

## **B. Tech. Degree I & II Semester (Combined) Examination June 2013**

**IT/CS/EC/CE/ME/SE/EE/EI/EB/FT 108 COMPUTER PROGRAMMING**  
(2006 Scheme)

Time : 3 Hours

Maximum Marks : 100

**PART A**  
(Answer *ALL* questions)

(8 x 5 = 40)

- I. (a) What is meant by enumerated data types? Give its application also.  
(b) Write a note on type conversion.  
(c) Describe the concept behind the binary search algorithm.  
(d) What are library files? What is their importance?  
(e) Define actual and formal parameters with examples.  
(f) Write a note on storage classes.  
(g) Write a note on function pointers in C.  
(h) How can we give command line argument in C? Explain with an example.

**PART B**

(4 x 15 = 60)

- II. List out four categories of operator in C, with the list of five operators in each. Give the order of evaluation of operators in tabular format. (15)
- OR**
- III. (a) Write a complete C program that will examine the value of character type variable and print one of the following message according to the value assigned to the variable performance. (10)
- |         |           |   |    |   |    |          |
|---------|-----------|---|----|---|----|----------|
| POOR    | if either | P | or | p | is | assigned |
| AVERAGE | if either | A | or | a | is | assigned |
| GOOD    | if either | G | or | g | is | assigned |
| BEST    | if either | B | or | b | is | assigned |
- (b) Distinguish BREAK and CONTINUE with an example. (5)
- IV. Write a function in C language to exchange the values of two variables. Also the function should print number of times this function is called. How will you invoke this function from main program? (15)
- OR**
- V. (a) Write a C program to print the fibonacci numbers using recursion, upto 100. (10)  
(b) List the scope, visibility, storage area, initial value and lifetime of register and auto storage class in tabular format. (5)
- VI. (a) Write a program to sort 10 names alphabetically. (10)  
(b) Write a C program to initialize the upper triangular matrix with zero. (5)
- OR**
- VII. (a) Write a function in C language to exchange two rows of a two dimensional array. Also write statements for invoking the function in main. (7)  
(b) Write C program to do selection sort. (8)
- VIII. Write a C program to read and store register number, name, total mark and percentage mark of a set of students using structure. Define a union to accept any one of the information and display the list of students which match with given information. (15)
- OR**
- IX. (a) What are the advantage of using pointers? (5)  
(b) What are preprocessor directives? List the commonly used directives and their uses. (10)