VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST – 625 234

DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10CC21**	**Programme:**	**B.Sc. Computer Science**	**CIA: I**
Date:	**09-01-2025**	**Part:**	**III**	**Semester: II**
Duration:	**2 Hours**	**Academic Year:**	**2024 – 2025**	**Max. Marks: 50**
Study Component:		**Core Course**		
Course Title:	**DATA STRUCTURES AND ALGORITHM**			

SECTION – A (Remembering)

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

1 Which one of these is a Non-Primitive data structure **CO1**
a) integer b) float c) char d) stack

2 Which of the following is the correct way of declaring an array? **CO1**
a) int array [10]; b) int array; c) array{20}; d) array int[10];

3 Which of the following is a linear data structure? **CO1**
a) Array b) Graph c) Binary Trees d) AVL Trees

4 If a Linear Array can hold 12 elements, then the maximum value of the index is _____ **CO1**
a) 0 b) 11 c) 10 d) 12

5 In a linked list each node has _____ field. **CO1**
a) 4 b) 5 c) 2 d) 1

6 The_____ pointer variable locates the beginning of the linked list. **CO1**
a) Anchor b) Base c) Footer d) Header

7 Removing of an element from stack is called _____. **CO2**
a) Create b) Push c) Pop d) All the above

8 A ____ is a list of elements in which an element may be inserted or deleted only at top. **CO2**
a) Push b) Pop c) Stack d) None of these

9 When new element inserted into a data structure when there is no available space, this state is usually called _____. **CO2**
a) Underflow b) Overflow c) Houseful d) Saturated

10 Pushing an element into stack already having five elements and stack size of 5, then stack becomes **CO2**
a) Overflow b) Crash c) Underflow d) User flow

SECTION – B (Remembering)

Answer ALL the Questions: **(5 × 2 = 10 Marks)**

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

12 Define the following: i) Record ii) Data item **CO1**

13 List the parameters to measure the efficiency of an algorithm **CO1**

14 List its operations? **CO2**

15 List the types of linked lists? **CO2**

SECTION – C (Understanding)

Answer ALL the Questions: **(3 × 6 = 18 Marks)**

16 a) Give the classification of data structures. **(OR)** **CO1**
b) Discuss the characteristics of a good algorithm? **CO1**

17 a) Enumerate on the characteristics and any two operations on array ADT? **(OR)** **CO1**
b) Write a note on how to insert an element into an array with a suitable example? **CO1**

18 a) Enumerate on the characteristics of a linked list with a neat diagram? **(OR)** **CO2**
b) Brief the characteristics of stack ADT? **CO2**

SECTION – D (Applying)

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

19 Enumerate on the types of operations performed using an Linear array? **CO1**

20 Explain the operations of stack ADT? **CO2**

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST – 625 234

DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10GE2A**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**10-01-2025**	**Part:**	**III**	**Semester:**	**II**
Duration:	**2 Hours**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**50**
Study Component:		**Generic Elective Course**			
Course Title:	**NUMERICAL METHODS**				

SECTION – A (Remembering)

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

1 Which of the following is an example of a transcendental equation? **CO1**
a) $x^2 - 4 = 0$ b) $\sin(x) = x$ c) $3x + 5 = 0$ d) $x^3 - 9x = 5$

2 Which of the following is an algebraic equation? **CO1**
a) $e^x = x$ b) $\log(x) = 2$ c) $x^2 - 4 = 0$ d) $\sin(x) = x$

3 The Bisection Method is primarily used to: **CO1**
a) Solve linear equations b) Find the root of an equation
c) Approximate the solution of a differential equation d) Find the derivative of a function

4 What is the order of convergence of the Bisection Method? **CO1**
a) Linear b) Quadratic c) Cubic d) Exponential

5 Which of the following methods is an example of an iteration method? **CO1**
a) Gauss-Seidel method b) Newton-Raphson method c) Bisection method d) All of the above

6 Which of the following is a disadvantage of the iteration method? **CO1**
a) It can only solve linear equations b) It requires a starting guess close to the root
c) It converges very rapidly d) It can be applied to any type of equation

