Code: EC1T5, AE1T4

I B.Tech - I Semester – Regular/Supplementary Examinations
November 2018

C - PROGRAMMING
(Common for ECE, AE)

Duration: 3 hours   Max. Marks: 70

PART – A

Answer *all* the questions.   All questions carry equal marks
                                                    11 x 2 = 22 M

1. a) What is an algorithm? Write an algorithm to swap two numbers.

   b) Write a small program to explain comma operator.

   c) What is an array? How it is different from a normal variable.

   d) Explain strcat( ) and strcmp( ) functions in C.

   e) Explain scope of a variable with an example.

   f) Write a program to add two numbers using pointers.

   g) What is a macro? Write a program to explain the concept.

   h) Define structure. Explain with an example.

   i) How files are useful in C. Write syntax for opening and closing a file.

   j) Write a program to print Fibonacci series using recursion.

   k) Write advantages of Recursion.

PART – B

Answer any ***THREE*** questions.   All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain the following
   i) Machine language   2 M
   ii) Assembly language   3 M
   iii) High level language   3 M

   b) Explain the difference between type conversion and type
      casting with suitable examples.   8 M

3. a) Explain various loop control structures in C with an
      example .   8 M

   b) Write a program two multiply two matrices.   8 M

4. a) What is a function? Explain different types of functions
      with suitable examples.   8 M

   b) Explain various storage classes in C with examples.
                                                          8 M

5. a) Explain different ways of allocating memory in C. Write
      a program to illustrate the functions associated with
      memory allocation.   8 M

b) i) Explain how macro is different from function concept in C. 3 M

ii) What is the role of Preprocessor in the Compilation process and explain two preprocessor directives. 5 M

6. a) What are the different ways to access the members of structure elements in C. Give example for each case. 8 M

b) Explain various 4 file handling methods with their syntax. 8 M