

**KURUKSHETRA UNIVERSITY KURUKSHETRA**

**Course: B.Sc. (Hons) IT**

**Semester-IV**

**Paper Code :BSIT-410**

**Nomenclature of Paper: Programming in C (I.T Lab-VIII)**

**Note:-**

1. Instructions for Examiners:A candidate is required to perform one experiment.
2. Maximum number of students should not exceed ten in one group during course of studies as well as annual examination.

**Max. Marks: 50**

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|---------------------|------|
| EXPERIMENT (3 hrs)  | : 25 |
| PRACTICAL WORK BOOK | : 15 |
| VIVA-VOCE           | : 10 |

**Time: 3 hrs**

- 1 Program to study the behavior of data types i.e. their min & max values & their sizes.
- 2 Program to convert given distance in km to meters,feet,inches and centimeters.
- 3 Program to convert given temperature in Fahrenheit to Celsius.
- 4 Program to calculate the smallest & Largest out of given numbers using conditional operator.
- 5 Program to print roots of quadratic equation.
- 6 Program to print sum of digits of a given number.
- 7 Program to reverse the given number.
- 8 Program to check whether a given number is palindrome or not.
- 9 Program to add first seven terms of following series using for loop  $1/1! + 2/2!+3/3!$   
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- 10 Program to evaluate the equation :  $Y=x^n$
- 11 Program to print factorial of a number.
- 12 Program to print Fibonacci series till n given number using function.
- 13 Program to implement Calculator using functions.
- 14 Program to print binary equivalent of given decimal number.
- 15 Program to sort elements of array in ascending and descending order.
- 16 Program to search an element in 1-D arrays.
- 17 Program to implement multi-dimensional arrays-Multiplication of two matrices.
- 18 Program to check the orthogonality of a given matrix.
- 19 Program to calculate the transpose of a given matrix.
- 20 Write a function to find the largest element of an m by n matrix.
- 21 Program to calculate the substring of a given input string.
- 22 Program to remove blanks from a given string.
- 23 Program to sort given input strings.
- 24 Program to implement a function that compares the two input strings and returns 0 if equal, otherwise tells which comes first.
- 25 Program to calculate binomial coefficient  ${}^n C_r$  using function.
- 26 Program to calculate HCF of n numbers using function.
- 27 Program to implement basic pointer arithmetic.
- 28 Program using pointers to read in an array of integers and print its elements in reverse order.

- 29 Program to create a function that receives a sorted array of integers & an integer value and inserts the value in its correct place using pointers.
- 30 Use recursive function calls to evaluate  $f(x) = x - x^3/3! + x^5/5! + x^7/7! - \dots$
- 31 Program to study the behavior of struct and union elements using pointers.
- 32 Program to create a binary/text files and count the numbers of characters in them.
- 33 Program to copy a file to another using command line arguments.
- 34 Program to compare the contents of two files to determine whether they are same or not.
- 35 Program to modify and delete an existing record in a file.