**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**ACADEMIC YEAR – 2017-2018**

**COURSE NAME: Fundamentals of Programming**

**BATCH: 2015-2019**

**COURSE CODE: SCS1102 YEAR : III SEM : V**

**Assignment Questions**

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| **S.No.** | **TOPICS** | **CO** |
| **1** | Apply for loop to generate the powers of 2 tables for the power 0 to 20, both positive and negative. | **CO1** |
| **2** | (a) Write a C program to calculate average of a set of N numbers.  (b) Write a C program to convert given temperature in Fahrenheit to Celsius | **CO1** |
| **3** | Write a function is\_leap\_year which takes the year as its argument and checks whether the year is a leap year or not and then displays the appropriate message. | **CO2** |
| **4** | Explain the concept of recursion. Write a program for finding the sum of n given numbers using the recursion concept. | **CO2** |
| **5** | Formulate a matrix in spiral order using 2D array? | **CO3** |
| **6** | Create program for the given criteria. Given a string containing lowercase alphabets, the task is to count the sub strings that contain all the vowels at-least one time and there are no consonants(non vowel characters) present in the sub-strings. | **CO3** |
| **7** | What do you mean by command line arguments? Write a simple program, how to get the inputs from command prompts and print the same into the monitor? | **CO4** |
| **8** | How to access array elements through pointers? Write a program in C to find average of “N” numbers by using pointers | **CO4** |
| **9** | Store ten names of students in a file called ‘data.txt’. Perform operations to sort their names alphabetically. Write the sorted names into another file called ‘names.txt’. Display the names from ‘names.txt’ by opening the file in read mode. Close the files after performing all the operations. | **CO5** |
| **10** | A file named DATA contains a serious of integer numbers. Write a C program to read these numbers and then write all odd numbers to a file called ODD and all even numbers to a file called EVEN | **CO5** |