

## GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, EAST DELHI CAMPUS, SURAJMAL VIHAR-110092

Semester: 4 <sup>th</sup>			
Paper code: AIDS252/AIML252/IOT252	L	P	Credits
Subject: Object-Oriented Programming Lab	0	2	1
Marking Scheme			

- 1. Teachers Continuous Evaluation: As per university examination norms from time to time
- 2. End term Examination: As per university examination norms from time to time

### **INSTRUCTIONS TO EVALUATORS: Maximum Marks:** As per university norms

- 1. This is the practical component of the corresponding theory paper.
- 2. The practical list shall be notified by the teacher in the first week of the class commencement under the intimation to the office of the HOD/ Institution in which the appear is being offered from the list of practicals below.
- 3. Instructors can add any other additional experiments over and above the mentioned in the experiment list which they think is important.
- 4. At least 8 experiments must be performed by the students.

### **Course Objectives:**

- 1. To implement real-world entities like inheritance, hiding, polymorphism, etc in developing software applications.
- 2. To understand how binding together the data and the methods operating on them helps in developing the applications.

#### **Course Outcomes:**

Apply object-oriented principles to design programming solutions to actual problems.

CO2 Analyse different packages of object-oriented programming language.

CO/PO	PO01	PO02	<b>PO03</b>	<b>PO04</b>	PO05	PO06	<b>PO07</b>	PO08	PO09	PO10	PO11	PO12
CO1	2	2	2	2	1	1	1	2	1	1	1	3
CO2	2	2	2	2	1	-	-	-	-	-	-	-

#### LIST OF EXPERIMENTS:

- 1. Generate a random number up to 100 and print whether it is prime or not.
- 2. A. Design a program to generate first 10 terms of Fibonacci series.
  - B. Find the factorial of a given number using Recursion.
- 3. Find the average and sum of array of N numbers entered by user.
- 4. Create a class to find out the Area and perimeter of rectangle.
- 5. Design a class that perform String operations (Equal, Reverse the string, change case).
- 6. Demonstrate the use of final keyword with data member, function and class.
- 7. Demonstrate the use of keywords try, catch, finally, throw and throws.



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- 8. Design a program to demonstrate multi-threading using Thread Class.
- 9. Design a program to create game 'Tic Tac Toe'.
- 10. Design a program to basic calculator using Applet and Event Handling.
- 11. Design a program to read a text file and after printing that on scree write the content to another text file.
- 12. Design a program to count number of words, characters, vowels in a text file.
- 13. Design a program to create simple chat application using Socket Programming.
- 14. Design a program to connect to access database and display contents of the table.