VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT22	**Programme:**	B. Sc., Computer Science	**CIA:**	I
Date:	22-04-2022	**Part:**	III	**Semester:**	II
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Core Course			
Course Title:	**DATA STRUCTURE**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 ____refers to a value or a set of values or facts **CO1**
Database b) Data c) Table d) Record

2 ____ is a collection of field values of a given entity **CO1**
a) File b) Data Item c) Record d) Entity Set

3 Identify the non – linear data structure ____ **CO1**
a) integer b) float c) Tree d) linked list

4 _____ is a sequential search that is performed over all items one by one **CO2**
Linear search b) Binary search c) Linear stack d) Integer

5 Give the number of operations that are commonly performed in a stack ____ **CO2**
a) 7 b) 2 c) 4 d) 3

6 Binary Search can be categorized into which of the following? ____ **CO2**
a) Brute Force technique b) Divide and Conquer c) Greedy algorithm d) dynamic programming

7 A tree is a data structure which represents hierarchical relationship between individual_____. a) **CO3**
data items b) fields c) nodes d) linked list.

8 The children node of same parent is called_____. **CO3**
a) binary tree b) tree c) sibling d)list.

9 The queue which wraps around upon reaching the end of the array is called as_____. **CO3**
a) circular queue b) linked queue c) doubly linked list. d) representation of queue.

10 The situation in linked list START = NULL is called_____ **CO3**
a) Overflow b) Underflow c) Zero d) assignment

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 Give any two uses of a data structure? **CO1**

12 List the attributes of a Linear Array? **CO1**

13 Give any two examples for Non Linear Non primitive data structure? **CO2**

14 Define a Stack? **CO2**

15 Give the formula to find the mid value of an array in binary search? **CO3**

16 List the types of sorting algorithms? **CO3**

17 Give the use of Pop( ) in a stack? **CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 Brief a note on data structure organization? **CO1**

19 Summarize the representation of Linear Arrays in memory? **CO1**

20 Critically analyze given below table with values and fill in the values where question marks given? **CO2**

FIELD	VALUES
Size of the stack	6
Maximum Value of the Stack Top	5
Minimum Value of Stack Top	?
Value of Top whcn Stack is Empty	?
Value of Top when the stack is Full	?

21 Summarize the representation of Stack in memory? **CO2**

22 Discuss about Polish notations? **CO3**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 Compare and analyze the insertion and deletion operations of Linear Arrays with a suitable algorithms and a program in C for each operation? **CO1**

24 Explain the bubble sort and write a program in C to implement bubble sort? **CO2**

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	DEPARTMENT OF COMPUTER SCIENCE				
	Course Code:	10CT41	**Programme:**	B. Sc., Computer Science	**CIA:**	I
	Date:	19-04-2022	**Part:**	III	**Semester:**	IV
	Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
	Study Component:		Core			
	Course Title:	**RELATIONAL DATABASE MANAGEMENT SYSTEMS**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 A relational database consists of a collection of **CO1**
A. Tables B. Fields C. Records D. Keys

2 A _____ in a table represents a relationship among a set of values. **CO1**
A. Column B. Key C. RowD. Entry

3 . For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute. A. Domain B. Relation C. Set D. Schema **CO1**

4 The number of attributes in relation is called as its **CO2**
A. Cardinality B. Degree C. Tuples D. Entity

5 Which level of Abstraction describes how data are stored in the database? **CO2**
A. Physical level B. View level C. Abstraction level D. Logical level

6 In an E-R diagram ellipses represents **CO2**
A. Entity sets B. relationship among entity sets
C. attributes D. link in attributes & entity sets

7 . In which of the following is a single-entity instance of one type related to many entity instances of another type? **CO3**
A. One-to-One Relationship B. One-to-Many Relationship
C. Many-to-Many Relationship D. Composite Relationship

8 The schema for hierarchical database is ---------- **CO3**
A. A tree B. A Graph C. A b-tree D. None

9 What statement is used to define a new assertion in SQL? **CO3**
A. create check B. create assertion where
C. create where D. create assertion check

