

I B. Tech I Semester Supplementary Examinations, June, 2015
Computer Programming

(Common to BME, ECE, EEE, CSE, IT)

Time: 3 hours

Max Marks: 70

PART – A

Answer ALL questions

All questions carry equal marks

10 * 2 Marks = 20 Marks

- 1). a What are the steps in the Program Development Cycle? [2]
- b How many Relational Operators are there? What are they? [2]
- c Define Array. Mention its applications. [2]
- d What's the difference between a function definition and a function prototype? [2]
- e Give two ways of reading multiple words. [2]
- f What is the difference between strcmp() and strcmpi()? [2]
- g Give the data type for argc and argv. [2]
- h Is it possible for a function to return more than one value? If yes how? [2]
- i In Which sorting technique in one pass there will be only one swap? [2]
- j An array has 40 sorted elements. What are the maximum number of comparisons required to search an element using binary search? [2]

PART – B

Answer any FIVE questions

All questions carry equal marks

5 * 10 Marks = 50 Marks

2. a. Write a program to find the greatest of the three numbers entered through the keyboard using Conditional Operators. [10]
- b. What are Enumeration Variables? How are they declared? What is the advantage of using them in a program?

3. a. Write a program to find the transpose of a given matrix? **[10]**
b. Write a program to check whether the given number is prime or not?
4. a. What are the different Storage Classes available in C? Explain with an example **[10]**
for each of the following?
b. Differentiate between Structure and Union.
5. a. Define File? Explain different modes in which a File can be opened? **[10]**
b. Write a program to implement string copy code using Pointers?
6. a. Write an algorithm to sort given input using Quick Sort? **[10]**
b. Show how Quick Sort sorts the following sequences of keys in ascending order
22,55,33,11,99,77,55,66,54,21,32.
7. a. Write a program to find greatest of two numbers using Ternary Operator? **[10]**
b. Explain return types of Printf and Scanf functions with an example.
8. a. Why Pointers should have Data Types when their size is always 4 bytes (in a 32- **[10]**
bit machine) and two bytes (in a 16 bit machine), irrespective of the variable they
are pointing to?
b. Differentiate between Linear and Non-Linear Data Structures.
