

**I B. Tech II Semester Regular Examinations, June, 2015**  
**Computer Programming & Data Structures**  
**(Common to CE, ME & BT)**

Time: 3 hours

Max Marks: 70

**PART – A**

Answer ALL questions. All questions carry equal marks.

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10 \* 2 Marks = 20 Marks

- 1). a What are the different Data Types available in C Language? [2]
- b What are the different I/O Statements? [2]
- c Write a program to find the greater of two numbers without using if Statement. [2]
- d What is the value returned by Strcmp( )? [2]
- e Differentiate between Character Pointer and Character Array. [2]
- f Write a C Program to swap two numbers using Call-by-Reference. [2]
- g Define Self Referential Structure. [2]
- h Define File. [2]
- i Give Time Complexity of Insertion Sort. [2]
- j What is the condition for unsuccessful search using Binary Search? [2]

**PART – B**

Answer any FIVE questions. All questions carry equal marks.

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5 \* 10 Marks = 50 Marks

2. a) Give an example for Type Conversion and Type Casting. [10]  
b) Write an algorithm to find the greatest of three numbers.
3. Write a C Program to multiply two Matrices. [10]
4. a) Explain about Pointer Arithmetic. [10]  
b) With a sample program illustrate the use of static Variables in a Function.
5. a) What happens if one of the members of a Structure is union and one of the members of a union is Structure? Discuss. [10]  
b) Explain about Random Access Files.
6. Sort the following elements using Quick Sort? 8, 7, 6, 5, 4, 3, 2, 1. [10]
7. a) Explain Bitwise Operators. [10]  
b) Write a C Program to check whether the given number is prime or not.
8. Write a C Program to read the student details in a Structure and store in it a File. [10]

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