TB2514417N

Reg. No :.....

Name :.....

BACHELOR'S DEGREE EXAMINATION, OCTOBER 2025

2025 ADMISSIONS REGULAR

SEMESTER I - MAJOR (COMPUTER APPLICATIONS)

CA1DSCA01B24 - Foundations of Programming and Artificial Intelligence

Time : 1.5 Hours

Maximum Marks : 30

Part A

Answer all questions. Each question carries 1 mark. (1x10=10)

1. Analyze the output: int a = 10, b = 20; printf("%d", (a > b) ? a : b); [CO1,Analyse]
2. List any two primitive data types in C. [CO1,Remember]
3. Predict the output if input is 18.4 for an integer using scanf() [CO1,Evaluate]
4. Identify the loop in C that guarantees at least one execution of its body. [CO2,Remember]
5. Identify the loop in C where the condition is checked after executing the body. [CO2,Remember]
6. State the index of the first element in a C array. [CO2,Remember]
7. State the general syntax of a function definition in C. [CO3,Remember]
8. Recall who is known as the father of AI. [CO4,Remember]
9. Which type of AI is designed to perform only specific tasks? [CO4,Understand]
10. Identify the three stages of AI. [CO4,Remember]

Part B

Answer any 2 questions from the bunch of CO1. Each question carries 5 mark. (5x2=10)

11. Explain special operator in C with example. [CO1,Understand]
12. Compare gets(), and puts() with examples. [CO1,Evaluate]
13. Write a C program to find the perimeter of a circle. [CO1,Apply]

Part B

Answer any 2 questions from the bunch of CO2. Each question carries 5 mark. (5x2=10)

14. Explain the structure of a switch statement with syntax and example [CO2,Understand]
15. Write a C program to find and calculate the sum of all elements in an array. [CO2,Apply]
16. Write a program in C to calculate the factorial of a number using a for loop. [CO2,Apply]

Part B

Answer any 2 questions from the bunch of CO4. Each question carries 5 mark. (5x2=10)

17. Explain the features of Narrow AI. [CO4,Understand]
18. Give examples of five real-life applications of AI. [CO4,Apply]
19. Write five advantages of Artificial Intelligence. [CO4,Understand]

Part C

Answer any 1 question from the bunch of CO3. Each question carries 10 mark. (10x1=10)

20. Write a C program with functions to find the sum and product of two numbers. [CO3,Create]
21. Write short notes on: a) Function declaration b) Function definition c) Function call [CO3,Remember]