

- (b) Classify functions on the basis of arguments and returning values.

Or

Define Array. Explain the syntax to declare and initialize one and multi-dimensional arrays. How arrays are passed as function arguments ? Give example. **8**

Roll No.

Exam Code : J-19

Subject Code—0370-X

M. Sc. EXAMINATION

(Prior 2011 Re-appear)

(Fourth Semester)

MATHEMATICS

MAL-645

Programming in 'C'

Time : 3 Hours

Maximum Marks : 60

Section A

Note : Attempt any *Seven* questions. **7×5=35**

1. Explain precedence and associativity of operators.
2. Explain user defined function and their significance.

3. Differentiate break and goto statement.
4. Write a note on main() function.
5. Define recursion and its execution in a program.
6. Give the syntax of scanf function.
7. Explain bitwise logical operators.
8. Define C preprocessor. Explain preprocessor primitives used in a program.
9. Define explicit conversions with example.
10. Explain the following declarations :
 - (i) char*a[10]
 - (ii) double (*a)[10]
 - (iii) float*pf (int*a, int*b)

Section B

Note : Attempt all the questions.

11. Explain the syntax of printf function with example. Discuss the format specification used for displaying the various data types variables. Also list the flags and their impact on the output.

Or

List the type specification statement used for different data type supported by C. Explain the syntax to declare and initialize strings with example. **9**

12. Define loop and its types. Explain the statements to generate a conditional loop in C.

Or

Define conditional branching. Explain the statements in C used for conditional branching. Write a program to calculate $f(x) = |x|$ for given x using it. **9**

13. (a) Define function prototype. Explain with syntax and the way to access it.