

LR-2138

**M. A. / M. Sc. (Second Semester) Examination,
May-June 2023**

MATHEMATICS

Paper : Fifth (iv) (Optional)

(Programming in 'C'-II)

Time Allowed : Three hours

Maximum Marks : 25

Note : Attempt all questions of two sections as directed. Distribution of marks is given with sections.

Section-‘A’

(Short Answer Type Questions) 5×2=10

Note : Attempt all five questions. One question from each unit is compulsory. Each questions carries 02 marks.

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Unit-I

1. Explain If-Else statement.

Or

Explain control flow.

Unit-II

2. Explain goto statement with examples.

Or

Explain infinite loops with examples.

Unit-III

3. Explain procedures and associativity.

Or

Explain conditional operator and Bitwise assignment operator.

Unit-IV

4. Explain 2-Demensional array with examples.

Or

Explain storage classes.

Unit-V

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5. Explain Nested structures.

Or

Explain register specifier.

Section-‘B’

(Long Answer Type Questions) 5×3=15

*Note : Attempt all **five** questions. **One** question from each unit is compulsory. Each questions carries 03 marks.*

Unit-I

6. Explain the concept of switch statement and also write a program on it.

Or

Explain do-while statement with program.

Unit-II

7. Differentiate between Break and continue statement.

Or

Write a program to evaluate the square root of a series of numbers and print the results.

Unit-III

8. Explain :

- (i) Binary arithmetic operator
- (ii) Arithmetic assignment operator

Or

Explain :

- (i) Increment and decrement operator
- (ii) Bitwise manipulation operator

Unit-IV

9. Differentiate between fixed vs automatic duration and explain various types of scope.

Or

How array of pointers are initialized? Write a program to find inverse of a square matrix.

Unit-V

10. Differentiate between structure and unions on the basis of memory structure.

Or

How structure differ from an array? What is self-referential structure.