7 Which of the following is a key advantage of the Gauss-Seidel method over the Jacobi method? **CO2**
a) It requires fewer iterations to converge b) It is more memory efficient
c) It works for non-linear systems d) It is always faster regardless of the system size

8 The Gauss-Seidel method is an example of: **CO2**
a) Direct method b) Iterative method c) Nonlinear method d) Analytical method

9 For the system of equations to be solved using the Gauss-Seidel method, the matrix of coefficients should be: **CO2**
a) Sparse b) Full
c) Non-singular d) Diagonally dominant or symmetric positive definite

10 In the case of unequal intervals, the weights of the interpolation methods: **CO2**
a) Are the same for all intervals b) Change depending on the width of the intervals
c) Do not affect the final interpolation result d) Are based on the number of data points

SECTION – B (Remembering)

Answer ALL the Questions: **(5 × 2 = 10 Marks)**

11 Define Algebraic equation with example **CO1**
12 Write the formula for Newton Raphson Method **CO1**
13 Define linear Equation with example **CO1**
14 Define Iterative method **CO2**
15 Write about interpolation **CO2**

SECTION – C (Understanding)

Answer ALL the Questions: **(3 × 6 = 18 Marks)**

16 a) Solve the following equations by Gauss Jordan method $x + y = 2, 2x + 3y = 5$ **(OR)** **CO1**
b) Solve the following equations by Gauss Elimination method **CO1**
$x + y + z = 9, 2x - 3y + 4z = 13, 3x + 4y + 5z = 40$

17 a) Discuss the procedure to solve (i) Iteration method (ii) Bi-Section Method **(OR)** **CO1**
b) using Newton's method to solve the equation of $x^3 = 6x - 4$ correct to 4 decimal places root lies between 0 and 1. **CO1**

18 a) Write procedure to solve Gauss Jacobi and Gauss Seidel method **(OR)** **CO2**
b) Solve the following equation $4x - 3y = 11, 3x + 2y = 4$ using Gauss Seidel method **CO2**

SECTION – D (Applying)

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

19 Find the real root of the Equation $x^3 - 3x + 1 = 0$ lying between 1 and 2 correct to 4 decimal places **CO1**
20 Solve the following System of Equations using Gauss Jacobi Method **CO2**
$6x + 15y + 2z = 72, x + y + 54z = 110, 27x + 6y - z = 85.$

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10SB21**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**03-01-2025**	**Part:**	**IV**	**Semester:**	**II**
Duration:	**1 Hour**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**25**
Study Component:		**Skill Enhancement Course**			
Course Title:	**OFFICE AUTOMATION**				

SECTION – A

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

1 Which of the following is considered the "brain" of the computer? **CO1**

a) Monitor b) Hard Disk c) RAM d) CPU

2 What is the main function of the operating system? **CO1**

a) To process data b) To manage hardware and software resources

c) To provide internet connectivity d) To store data

3 Which of the following is an input device? **CO2**

a) Monitor b) Printer c) Keyboard d) Speaker

4 Which of the following is an example of application software? **CO2**

a) Windows b) Linux c) Microsoft Word d) BIOS

5 What is the purpose of an output device in a computer system? **CO2**

a) To display or present data b) To store data c) To process data d) To input data

SECTION – B

Answer ALL the Questions: **(2 × 2 = 4 Marks)**

6 Define Software **CO1**

7 Expand ALU, CPU **CO2**

SECTION – C

Answer ALL the Question: **(1 × 6 = 6 Marks)**

8 a) Discuss about Input Devices **CO1**

(OR)

b) Write about output Devices **CO1**

SECTION – D

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

9 Discuss about Generation of Computer **CO1**

10 Write short notes on types of OS **CO2**

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10CC41**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**09-01-2025**	**Part:**	**III**	**Semester:**	**IV**
Duration:	**2 Hours**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**50**
Study Component:		**Core Course**			
Course Title:	**JAVA PROGRAMMING**				

SECTION – A (Remembering)

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

1 Which of the following is not a principle of Object-Oriented Programming? **CO1**
a) Encapsulation b) Inheritance c) Polymorphism d) Compilation

