

No. of Printed Pages : 2 **BCSL-058(Set-IV)**

**BACHELOR OF COMPUTER
APPLICATIONS (BCA) (REVISED)**

Term-End Practical Examination

December, 2024

**BCSL-058(Set-IV) : COMPUTER ORIENTED
NUMERICAL TECHNIQUES LAB**

Time : 1 Hour

Maximum Marks : 50

Note : (i) *There are two questions in this paper
and both are compulsory.*

(ii) *Each question carries 20 marks.*

(iii) *Rest 10 marks are for viva-voce.*

1. Write a program in C/C++ to find the solution of the system of linear equations, by using Gauss Elimination method : 20

$$x + y + z = 2$$

$$x - 2y + 3z = 14$$

$$x + 3y - 6z = -23$$

2. Write a program in C/C++ to demonstrate the evaluation of operations of the following operators for the function $f(x) = x^2 + x + 7$: 20

- (a) Forward difference operator
- (b) Backward difference operator
- (c) Central difference operator
- (d) Averaging operator

take the interval (2, 7) and step size $h = 1$.

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