**18CSC202J – OODP – C++ Lab 9 Exercise**

**Topic: Class & Function Templates**

1. Write a Function Template in C++ to perform sorting of n items. The items can be of type int, float, etc.,

2. Ram and shiva are working as accountants in bank. They need to know all the arithmetic operations to verify the accounts. Since they are weak in mathematics, they found difficulty in doing such arithmetic operations. Help them to check accounts by applying arithmetic operations including add, subtract, multiply and divide using class template.

3. Write a program to define the function template for swapping two items of the various data types such as integer, float and characters.

4. Write a program to define the function template for calculating the square of given numbers with different data types.

5. Write a function template in C++ to find duplicate elements in an array.

6. Write a program to illustrate how to define and declare a class template for reading two data items from the keyboard and to find their sum.

7. Write a program to demonstrate the use of special functions, constructor and destructor in the class template. The program is used to find the biggest of two entered numbers.

8. Write a Function Template in C++ to find the maximum number among the 3 given numbers.

9. Write a C++ program to illustrate overloading of template function using an explicit function.

10. Write a class template in C++ to search for a single missing element in a sorted array.