2 Which keyword is used to inherit a class in Java? **CO1**
a) implements b) extends c) inherits d) superclass

3 What was the original name of the Java programming language? **CO1**
a) OAK b) Green c) Maple d) Coffee

4 ava was initially developed as part of a project at which company? **CO1**
a) Sun Microsystems b) Microsoft c) Google d) Oracle

5 Which component of the Java platform is responsible for executing Java bytecode? **CO1**
a) Java Compiler b) Java Virtual Machine (JVM)
c) Java Development Kit (JDK) d) Java Runtime Environment (JRE)

6 Which of the following is not a type of operator in Java? **CO1**
a) Arithmetic operator b) Relational operator c) Bitwise operator d) Data operator

7 Which of the following is used to make a decision in Java? **CO2**
a) for b) if c) while d) do-while

8 Which of the following is used to terminate a statement in Java? **CO2**
a) Colon (:) b) Semicolon (;) c) Comma (,) d) Period (.)

9 Which of the following is a valid way to declare an array in Java? **CO2**
a) int arr[] = new int[5]; b) int[] arr = new int[5]; c) int arr[] = {1, 2, 3}; d) All of the above

10 How can you determine the length of an array in Java? **CO2**
a) array.length() b) array.size() c) array.length d) array.getLength()

SECTION – B (Remembering)

Answer ALL the Questions: **(5 × 2 = 10 Marks)**

11 Define Data type. **CO1**

12 How to take input from users in Java **CO1**

13 Define Identifier & Keyword **CO1**

14 What is array? **CO2**

15 Define class **CO2**

SECTION – C (Understanding)

Answer ALL the Questions: **(3 × 6 = 18 Marks)**

16 a) Write about the JVM with neat diagram. **(OR)** **CO1**
b) Write a simple java program with explain. **CO1**

17 a) write a java program biggest among three number. **(OR)** **CO1**
b) write a java program prime number **CO1**

18 a) Write about class, object and method with example. **(OR)** **CO2**
b) Write about create an object with example program **CO2**

SECTION – D (Applying)

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

19 Explain about operators in Java **CO1**

20 Briefly explain the Oops concepts in Java **CO2**

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10GE4A**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**10-01-2025**	**Part:**	**III**	**Semester:**	**IV**
Duration:	**2 Hours**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**50**
Study Component:		**Generic Elective**			

Course Title: RESOURCE MANAGEMENT TECHNIQUES

SECTION – A (Remembering)

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

1 The term "Operations Research" was first used during: **CO1**

a) World War I b) World War II c) The Cold War d) The Industrial Revolution

2 What was the primary goal of Operations Research during its early development? **CO1**

a) To optimize mathematical algorithms b) To improve decision-making in military operations

c) To design mathematical models d) To automate industrial processes

3 A "Network Flow Model" is primarily used for: **CO1**

a) Optimizing the flow of goods in a supply chain b) Analysing military strategies

c) Scheduling and resource allocation d) Modelling production processes

4 Which of the following is a key characteristic of an optimization model in Operations Research? **CO1**

a) Focuses on minimizing variables

b) Involves decision variables, an objective function, and constraints

c) Always uses linear equations

d) Focuses only on decision-making under uncertainty

5 Which of the following is a characteristic of an "Iconic Model" in Operations Research? **CO1**

a) It uses mathematical equations and computations

b) It is a physical representation of a system or process

c) It is a conceptual representation without physical form

d) It uses probability and statistics for analysis

6 One key advantage of Operations Research is that it helps organizations: **CO1**

a) Only focus on financial metrics

b) Make decisions based on systematic and objective analysis rather than guesswork

c) Remove the need for any form of data collection

d) Avoid taking risks in business decisions

7 When formulating an LPP, constraints are typically represented as: **CO2**

a) Linear inequalities or equations involving the decision variables

b) Linear relationships between constants

c) Nonlinear equations

d) Fixed values that cannot change

8 Which of the following is the correct general form of a Linear Programming Problem (LPP)? **CO2**

a) Maximize or minimize a nonlinear objective function, subject to linear constraints

b) Maximize or minimize a linear objective function, subject to linear constraints

c) Maximize or minimize a nonlinear objective function, subject to nonlinear constraints

d) Maximize or minimize a linear objective function, subject to nonlinear constraints

