

QP CODE: D2BCS2503	(Pages: 2)	Reg. No :
		Name :
SECOND SEMESTER FYUGP EXAMINATION, APRIL 2026		
(Regular/Improvement/Supplementary)		
Discipline Specific Core (DSC) Courses - Minor		
CSC2MN101 : FOUNDATIONS OF C PROGRAMMING		
(Credits: 4)		
Time: 2 Hours	Maximum Marks: 70	
Section A		
Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)		
1. Why is pseudocode useful in communicating algorithms to non-programmers?	BL2	CO4
2. Discuss the importance of arrays in programming and provide an example where using arrays significantly simplifies the solution compared to individual variables.	BL2	CO1, CO4
3. What is the purpose of the return statement in the main() function.	BL2	CO1
4. What is the difference between a variable and a constant in C?	BL2	CO1
5. What is a base case in recursion?	BL2	CO5
6. What is a pointer in C?	BL1	CO1
7. Define variable declaration in C. Give its syntax and an example for declaring different types of variables.	BL2	CO1
8. What is the purpose of using functions in C programming?	BL2	CO1
9. What is the function of Raptor in learning programming concepts.	BL1	CO4
10. Explain the difference between while and do-while iteration statements in programming.	BL2	CO1, CO4
Section B		
Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)		
11. Evaluate the effectiveness of using flowcharts to represent complex algorithms. Discuss both the advantages and limitations of using flowcharts for problem-solving.	BL2	CO2

(PTO)		
12. What role do library functions play in C programming?	BL1	CO1
13. Write a short note on the use of formatted I/O functions like 'scanf' and 'printf' in C programming. Highlight their importance with an example.	BL1	CO1, CO3
14. Define what an array is in programming.	BL1	CO1, CO4
15. What is a structure in C programming? Provide an example of a structure definition and accessing its members.	BL1	CO1, CO4
16. Explain the concept of strings in programming. How are strings stored in memory? Provide examples of string manipulation functions.	BL1	CO1
17. What is the role of a function declaration in C? Provide an example of a function declaration.	BL2	CO1
18. Discuss how algorithms are used to solve real-world problems. Use an example to illustrate your answer.	BL2	CO3
Section C		
Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)		
19. Explain the concept of "call by value" and "call by reference" in functions. Write a program to demonstrate both approaches with appropriate examples.	BL2	CO1
20. Explain the concept of operator precedence and associativity in C programming with suitable examples.	BL2	CO1, CO2, CO4
CO : Course Outcome		
BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)		