## Jadavpur University Session 2021-2022, Odd Semester Computer Programming and Numerical Methods Group A3, BCSE 1

## **Function and Pointer**

- 1. Write recursive functions for following tasks.
  - a. Binary equivalent of a number.
  - b. Sum of individual digits of a number passed as argument.
- **2**. Write a C program using functions which accepts a string from the user and performs the following tasks.
  - a. Counts the number of characters in the string without using string library functions.
  - b. Prints the reverse of the string without using string library functions.
- 3. Write a C program which accepts a full name from the user prints the initials. Eg. SRT for Sachin Ramesh Tendulkar.
- 4. Write a program to count the number of occurrences of any two vowels in succession in a line of text.
- 5. Write a program that converts (Do not use any string library function):
  - a. A string like "123" to integer 123.
  - b. An integer like 123 to string "123".
- 6. Write a C program which accepts a string from the user and performs the following tasks. (Do not use any string library function. )
  - a. Check whether it is palindrome or not. [Example of a palindrome string: "abcba", "abba"]
  - b. Counts the number of characters and words in it.
- 7. Write a program in C to store n numbers in an array and print the elements using pointers. Also compute the sum of all elements of that array using pointers.
- 8. Write a C function which accepts a string str1 and returns a new string str2 which is str1 with each word reversed. Do not use any string library function.
- 9. Write a function squeeze(s,c) which removes all occurrences of the character c from the string s.
- 10. Write the function strend(s,t), which returns 1 if the string t occurs at the end of the string s, and zero otherwise.