9 What happens if a Linear Programming Problem has no feasible region in the graphical method? **CO2**

a) The problem has no solution b) The solution is at the origin

c) The problem has infinite optimal solutions d) The problem has a unique optimal solution

10 In the graphical method of solving an LPP, how is the optimal solution found? **CO2**

a) By calculating the intersection points of the constraints

b) By evaluating the objective function at all corner points of the feasible region

c) By solving the system of equations

d) By choosing the point closest to the origin

SECTION – B (Remembering)

Answer ALL the Questions: **(5 × 2 = 10 Marks)**

11 Define OR. **CO1**

12 Write about Models. **CO1**

13 Give any characteristics of good Model. **CO1**

14 How many variables need to solve the graphical method? **CO2**

15 List out types of solution in Graphical Method. **CO2**

SECTION – C (Understanding)

Answer ALL the Questions: **(3 × 6 = 18 Marks)**

16 a) List out advantages of OR in various fields. **CO1**

(OR)

b) Discuss about main phases of OR. **CO1**

17 a) write about general methods for solving OR. **CO1**

(OR)

b) Enumerate on scientific method in OR. **CO1**

18 a) Apply Graphical method for the following LPP **CO2**

$Max\ z = 5x_1 + 8x_2\ subject\ to\ 15x_1 + 10x_2 \leq 180, 10x_1 + 20x_2 \leq 200, 15x_1 + 20x_2 \leq 210\ and\ x_1, x_2 \geq 0$

(OR)

b) Apply Graphical to solve the following LPP **CO2**

$Max\ z = 3x_1 + 4x_2\ subject\ to\ x_1 + x_2 \leq 450, 2x_1 + x_2 \leq 600\ and\ x_1, x_2 \geq 0$

SECTION – D (Applying)

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

19 Discuss about OR Model and its types with examples. **CO1**

20 A Company Manufactures 2 types of Products A and B, they sell them at profit of Rs.2 on type A and Rs.3 on type B. Each product processed on two machines M1 and M2. Type A Requires 1 Minute on M1 and 2 Minutes on M2. Type B requires 1Minutes on M1 and 1 Minutes on M2. Machine M1 is available for more than 6 hours 40 Minutes while Machine M2 is available for 10 hours during any working day. Formulate the problem as LPP and solve it using Graphical Method. **CO2**

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10SB42**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**04-01-2025**	**Part:**	**IV**	**Semester:**	**IV**
Duration:	**1 Hour**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**25**
Study Component:		**Skill Enhancement Course**			
Course Title:	**QUANTITATIVE APTITUDE**				

SECTION – A

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

1 What is the place value of hundred's digit of this number 856973 is _____? **CO1**
a) 700 b) 300 c)900 d)600

2 The L.C.M of 24, 36 and 40 is _____? **CO1**
a) 120 b) 240 c) 360 d) 480

3 Find the average of all prime numbers between 30 and 50 is _____? **CO2**
a) 36.9 b) 39.8 c) 38.3 d) 37.1

4 Rajeev's age after 15 years will be 5 times his age five years back, what is the present age of Rajeev? **CO2**
a) 10 b) 12 c) 8 d) 11

5 The product of the ages of Ankit and Nikita is 240. If twice the age of Nikita is more than Ankit's age by 4 years, what is Nikita's age? **CO2**
a) 11 b) 12 c) 13 d) 14

SECTION – B

Answer ALL the Questions: **(2 × 2 = 4 Marks)**

6 Find the Face and Place value for following numbers a) 6872 b) 70984 **CO1**

7 Solve it 5793405*9999 =? **CO2**

SECTION – C

Answer ALL the Question: **(1 × 6 = 6 Marks)**

8 a) i) Solve it (475*475 + 125*125) =? **CO1**
ii) On dividing 12401 by a certain number, we get 76 as quotient and 13 as remainder, what is the divisor?

