

**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. (16M)  
 Hall ticket number, name, marks.  
 Write a C program that uses this structure and calculates the average of 5 students.
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)

