Code No: R13105   **R13**   SET - 1

I B. Tech I Semester Supplementary Examinations, Nov/Dec - 2017
C PROGRAMMING
(Com. to CE, ME, CSE, PCE, IT, Chem E, Aero E, AME, Min E,PE, Metal E, Textile Engg)

Time: 3 hours   Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answer **ALL** the question in **Part-A**
3. Answer any **THREE** Questions from **Part-B**
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PART –A

1. a) Give the characteristics of an algorithm.   (4M)

    b) Write a for loop to print numbers from 10 to 1.   (3M)

    c) What is the use of header files in C programming?   (4M)

    d) What is a dangling Pointer? How it is different from normal Pointer?   (3M)

    e) What are self-referential structures?   (4M)

    f) Compare and contrast between text and binary files.   (4M)

PART -B

2. a) What is a programming language? Give the classification in it.   (4M)

    b) Compare and contrast constant with a variable.   (4M)

    c) Explain various operators available in C with examples.   (8M)

3. a) Give the distinction between entry-controlled and exit-controlled loops. Explain with examples.   (8M)

    b) Write a C Program that calculates the length of the string without using any string handling functions.   (8M)

4. Define the scope and life time of a variable. Illustrate the necessity of storage classes in C with an example of each.   (16M)

5. a) List and explain various functions in C that support dynamic memory management.   (8M)

    b) How arrays are passed as an argument to function? Explain with an example.   (8M)

6. Define a structure to hold the following details of student.
    Hall ticket number, name, marks.
    Write a C program that uses this structure and calculates the average of 5 students.   (16M)

7. a) Describe the role of ftell() in file handling. Write a C program that illustrates various file operation.   (8M)

    b) Write a C program to concatenate two text files.   (8M)