(OR)

b) i) The Present age of a father is 3 years more than 3 times the age of his son. Three years hence father's age will be 10 years more than twice the age of the son. Find the present age of the father. **CO2**
ii) One year ago, the ratio of Gaurav's and Sachin's age was 6:7 respectively four years. Hence this ratio would become 7:8. How old is sachin?

SECTION – D

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

9 i) If $a=\sqrt{5}+1$ and $b=\sqrt{5}-1$. Find the value of a^2+ab+b^2 **CO1**

$\sqrt{5}-1$ $\sqrt{5}+1$ a^2-ab+b^2

ii) The ages of two persons differ by 16 years. If 6years ago, the elder one be 3 times as old as the younger one. Find their present ages?

10 a) Rohit was 4 times as old as his son 8 years. After 8 years, Rohit will be twice as old as his son. what are their present ages? **CO2**

b) Abhay's age after six years will be three-seventh of his father's age. Ten years ago the ratio of their ages was 1:5. What is Abhay's father's age at present.

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST – 625 234

DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10CT61**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**09-01-2025**	**Part:**	**III**	**Semester:**	**VI**
Duration:	**2 Hours**	**Academic Year:**	**2024-2025**	**Max. Marks:**	**50**
Study Component:		**Core Course**			
Course Title:	**WEB PROGRAMMING**				

SECTION – A (Remembering)

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

1 What does HTML stand for? **CO1**
a) HyperText Markup Language b) High-Level Text Management Language
c) Hyperlink and Text Markup Language d) HyperTransfer Markup Language

2 Which HTML tag is used for creating hyperlinks? **CO1**
a) <link> b) <a> c) <href> d) <hyperlink>

3 Which HTML tag is used for creating an unordered list? **CO1**
a) b) c) d) <list>

4 What does the HTML <br> element represent? **CO1**
a) Bold text b) Break line c) Bulleted list d) Blockquote

5 The width of any column is specified in _____. **CO1**
a) dot. b) pixels. c) frames. d) head.

6 What is the purpose of the CSS property background-color? **CO1**
a) It changes the color of the text. b) It defines the background color of an element.
c) It controls the size of text. d) It sets the space between the border and content of an element.

7 IP stands for _____. **CO1**
a) Information Provider b) Internet Provider c) Internet Protocol d) Information Protocol

8 What does "JS" stand for in JavaScript? **CO2**
a) Java Standard b) JavaScript c) Just Script d) Java Syntax

9 How do you declare a multi-line comment in JavaScript? **CO2**
a) // This is a comment b) /* This is a comment */ c) -- This is a comment d) ' This is a comment '

10 What is the correct way to comment out a single line in JavaScript? **CO2**
a) // This is a comment b) /* This is a comment */ c) -- This is a comment d) ' This is a comment '

SECTION – B (Remembering)

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

11 Define Internet **CO1**
12 Difference Between Static and Dynamic Websites **CO1**
13 Define Browser **CO1**
14 Write about the TELNET **CO1**
15 List out types of CSS selectors **CO1**
16 Expand (i)CSS (ii)SMTP **CO2**
17 Why use JavaScript. **CO2**

SECTION – C (Understanding)

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

18 Explain Basics of internet and How Internet Works. **CO1**
19 Explain about the Text Formatting Tag with example. **CO1**
20 Explain about tables and attributes in HTML with example **CO1**
21 Discuss about the advantages of JavaScript **CO2**
22 Write notes on save and run a JavaScript files with example **CO2**

SECTION – D (Applying)

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

23 Illustrate the various types of protocols in Internet Services. **CO1**
24 Explain about operators and expressions in JavaScript **CO2**

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DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10DS6A**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**10-01-2025**	**Part:**	**III**	**Semester:**	**VI**
Duration:	**2 Hours**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**50**
Study Component:		**Discipline Specific Elective**			
Course Title:	**FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE**				

SECTION – A (Remembering)

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

1 If a machine can change its course of action based on the external environment on its own, the machine is called? **CO1**
a) Mobile b) Intelligent c) Sensitive d) Reactive

