QP Code:UV25DIS009

Reg.No : .....

Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (CBCSS-VUG) DEGREE EXAMINATIONS, NOVEMBER 2025

(Improvement/Supplementary)

B. Voc. Software Development

SDC1IT02 : Programming in C

2024 Admission Only

(Credits: 4)

Time: 2.5 Hours **Maximum Marks: 80**

Section A

*Short answer type carries **2** Marks each.*

(Ceiling 25)

1. List out different generations of computer.
2. What is decision making statement in c?
3. How do you show the address of a variable?
4. What are user defined functions in C?.
5. Write the use of strlen() and srtcpy().
6. What is the purpose of program verification?
7. What are the major categories of a programming language?
8. Convert (110011)2 to decimal.
9. Write and explain the syntax of if ..else.
10. Distinguish between while and do..while statement in C.
11. Classify the function prototypes with example C program for each.
12. What are the major categories of a programming language?
13. What is string, describe the string manipulation library function?
14. Explain Algorithm with suitable example.
15. Write a program to check whether a number is odd or even.

Turn Over

Section B

*Paragraph types carries **5** Marks each.* ***(Ceiling 35)***

16. Explain basic file operations. How we can define and open a file?
17. Illustrate about the various data types in ‘C’.
18. What are the rules of precedence of operators to evaluate an expression?
19. Explain the use of if.. ladder statements in C.
20. Add the following
    a) 1110011 + 1010101
    b) (11101) 2 + (110) 2
    c) (11101) 2 + (110) 2
21. Explain the structures and pointers in C.
22. Differentiate between sequential and random access files.
23. Explain is recursion? Write a C program to find the sum of the digits using recursion.

Section C

*Essay-type carries **10** Marks. Answer **any two** questions.*

24. Explain Number system and binary arithmetic with examples.
25. Illustrate the difference between call by value and call by reference with suitable example.
26. Explain arrays and different types of arrays with example.
27. Write a C program to count vowels and consonants in a string using pointer.

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