



# KONERU LAKSHMAIAH EDUCATION FOUNDATION

(Deemed to be University, Estd. u/s. 3 of UGC Act 1956)

B.Tech - Even Sem : Semester in Exam-II  
Academic Year:2019-2020

## 19cs1203 - OBJECT ORIENTED PROGRAMMING

Set No: 2

Time:		Max.Marks: 50				
S.NO	Answer All Questions	Choice	Marks	CO	CO BTL	COI BTL
1.	Explain all the uses of final keyword in java.		3Marks	CO3	3	2
2.	Create an abstract class 'Bank' with an abstract method 'getBalance'. \$100, \$150 and \$200 are balances in banks A, B and C respectively. 'BankA', 'BankB' and 'BankC' are subclasses of class 'Bank'. Call this method by creating an object of each of the three classes.		3Marks	CO3	3	3
3.	John writes a program that considers 5 integers as command line arguments to main() method. He inputs only 4 integers. Develop the code to handle this.		3Marks	CO4	3	2
4.	Demonstrate a program for the implementation of thread by extending Thread class.		3Marks	CO4	3	3
5.	Create an class Entertainment, with an attribute Title and abstract methods seatingCapacity():int and ticketPrice():int. The classes Movie (with attribute director:String), Drama (with attribute writer:String) are subclasses of Entertainment. Consider Movie has seating capacity of 250 persons, with a fare of 200 per ticket, Drama has seating Capacity of 500 persons with ticket price 100 per person. The EntertainmentDemo class has main () method to create 2 references of Entertainment each assigned with objects of Movie and Drama and invoking the methods.		5Marks	CO3	3	2
6.	Develop a class Person with name and address as String attributes. The Employee class inherits the Person and has ID, salary as attributes. Write constructors in both classes to initialize the attributes. The EmployeeDemo class has a main() method that creates object of Employee and prints details in the following format: ID: 1234 Name: ABC Address: Guntur, AP Salary: Rps 25000.		5Marks	CO3	3	3
7.	Write a program that prompts the user to enter the length (in feet) as input. The program must output the number of inches. If the user enters a negative number or a non-digit, throw InvalidInputException. (Create a user defined Exception)		5Marks	CO4	3	2
8.	A set of Student names are specified as command line arguments. Write a program to print only the set of distinct names.		5Marks	CO4	3	3

9.	A publishing company markets both book and audiocassette versions of its works. Create a class Publication that stores the title (type string) and price (type float) of a publication. From this class derive two classes: Book, which adds a page count (type int), and class Tape, which adds an attribute time that denotes the playing time in minutes (type float). Each of these classes have parameterized constructor, toString() method. The PublicationDemo class has main() method which is menu driven with the following options: 1. Add new Publication 2. Print details of all publications	choice Q-10	9Marks	CO3	3	2
10.	Develop a class Bank with getRateOfInterest() and calculateInterest() as its abstract methods and both return double. It has the attributes principle and noOfYears as attributes. The classes SBI and ICICI must implement the above methods. SBI has 7% and ICICI has 8% as interest rate. Create references to Bank and store details of both banks. Invoke the methods and display the data.		9Marks	CO3	3	3
11.	Develop a program to create a class "Dictionary" that contains the following information. (a) Name of a person (b) Mobile Number.. The setter method raise an exceptions when name has any other characters apart from lower- and upper-case alphabets and when mobile number is negative or does not have 10 digits. The parameterized constructor calls the setters and throws the Exceptions. The main() method of DictionaryDemo must handle the exceptions.	choice Q-12	9Marks	CO4	3	2
12.	Develop a Java class to Read data of Employees (with ID, name, gender, salary as private instance members). Draw the class diagram and define the parameterized constructor and format the output as ID: 1234 Name: ABC Gender: Male Salary: \$2400 The main () method must be menu driven with the following options: 1. Add New Employee 2. Print all Employee data 3. Store the data in an ArrayList		9Marks	CO4	3	3

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