10 Which is a unary operation **CO3**
A. Selection operation B. Primitive operation
C. Projection operation D. Generalized selection

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 What are the uses of DBMS. **CO1**

12 What is the difference between a weak and a strong entity set? **CO1**

13 How data models are classified? **CO2**

14 Define primary key with an example. **CO2**

15 What is the difference between key and superkey? **CO3**

16 What is relational algebra? **CO3**

17 Define relational calcus. **CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 What are the desirable features of DBMS? **CO1**

19 Explain about the database languages. **CO1**

20 Define UPDATE statement in SQL with examples. **CO2**

21 What is query language? Explain briefly. **CO2**

22 Explain the use of SELECT,PROJECT and JOIN operations with illustrative examples. **CO3**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 Describe with a neat diagram the basic architecture of a database management system **CO1**

24 With the help of an E-R diagram, explain a banking system. **CO2**

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DEPARTMENT OF COMPUTER SCIENCE					
Course Code:	10CT42	**Programme:**	B.Sc., Computer Science	**CIA:**	I
Date:	22-04-2022	**Part:**	III	**Semester:**	IV
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Core			
Course Title:	**DOT NET PROGRAMMING**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 A GUI: **CO1**
A. uses buttons, menus, and icons. B. should be easy for a user to manipulate.
C. stands for Graphic Use Interaction. D. Both a and b.

2 Which is not a main component of the Visual Studio IDE? **CO1**
A. Solution Explorer. B. Tool Box. C. Start Menu. D. Designer Window.

3 Which is not a common property of the control class? **CO1**
A. Show. B. BackColor. C. Font. D. ForeColor.

4 How many predefined data types can be defined in VB.NET for the use in a programs? **CO3**
A.1 B. 2 C. 12. D. None.

5 Visual Studio .NET provides _____ feature? **CO3**
A. debugging. B. application deployment. C. syntax checking. D. All of the above.

6 Properties are used to represent _____. **CO3**
A. actions. B. classes. C. data. D. events.

7 Anything in VB.NET that has a property or method is _____. **CO3**
A. a class. B. a control. C. an object. D. Both a and b.

8 The .NET Framework provides a run time environment called _____ **CO4**
A. CLR B.RC C. RCT D. RTE

9 The _____ control has a in-built support for Sort, Filter and paging the Data. **CO4**
A. DataGrid B. DataList C. Repeater D. FormView

10 Which control enables the user to display the rows of data from a data source in a list? **CO4**
A. DataGrid. B. DataList. C. Repeater. D. DataRepeater.

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 Define dot net? **CO1**

12 What do you mean by CLR? **CO1**

13 Define Class with real time example. **CO3**

14 Define Object. **CO3**

15 Explain any four advantage of OOPS **CO3**

16 Write any two tools with example. **CO4**

17 Different between label and link label **CO4**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 Benefits of dot net. **CO1**

19 Explain the visual studio IDE. **CO1**

20 Explain about interface with example program. **CO3**

21 Explain about List Box with example. **CO4**

22 Explain the Rich Textbox with example. **CO4**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 Explain about the Dot Net Framework components with diagram. **CO1**

24 Discuses about Radio button, Check box and picture box with example. **CO4**

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DEPARTMENT OF COMPUTER SCIENCE					
Course Code:	10CT61	**Programme:**	B. Sc Computer Science	**CIA:**	**I**
Date:	22-04-2022	**Part:**	III	**Semester:**	**VI**
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	**50**
Study Component:		Core			
Course Title:	**WEB PROGRAMMING**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1	Expand HTML? A. Hyper Texture Making of Language. B. Hyper Text Markup Language. C. Hyper Text Marking of Links. D. Higher Text Markup Language.	**CO1**
2	Which HTML tag is used to display a picture on a webpage? A. picture. B. image. C. img. D. src.	**CO1**
3	_____ tag makes the enclosed text into italic. A.<b> B.<a> C.<u> D. <i>	**CO1**
4	Where is the correct place to insert a JavaScript? a) The <head> section b)The <body> section c) The <title> section d) Both the <head> section and the <body> section are correct	**CO2**
5	The _____ element is used to create an unordered list. A. h1. B. h6. C. ul. D. hr.	**CO2**
6	A proper scripting language is a a)High level programming language b)Assembly level programming language c)Machine level programming language d)Low level programming language	**CO2**
7	What is the correct syntax for referring to an external script called "xxx.js"? a)<script name="xxx.js"> b) <script src="xxx.js">	**CO3**

