25U269 (Pages: 2) Name : .....

Reg. No : .....

SECOND SEMESTER UG DEGREE EXAMINATION, APRIL 2026

(FYUGP)

(Regular/Supplementary/Improvement)

CC24UCSC2CJ101 - FUNDAMENTALS OF PROGRAMMING (C LANGUAGE)

(Computer Science - Major Course)

(2024 Admission onwards)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Express and list the categories of C operators. [Level:2] [CO1]
2. Summarise keywords and identifiers in C. Provide examples to support your analysis. [Level:2] [CO1]
3. How is a switch statement different from multiple if-else conditions? [Level:3] [CO2]
4. What happens if the condition in an if statement is false? Explain with an example. [Level:3] [CO2]
5. Explain the concept of call by reference in C with example using pointnters. [Level:3] [CO3]
6. Implement why do we use functions in C? [Level:3] [CO3]
7. Explain what is recursive function. [Level:3] [CO3]
8. Describe three dimensional arrays ,how can you initialize them? [Level:3] [CO3]
9. Discuss the best practices for declaring and initializing pointers in C. [Level:3] [CO4]
10. Explain how pointers can be used to swap the values of two variables in a function. [Level:3] [CO4]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Explain the structure of C program. [Level:2] [CO1]
12. Explain the role of logical operators in C with suitable example. [Level:2] [CO1]
13. Explain nesting of for loop with suitable example. [Level:3] [CO2]
14. Explain how you can dynamically allocate memory for a one-dimensional array [Level:3] [CO3]

15. Write the functionality of strlen( ) and strcpy( ) using C program. Do not use library function. [Level:3] [CO3]

16. Describe null pointers, and why are they important in C programming? How are they initialized and used? [Level:3] [CO4]

17. Describe how does the extern keyword work in a multi-file program? Explain with a practical example demonstrating its usage. [Level:3] [CO4]

18. Compare and contrast the initialization and usage of structure and union variables. Why would you choose one over the other? [Level:3] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Explain what are various jumpng statements? With example. [Level:3] [CO2]

20. Implement what is a function without arguments and return value? Write a C function that prints "Hello, C Programming!" without taking any parameters or returning a value. [Level:3] [CO3]

(1 × 10 = 10 Marks)

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