Reg. No. | | | | | | | | | |

ELS 404

First Semester M.Sc. Degree Examination, Dec. 2018/Jan. 2019
(CBCS Scheme)
ELECTRONICS
Programming in C

Time : 3 Hours Max. Marks : 70

PART – A

Note : Answer **all** questions. **(5×2=10)**

1. a) What is a global variable ?
   b) What is the use of pointer variable ?
   c) What is a function ?
   d) Explain the general format of for loop.
   e) What is the purpose of printf and scanf functions ?

PART – B

(3×20=60)

2. a) What is an algorithm ? Explain the use of flow-chart with suitable example.
   b) Explain different types of mathematical functions used in C. **(10+10)**

OR

3. a) Explain the general structures and uses of for, while and do-while loops with suitable examples.
   b) Write an algorithm and program that reads three values, determines the largest value and prints the largest value with an identifying message. **(10+10)**

P.T.O.

4. a) What is function definition and explain the general structure of function definition and prototyping with example.

   b) Write a C program to sort an array with N values into ascending order. **(10+10)**

OR

5. a) With neat diagrams, explain the modularity and its advantages in programming.

   b) What is a data file ? Explain the purpose of fopen(), fclose(), fprinf() and fscanf() functions to work with data files. **(10+10)**

6. a) Write a program to compute the sum of the elements in a matrix S with two rows and three columns.

   b) Write a program compute to the sum of N elements in an array using pointers. **(10+10)**

OR

7. a) Write a program to implement quick-sort algorithm.

   b) Write a program to determine the length of a string using a pointer with a while loop. **(10+10)**
