QP CODE: 23104817

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Reg No : .....

Name : .....

B.Sc/BCA DEGREE(CBCS)REGULAR/IMPROVEMENT/REAPPEARANCE EXAMINATIONS, FEBRUARY 2023

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

B7878054

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is an Assembler ?
2. List out the characteristics of a good programming language.
3. What is a selection structure?
4. What are static variables?
5. What is the output of the following program

```
main()
{
int x=100,y=200;
printf("%d",(x>y)? x:y);
}
```

6. Explain the use of getch() statement.
7. What is the use of ‘default’ in switch statement ?
8. How will you initialize an array?
9. Write short note on different arithmetic operations performed on a pointer.
10. Write the syntax of function definition.
11. What are the rules to followed while using recursion?

12. Define
    a) malloc b)calloc

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. What are the different classifications of programming languages?
14. What do you mean by Testing and Debugging ? Explain.
15. Why do you mean by type modifier? What are the different type conversions possible in C? Explain with example
16. Write a C program to check whether the given number is armstrong number or not.
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. What is the relationship between array and pointer?
20. How an array is passed to a function explain it with example
21. Explain the difference between structure and union with example

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. a) What is a flowchart ? Explain the different symbols used in flow chart.
    b) Draw a flowchart to check whether a number is prime or not.
23. Explain different tokens in C language.
24. Write a C program to check whether two strings are equal or not without using string handling functions.
25. a) Explain storage classes in C with example
    b) What is recursion? What are its different types? Write a recursive function to find the factorial of a given integer.

(2×15=30)