8	How do you write "Hello World" in an alert box?
	a) alertBox("Hello World"); b) msg("Hello World");
	c) alert("Hello World"); d) msgBox("Hello World");
		CO3

9	How do you create a function in JavaScript? a) function myFunction(){ statements} b) function = myFunction() { statements} c) function:myFunction() { statement } d) function:: myFunction() { statements }	**CO3**

10	How do you call a function named "myFunction"?
	a) myFunction(); b) function:myFunction(); c) call myFunction();
	d) call function myFunction();
		CO3

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11	Define frames	**CO1**
12	List out any four protocols **NAME**	**CO1**
13	How to place a text in browser using javascript	**CO3**
14	Define Netscape	**CO2**

15	Write a javascript program to display greetings with your name	**CO2**
16	Write about DOM	**CO3**
17	Differentiate client and server	**CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18	Explain basics of internet	**CO1**
19	Explain briefly about Textbox and submit button elements with example	**CO3**
20	Discuss about structure of HTML	**CO1**
21	List out the advantages of JavaScript	**CO2**
22	Discuss about dialogue boxes in JavaScript	**CO2**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23	Explain about operators and expressions in JavaScript	**CO2**
24	illustrate different stylesheets and selectors with example	**CO1**

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DEPARTMENT OF COMPUTER SCIENCE					
Course Code:	10EP6A	**Programme:**	B.Sc., Computer Science	**CIA:**	I
Date:	23-04-2022	**Part:**	III	**Semester:**	VI
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Elective			
Course Title:	**DATA MINING AND DATA WAREHOUSING**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 Application of intelligent methods in a process to extract data patterns is called _____ **CO1**
a) Biometrics b) Data selection c) Data mining d) Pattern recognition

2 _____ includes data cleaning, data integration, data selection, data transformation, pattern evaluation and presentation of data a) KDD b) data warehouse c) DBMS d) Data analysis **CO1**

3 General characteristics or features of a target class of data refers to _____ **CO1**
a) Data classification b) Data selection c) Data Discrimination d) Data characterization

4 ____ is a subject-oriented, integrated, time – variant and non-volatile organized collection of data to support management decision making. **CO2**
a) Database b) RDBMS c) Data mining d) Data warehouse

5 The core of the multidimensional data model is the ____ **CO2**
a) Database b) Data cube c) Dimension d) Schema

6 The construction of a _____ requires data integration, data cleaning and data consolidation. **CO2**
a) DBMS b) Data cube c) Data warehouse d) Data mart

7 ____ provides details of the warehouse structure, data history, algorithms used for summarization, mappings from source data to warehouse form and system performance **CO3**
a) OLAP b) Data dictionary c) Meta data repository d) relations

8 Which one of the following measures dispersion of data _____ **CO3**
a) Standard deviation b) mode c) mean d) weighted average

9 The operation of moving from finer granularity data to a coarser granularity by means of aggregation is called ___ a) Roll-up b) Drill-down c) Dicing d) Pivoting **CO3**

10 If a rule concerns associations between the presence or absence of items is called a _____ **CO3**
a) Boolean association rule b) quantitative association rule c) dimensional association rule d) multilevel association rule

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 Define KDD? **CO1**

12 Define a Data Warehouse? **CO1**

13 Give any two advantages of Online Analytical Processing? **CO2**

14 Give the advantages of using a Data Warehousing? **CO2**

15 Define Concept description? **CO3**

16 Define Temporal Databases? **CO3**

17 List the Types of schema in multidimensional datamodel? **CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 Brief a note on applications of data mining in the industry? **CO1**

