

ST. XAVIER'S COLLEGE KOLKATA (AUTONOMOUS)

1st SEMESTER EXAMINATION NOVEMBER - DECEMBER 2014 M.Sc. Computer Science

CMSM4157

LAB 2; OBJECT ORIENTED PROGRAMMING LAB

Wednesday & Thursday, 10^{th} December & 11^{th} December 2014 10:00 am onwards

3 hours

Full Marks: 80

READ THESE INSTRUCTIONS FIRST:

- Of the questions attempted, the answers to only the first required number of questions (as stipulated in the question paper) will be evaluated. **So please do not attempt extra questions**.
- Use fountain pen or ball-point pen of blue or black ink.
- Answer in your own words as far as practicable.
- Do not write anything on the Question paper other than your Roll No.

At the end of the examination, fasten all your work securely together.

The marks are given in **brackets** [] at the end of each question or part question.

29112014

SET: 3 PROGRAM CODE: 45; SAMPLE OUTPUT(S): 15; VIVA: 20

- 1. Write a class to find the third largest element from an array (at least 10 numbers having the range of 1 -100) using Exception Handling.
- 2. (a) Write a class to print the first 10 prime numbers.
 - (b) Write a class to sort an array of integers of size 15.
- 3. Create an interface called TwoDFigure containing a method called area() and a final variable called pi=3.14. Write a class by implementing the above interface called Rectangle. Now demonstrate the above by creating at least two objects of the Rectangle class.
- 4. Write a class to implement searching of an element from an array (at least 10 numbers having the range of 1 -100) using Exception Handling. The element to be searched is provided by the user.
- 5. Create three threads A, B, C using Runnable interface. Execute the threads from the main program using the start () method. Also implement the method of sleep () and stop ().

|****

29112014 2

CMSM4157

SET: 3

1. Write a class to find the third largest element from an array (at least 10 numbers having the range of 1 -100) using Exception Handling.

CMSM4157

SET: 3

- 2. (a) Write a class to print the first 10 prime numbers.
 - (b) Write a class to sort an array of integers of size 15.

CMSM4157

SET: 3

3. Create an interface called TwoDFigure containing a method called area() and a final variable called pi=3.14. Write a class by implementing the above interface called Rectangle. Now demonstrate the above by creating at least two objects of the Rectangle class.

CMSM4157

SET: 3

4. Write a class to implement searching of an element from an array (at least 10 numbers having the range of 1 -100) using Exception Handling. The element to be searched is provided by the user.

CMSM4157

SET: 3

5. Create three threads A, B, C using Runnable interface. Execute the threads from the main program using the start () method. Also implement the method of sleep () and stop ().

29112014 3