE Question:	$(1 \times 6 = 6 \text{ Marks})$			
10	Discuss about System Hacking	CO3			
11	Describe about the Cryptography and Encryption Techniques	CO5			
SECTION D					
Answei	any ONE Question:	(1 X 10= 10 Marks)			
12					
13	Explain the Ceaser Cipher Algorithm	CO5			