St.Joseph's College of Engineering, Chennai-119

St.Joseph's Institute of Technology, Chennai - 119

Department Of IT/CSE

CS6301- Programming and Data structures - II

ASSIGNMENT III

PART-A

- 1. What is meant by abstract class?
- 2. Illustrate the exception handling mechanism
- 3. What are the two types of exceptions?
- 4. What are templates?
- 5. Distinguish between class template and function template
- 6. List out any four containers supported by Standard Template Library
- 7. What is the use of function adaptors?
- 8. What is file mode? List any four file modes.

PART-B

- 1. (i) Explain how rethrowing of an exception is done. (4)
 - (ii) Write a C++ Program that illustrates multiple catch statements. (12)
- 2. (i) Explain the overloading of template function with suitable example. (8)
 - (ii) Write a function template for finding the minimum value contained in an array. (8)
- 3. (i) List the advantages of exception handling mechanisms. (4)
 - (ii) Write a c++ program for the following:
 - 1. A function to read two double type numbers from keyboard.
 - 2. A function to calculate the division of these two numbers.
 - 3. A try block to throw an exception when a wrong type of data is keyed in.
 - 4. A try block to detect and throw an exception if the condition "divide by zero" occurs
 - 5. Appropriate catch block to handle the exceptions thrown. (12)
- 4. (i) Explain any two sequence containers supported by Standard Template Library. (4)
 - (ii) Write a C++ Program using lists from STL to input 10 numbers and store them in a list. From this list, create wo more lists, one containing the even numbers, and the other containing the odd numbers. Output all the three lists(12).