2 Who is known as the "Father of AI"? **CO1**
a) Fisher Ada b) Alan Turing c) John McCarthy d) Allen Newell

3 A technique that was developed to determine whether a machine could or could not demonstrate the artificial intelligence known as the _____ **CO1**
a) Boolean Algebra b) Turing Test c) Logarithm d) Algorithm

4 Which algorithm is used in the Game tree to make decisions of Win/Lose? **CO1**
a) Heuristic Search Algorithm b) DFS/BFS algorithm
c) Greedy Search Algorithm d) Min/Max algorithm

5 An AI agent perceives and acts upon the environment using _____. **CO1**
a) Sensors b) Perceiver c) Actuators d) both a and c

6 The _____ agent works on Condition-action rule, which means it maps the current state to action **CO1**
a) Utility based b) Model based c) Simple Reflex d) Goal Based

7 Which term describes the common-sense of the judgmental part of problem-solving? **CO1**
a) Values-based b) Critical c) Analytical d) Heuristic

8 Which AI technique enables the computers to understand the associations and relationships between objects and events? **CO2**
a) Heuristic Processing b) Cognitive Science c) Relative Symbolism d) Pattern Matching

9 Which process makes two different Logical expressions look identical? **CO2**
a) Unification b) Lifting c) Inference Process d) Decomposition

10 Among the given options, which search algorithm requires less memory? **CO2**
a) Optimal Search b) Depth First Search c) Breadth-First Search d) Linear Search

SECTION – B (Remembering)

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

11 Define Artificial Intelligence? **CO1**
12 List the types of Artificial Intelligence? **CO1**
13 What is a software agent? **CO1**
14 Give the disadvantages of Artificial Intelligence? **CO1**
15 Define the term "actuators"? **CO1**
16 Distinguish Reflex agents and goal-based agents? **CO2**
17 List the properties of search algorithms? **CO2**

SECTION – C (Understanding)

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

18 Outline the characteristics of an intelligent agent? **CO1**
19 Brief a note on the structure of an AI agent? **CO1**
20 Write a note on the types of environments for AI agents? **CO1**
21 Summarize on the any two problem solving methods in AI? **CO2**
22 Write brief note on informed search algorithms? **CO2**

SECTION – D (Applying)

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

23 Elaborate on the types of AI agents? **CO1**
24 Explain in detail any 4 uninformed search algorithms? **CO2**

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST – 625 234

DEPARTMENT OF COMPUTER SCIENCE

Course Code:	**10SE62**	**Programme:**	**B.Sc. Computer Science**	**CIA:**	**I**
Date:	**03-01-2025**	**Part:**	**IV**	**Semester:**	**VI**
Duration:	**1 Hour**	**Academic Year:**	**2024 – 2025**	**Max. Marks:**	**25**
Study Component:		**Skill Enhancement Course**			
Course Title:	**PROFESSIONAL ETHICS FOR COMPUTER SCIENCE**				

SECTION – A

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

1 _____ are the rights of the owner of a information to decide how much information is to be exchanged, share or distributed? **CO1**

a) Computer Ethics b) Cyber law c) Intellectual Property right d) Labour law

2 What are professional ethics? **CO1**

a) A set of legal rules b) Ethical guidelines for a specific profession

c) Personal moral beliefs d) Government regulations

3 Which of the following is NOT a fundamental ethical principle in professional ethics? **CO2**

a) Honesty b) Integrity c) Profit maximization d) Accountability

4 What is the main purpose of professional codes of ethics? **CO2**

a) To maximize profits b) To protect consumers c) To increase competition d) To stifle innovation

5 What is "plagiarism" in the context of professional ethics? **CO2**

a) A form of honest borrowing b) Failing to cite sources properly

c) Encouraged in academic research d) A type of innovation

SECTION – B

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

6 Define Plagiarism? **CO1**

7 What is the primary goal of professional code of ethics? **CO1**

8 Define user privacy and data security? **CO2**

9 What is meant by "non-maleficence"? **CO2**

SECTION – C

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

10 Discuss on sustainable growth. **CO1**

11 Write short notes on causes on Energy crisis. **CO1**

SECTION – D

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

12 Discuss about social and human critiques. **CO1**

13 Write about Renewable Energy resources. **CO2**

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