



QP CODE: 24047571



Reg No : .....

Name : .....

**B.Sc/BCA DEGREE (CBCS) IMPROVEMENT/REAPPEARANCE/MERCY CHANCE  
EXAMINATIONS, DECEMBER 2024**

**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

84A3A8B4

Time: 3 Hours

Max. Marks : 80

**Part A**

*Answer any **ten** questions.*

*Each question carries 2 marks.*

1. What is a programming language?
2. What is a language translator?
3. What is Debugging?
4. Differentiate between keywords and identifiers.
5. Define the term 'type casting'
6. Explain the use of gets() statement.
7. What is the use of continue statement ?
8. How will you initialize an array?
9. What is meant by base address of an array?
10. What is the use of automatic variable?
11. What is the advantage of using enumerated data type?
12. What are the various dynamic memory allocation functions in C?

(10×2=20)

**Part B**

*Answer any **six** questions.*

*Each question carries 5 marks.*





13. (a) What is a subprogram?  
(b) What is an assembler?
14. Explain Iteration Statements in C with example.
15. What are the rules for defining a variable ? How can we declare and initialize a variable?
16. Write a C program to perform the functions of arithmetic operations of a calculator using switch statement.
17. Write a C program to print the series 1, 3, 9, 27, 81 .....upto a given 'n'.
18. Write a C Program to find the transpose a matrix.
19. Explain the concept of pointer to array.
20. What is recursion? Write a program to find the factorial of a number using recursion?
21. Write a program to find the average mark of each student in a class, given their roll number, name, mark1, mark2, mark3 using the concept of array of structures.

(6×5=30)

### Part C

*Answer any two questions.*

*Each question carries 15 marks.*

22. Explain with examples (a) Algorithm and its characteristics (b) Flow chart with its advantages and disadvantages
23. Explain the following :- a) Logical operators b) shorthand assignment operators c) enumerated datatypes
24. Write a C program to read in a line of text and count the number of occurrence of vowels, words in it?
25. a) Explain function definition with syntax.  
b) Write a program to find area of rectangle using function.

(2×15=30)