19 Identify the issues in Data mining? **CO1**

20 Distinguish between Data characterization and Data discrimination? **CO2**

21 Compare the characteristics Outlier Analysis and Evolution analysis? **CO2**

22 Explain the characteristics of a Data warehousing system? **CO3**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 Enumerate on the Data mining functionalities used for mining patterns? **CO1**

24 Explain the architecture of data mining system? **CO2**

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DEPARTMENT OF COMPUTER SCIENCE					
Course Code:	10SB62	**Programme:**	B.Sc., Computer Science	**CIA:**	**I**
Date:	15-04-2022	**Part:**	IV	**Semester:**	**VI**
Duration:	1 Hour	**Academic Year:**	2021-22	**Max. Marks:**	**25**
Study Component:		Skill Based			
Course Title:	**CYBER SECURITY**				

SECTION – A

Answer **ALL** the Questions: **(5 X 1 = 5 Marks)**

1 Which of the following is a type of antivirus program? **CO1**
A.Quick heal B.McaFee C. Kaspersky D. All of the above

2 In ethical hacking and cyber security, there are _____types of scanning **CO1**
A. 1 B. 2 C.3 D.4

3 Code Red is a type of _____ **CO1**
A. An Antivirus Program B. A photo editing software C. A Computer Virus D. None

4 Which of the following is a tool for performing footprinting undetected? **CO2**
A. Whois search B. Traceroute C. Ping sweep D. Host scanning

5 What is the next step to be performed after footprinting? **CO2**
A. Scanning B. Enumeration C. System hacking D. None

SECTION – B

Answer any **TWO** Questions: **(2 X 2 = 4 Marks)**

6 Define Security **CO1**

7 What is meant by Cyber Security? **CO1**

8 Define FootPrinting **CO2**

9 List out the types of DNS records. **CO2**

SECTION – C

Answer any **ONE** Question: **(1 X 6= 6 Marks)**

10 Write about Ethical Hacking, Ethics, and Legality **CO1**

11 Describe about the Information Gathering Methodology **CO2**

SECTION – D

Answer any **ONE** Question: **(1 X 10= 10 Marks)**

12 Explain about the Different Types of Hacking Technologies. **CO1**

13 Explain the E-Mail Tracking Works. **CO2**

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10AE21	**Programme:**	B. Sc., Computer Science	**CIA:**	I
Date:	23-04-2022	**Part:**	III	**Semester:**	II
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Ability Enhancement Course			
Course Title:	**STATISTICS & PROBABILITY**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 The totality of all objects under a study is called _____ **CO1**
a) Sample b) Group C)Population d)Specimen

2 Which of the following is not an example for a primary data? **CO1**
a) Mailed questionnaire b)Local correspondents c)Indirect oral investigation
d)Survey reports in newspapers, journals Multiple choice question with four options

3 What is the simple arithmetic mean of 15,0,36,0 and 9? **CO1**
a)20 b)15 c)10 d)60

4 Which of the following relations always hold true? **CO2**
a)For equal observations AM=GM b) For equal observations GM≤ AM
c) For Unequal observations AM≤GM d) For unequal observations AM=GM

5 Which among the following is not a commonly used measure of dispersion? **CO2**
a)Range b)Median c)Standard Deviation d)Mean Deviation

6 What is the range of the following data? **CO2**
Class 40-45 45-50 50-55 55-60 60-65 65-70
Frequency 4 13 14 12 5 2 a)20 b)30 c)25 d)35

7 _____ is the study of functional relationship between the variables, making it possible to predict /estimate the unknown value of one of the variables fromthe known value of the other. **CO3**
a) Correlational Analysis b)Regression Analysis c)Mean Difference Analysis
d)None of these

8 Which among the following is a sample space obtained while tossing a coin thrice? **CO3**
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)}

