(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. **7**



**Roll No. .....** **Exam Code : J-19**

# Subject Code—0370

## M. Sc. EXAMINATION

(Batch 2011 Onwards) (Main & Re-appear)

(Fourth Semester)

MATHEMATICS

MAL-645

Programming in 'C'

*Time :* 3 *Hours* *Maximum Marks :* 42

### Section A

**Note** : Attempt any *Seven* questions. **7×3=21**

**1.** Explain precedence and associatively 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. **7**

**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. **7**

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