

Code: EE2T6, CE2T6, ME2T6, CS2T6, IT2T6

**I B.Tech - II Semester – Regular/Supplementary Examinations –  
May 2017**

**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) What is an expression? How is an expression differing from variables?
- b) Explain printf( ).
- c) Write example for ternary operator
- d) Trace and write output for the following code:

```
#include <stdio.h>
int main( )
{
    int m=1,n=2;
    int j;
    for( j=1;j<=2;j=j+1)
    {
        m=m+1;
        n=n*j;
        printf("%d \t %d\t", m, n);
    }
    return 0;
}
```

- e) What is the difference between while and do-while?
- f) Explain strlen( ) and strcat( ) methods.
- g) Explain putchar( ).
- h) What is pointer and declare pointer array?
- i) Explain predefined macros.
- j) List any three file modes in C.
- k) Write applications of command line arguments.

### PART – B

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

3 x 16 = 48 M

- 2. a) C provides four general categories of control structures: sequential, selection, iteration and encapsulation. Give example and explanation for each control structure. 8 M
- b) Write a C Program to read character from keyboard and display message whether a character is alphabet, digit or special symbol. 8 M
- 3. a) What is static memory allocation and dynamic memory allocation? 8 M
- b) Explain any four basic string functions with examples. 8 M
- 4. a) Write difference between recursion and iteration with suitable examples. 8 M

- b) Write a C Program to read a string and count number of vowels in it using functions. 8 M
5. a) Write a note on pointer to pointer & explain memory functions with examples. 8 M
- b) What is advantage of representing an array of string by an array of pointer to string? 8 M
6. a) Discuss the functions of fscanf( ), fprintf( ), fseek( ) and ftell( ). 8 M
- b) Write a program to compare two files, printing the first line where they differ. 8 M