9 Quartile Deviation or Semi-inter quartile range is given by **CO3**
a)(Q2-Q1)/2 b)(Q3-Q2)/2 c)(Q3-Q1)/2 d)(Q3-Q1)/Q2

10 Which among the following is equal to the measure at the (N+1)/2 th position of an ordered data? **CO3**
a)Median b)2nd Quartile c)Both (a) and (b) d)Neither (a) nor (b)

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 Mention the graphical representation of a frequency distribution. **CO1**

12 What are the requisites for an ideal measures of central tendency. **CO1**

13 Mention some of the characteristics for an ideal measures of Dispersion. **CO2**

14 Write a formulae for the (i) Mean deviation (ii) Range (iii) Quartile deviation (iv) Standard deviation **CO2**

15 What do you mean by random experiment. **CO3**

16 Define Mutually exclusive event. **CO3**

17 Define Equally Likely event. **CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 Find the arthimetic mean for following distribution. **CO1**

X	1	2	3	4	5	6	7
F	5	9	12	17	14	10	6

19 Find the arithmetic mean for following distribution **CO1**

class	0-8	8-16	16-24	24-32	32-40	40-48
Frequency	8	7	16	24	15	7

20 Explain about the dispersion with given example **CO2**

21 Discuss about the measures of dispersion **CO2**

22 What is the chance that a leap year selected at random will contain 53 Sundays? **CO3**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 Find the median for following distribution **CO1**

wages	2000-3000	3000-4000	4000-5000	5000-6000	6000-7000
No.of.Workers	3	5	20	10	5

24 Calculate the quartile deviation and mean deviation from the mean for the following data. **CO2**

Marks	0-10	10-20	20-30-	30-40	40-50	50-60	60-70
No.of students	6	5	8	15	7	6	3

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10AT41	**Programme:**	B. Sc Computer Science	**CIA:**	I
Date:	23-04-2022	**Part:**	III	**Semester:**	IV
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Allied			
Course Title:	**NUMERICAL METHODS FOR COMPUTER SCIENCE**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1 $E^4-4E^3+6E^2+-4E+1=-$_____ **CO2**

a) E^4 b)$(E-1)^4$ C) $(E+1)^4$ D)$(E-1)^3$

2 $EY_0=$_____ **CO2**

a) Y_{-1} b) y_0 c) y_1 d)y_2

3 _____formulae used for equal interval **CO2**

a) Newton forward b) Newton backward c) Guass forward and backward d) all

4 The number of elements in an m*n matrix is ____. **CO3**

a) mn
b) m+n
c) m-n
d) n+m

5 The order of the matrix B= [1 2 5 7] is _____. **CO3**

a) 1*1
b) 1*2
c) 1*4
d) 1*3

6 _____rule is applicable only when n is a multiple of 3. **CO3**

a) Weddle's
b) Trapezoideal
c) Simpson's 1/3
d) Simpson's 3/8

7 Interpolating polynomial is also known as_____ **CO4**

a)smoothing function. b).interpolating function. c)collocation polynomial. d)interpolating formula.

8 In Lagrange's interpolation formula, the value of 1(x1) = _____. **CO4**

a)0. b)1 c)2. d)3

9 Newton divided difference formula only for _____ intervals. **CO4**

a)Equal. b)Unequal. c)Open . d)Closed.

10 An unequal interval, we can use _____ to get the derivative value. **CO4**

a)Newton Forward Interpolation Formula.
b)Newton Backward Interpolation Formula.
c)Newton Forward Difference Formula.
d)LaGrange's Interpolation Formula.

