



QP CODE: 21102622



21102622

Reg No :

Name :

B.Sc/BCA DEGREE(CBCS)EXAMINATIONS, OCTOBER 2021

First Semester

**Core Course - CS1CRT02 - METHODOLOGY OF PROGRAMMING AND C
LANGUAGE**

(Common to B.Sc Computer Applications Model III Triple Main, B.Sc Computer Science Model III,
B.Sc Information Technology Model III & Bachelor of Computer Application)

2017 Admission Onwards

2D0E4A78

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. List out any three factors for selecting a programming language.
2. Draw a flow chart to find the average of three numbers.
3. List the three control structures with atleast one example for each.
4. Differentiate between keywords and identifiers.
5. What are different storage class specifiers in C ?
6. Explain the use of printf() statement.
7. Draw the flow chart showing the execution of while loop in C.
8. How a matrix can be declared in C?
9. Differentiate between array of pointers and pointers to array.
10. Write the commonly used library functions in C.
11. What is external variable?
12. What is dynamic memory allocation ?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss about various programming languages with its advantages and limitations.





14. What do you mean by Testing and Debugging ? Explain.
15. Discuss the precedence of arithmetic, logical and relational operators in C.
16. Discuss the various unconditional branching statements in C.
17. Write a C program to print the first n prime numbers.
18. What is array? Write a program to sort a set of numbers in ascending order.
19. Write a C program to find the number of vowels in a string.
20. What is the difference between function prototype and function definition? Explain with an example.
21. What is recursion? Write a program to find the factorial of a number using recursion?
(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain about a) Linker b) Subprogram c) Differences between compiler and interpreter.
23. Explain in detail various datatypes used in C with example.
24. a) Write a C program using pointer to swap the values of two integer number.
b) Explain the relation between an array and a pointer. What is wild pointer in C?
25. Explain a) structure with sample program.
b) Explain Pointers to Structure.
(2×15=30)

