TB251750S

Reg. No :.....

Name :.....

BACHELOR'S DEGREE EXAMINATION, OCTOBER 2025

2025 ADMISSIONS REGULAR

SEMESTER I - MINOR - C (COMPUTER APPLICATIONS)

CA1DSCB101B24 - Foundations of Programming and Artificial Intelligence

Time : 1.5 Hours | Maximum Marks : 50

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. Identify the return type of the main() function in C? [CO1,Understand]
3. Recall the header file required for using printf() and scanf()? [CO1,Remember]
4. Identify the loop in C that guarantees at least one execution of its body. [CO2,Remember]
5. Identify the return type: int square(int n) { return n*n; } [CO3,Understand]
6. Which standard library contains printf()? [CO3,Understand]
7. Which keyword is used to return a value? [CO3,Understand]
8. Which AI type has self-awareness? [CO4,Analyse]
9. Which stage of AI is also called superintelligence? [CO4,Analyse]
10. Which AI type is capable of understanding human emotions? [CO4,Apply]

Part B

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

11. Write a C program to find the average of three numbers. [CO1,Apply]
12. Write a C program to print even numbers upto 10. [CO1,Understand]
13. Explain variables in C with examples. [CO1,Evaluate]

Part B

Answer any 2 questions from the bunch of CO3. Each question carries 5 mark. **(5x2=10)**

14. Write a function to calculate the area of a circle. Pass radius as an argument and return the result. [CO3,Create]
15. What is the role of a return statement in a function? Give an example. [CO3,Analyse]
16. Write a C function that calculates the square of a number. Demonstrate how it is called. [CO3,Create]

Part B

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

17. Explain the major domains of Artificial Intelligence and their applications. [CO4,Understand]
18. Define Artificial Intelligence (AI). Explain its importance with suitable examples [CO4,Remember]
19. "AI is both a boon and a threat to mankind." – Discuss this statement with arguments. [CO4,Create]

Part C

Answer any 1 question from the bunch of CO2. Each question carries 10 mark. **(10x1=10)**

20. Write a program to find the sum and average of elements of an array. [CO2,Create]
21. Explain how arrays are declared and initialized in C. Write a program to input and display 5 integers using an array. [CO2,Apply]