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11 Define interpolation **CO2**

12 Write a procedure to solve Gauss Elimination inverse method **CO2**

13 Steps to solve Gauss Jordan method **CO3**

14 State central interpolation **CO3**

15 Evaluate Actual integration $\int_{-1}^{1} \frac{1}{1+x2}$ **CO4**

16 Write down Trapezoidal rule formula **CO4**

17 When we use Simpson's 3/8 rule? **CO4**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18 **CO4**

Evaluate $\int_{-3}^{3} x4$ by using Trapezoidal and Simpson's both rule

19 from the following table find y(35) using Laplace Everett's formula **CO3**

X	20	30	40	50
Y	512	439	346	243

20 Apply Guass forward formula and estimate f (32) from the following table **CO3**

X	25	30	35	40
Y=f(x)	0.2707	0.3027	0.3386	0.3794

21 Solve the following system Gauss Elimination method **CO2**

$$5w + x + y + z = 4;$$
$$w + 7x + y + z = 12;$$
$$w + x + 6y + z = -5;$$
$$w + x + y + 4z = -6$$

22 Find the missing value of the table **CO2**

X	0	1	2	3	4
Y	1	2	4	-	16

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23 From the following table find x=43 and x=84 and express terms of x **CO2**

X	40	50	60	70	80	90
Y	184	204	226	250	276	304

24 (i)Find f(25) given f(20)=14, f(24)=32, f(28)=35 and f(32)=40 using Gauss forward formula **CO3**

(ii) using Gauss backward formula find the population of 1936 given that

Year	1901	1911	1921	1931	1941	1951
Population(1000)	12	15	20	27	39	52

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT21	**Programme:**	B. Sc., Computer Science	**CIA:**	I
Date:	19-04-2022	**Part:**	III	**Semester:**	II
Duration:	2 Hours	**Academic Year:**	2021-22	**Max. Marks:**	50
Study Component:		Core Course			
Course Title:	**OBJECT ORIENTED PROGRAMMING WITH C++**				

SECTION – A (Remembering)

Answer **ALL** the Questions: **(10 X 1 = 10 Marks)**

1. OOP language supports object based features, inheritance and _____. **CO1**
   A. Encapsulation. B. Polymorphism. C. Object identity. D. Functions.
2. A structure defines a _____type. **CO1**
   A. class. B. pointers. C. arrays. D. variables.
3. Which of the following is a logical operator? **CO1**
   A. ++ B.?: C. == D. &&
4. A _____ is an instance of class. **CO2**
   A. code. B. object. C. variable. D. pointer.
5. Function overloading is also similar to which of the following? **CO2**
   A. operator overloading B. constructor overloading
   C. destructor overloading D. none of the mentioned
6. Public, private, protected are _____. **CO2**
   A. identifiers. B. data members. C. access specifies. D. type of class
7. A _____ is a special method used to initialize the instance variable of a class. **CO3**
   A. Member function B. Destructor C. Constructor D. Structure
8. A Class can have how many destructor? **CO3**
   A. 1 B. 2 C. 3 D. 4
9. _____ function is a function that calls itself repeatedly. **CO3**
   A. Friend. B. Inline. C. Recursive. D. Member.
10. _____ function is a function in which expansion of the function takes place rather than execution. **CO3**
    A. Friend. B. Inline. C. Recursive. D. Member.

SECTION – B (Remembering)

Answer any **FIVE** Questions: **(5 X 2 = 10 Marks)**

11. Any TWO difference between C and C++ **CO1**
12. Define Encapsulation **CO1**
13. Define Methods **CO2**
14. Define Class **CO2**
15. Define Constructor? **CO3**
16. Define Destructor. **CO3**
17. List out the types of Costructors **CO3**

SECTION – C (Understanding)

Answer any **THREE** Questions: **(3 X 6= 18 Marks)**

18. Explain about Increment and Decrement Operator with Example **CO1**
19. Write about WHILE and DO-WHILE Loop with Example **CO1**
20. Explain about the Scope resolution Operator **CO2**
21. Write a C++ program to find the odd or even number. **CO2**
22. Write short notes on Copy constructor **CO3**

SECTION – D (Applying)

Answer any **ONE** Question: **(1X 12= 12 Marks)**

23. Estimate explain about the basic concepts of OOPs with examples? **CO1**
24. Apply the concept of Inline function with a suitable example. **CO2**

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