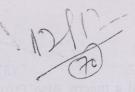
Sr. No 325305



## December 2023

## B.Sc (Life Science) III SEMESTER Introduction to Programming (OCSC-101A)

Time: 3 Hours

Max. Marks:75

Instructions:

- 1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
- 2. Answer any four questions from Part -B in detail.
- 3. Different sub-parts of a question are to be attempted adjacent to each other.

## PART -A

Q1 (a)	Differentiate between a variable and a constant.	(1.5)
(b)	How Do-While Loop is different from While Loop?	(1.5)
(c)	What are Header Files?	(1.5)
(d)	What is the use of getc(), getchar() and putchar()?	(1.5)
(e)	What are preprocessor directives?	(1.5)
(f)	What do you mean by Function prototype and Function definition?	(1.5)
(g)	Differentiate between Call by Value and Call by Reference.	(1.5)
(h)	Write a program to display contents of an Integer Array.	(1.5)
(i)	What are Constructors? Why they are used?	(1.5)
(j)	What are different file open modes?	(1.5)

## PART-B

Q2 (a) Discuss the importance of using primitive and user defined data types available in C Language with example. (5)

(b) Give the output of the following code snippet #include <stdio.h>

void main()

(5)

```
{
    int p1 = 100, p2 = 200, p3, p4;
    p3 = p1++;
    p1 = ++p2;
    p4=p1+p2--;
    printf ("%d %d %d %d", p1,p2,p3,p4);
}
```

- (c) Explain different types of operators used in C Language with example. (5)
- Q3 (a) Write a program to multiply two matrices. (5)
  - (b) Define a C String and discuss various library functions available in String.h (10) header file.

325305/70/11/563

325305 Q4 (a) What are void and Inline Functions? Why they are used (b) Explain the similarities and difference between Function and a macro. Also (10) write a program to print reverse of a number Q5 (a) What are structures? How members of a structure are created and accessed? (10) Explain with the help of example. Also specify whether structures can be inherited or not? (b) Write a program to input string from a keyboard and write them in file. (5) Q6 (a) Differentiate between Object oriented and Procedure Oriented Programming. (b) What is a Class? Specify the access modifiers associated with class members? (5) How it is different from a Structure. (5) (c) Write a program to demonstrate the concept of Inheritance. (5)Q7 Write short note on any three of the following Implicit and Explicit Casting i. (15)ii. Variable Scope iii. Recursion iv. Function Overloading