

Code: EE2T6, CE2T6, ME2T6, CS2T6, IT2T6

**I B.Tech - II Semester – Regular/Supplementary Examinations  
April 2019**

**C - PROGRAMMING  
(Common for EEE, ME, CSE, CE, IT)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11x 2 = 22 M

1. a) List any two memory allocation functions.
- b) Why are compilers and interpreters used?
- c) Draw a flow chart for factorial of a given number.
- d) List arithmetic and logical operators in C in the order of their precedence.
- e) Write any two differences between pre-test loop and post-test loop.
- f) What are the different parameter passing mechanisms in C?
- g) What is meant by dereferencing pointer?
- h) Define a Union. How to declare a union in C?
- i) What is a file?
- j) Give syntax to write data to a file.
- k) Define life time of a variable.

## PART – B

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

3 x 16 = 48 M

2. a) Write short notes on the following: 8 M

- i) Assembler      ii) Header Files

b) Discuss basic data types that the C-language supports.

8 M

3. a) Write a program to print the following pattern: 8 M

(using control structures)

```
    1
   1 2 1
  1 2 3 2 1
 1 2 3 4 3 2 1
```

b) Discuss about string handling functions 8 M

4. a) Write two C programs to multiply two integer numbers a and b by means of successive addition using 10 M

- i) iteration    and    ii) recursion

b) Explain different storage classes in C. 6 M

5. a) Write a pointer version of the function strcmp to compare two strings s and t 8 M
- b) Discuss about Predefined Macros in ctype.h. 8 M
6. a) Explain with an example how structures are initialized? 8 M
- b) Write a C program to append the contents into an existing file. 8 M