

JAMIA HAMDARD
(Deemed to be University)
School of Engineering Sciences and Technology
Department of Computer Science and Engineering
New Delhi – 110062
Examination: Even Semester Examination – 2023

Roll No: _____

Paper: Programming in Java

TIME: 2.5 Hours

Note: Follow proper numbering for answering the questions.

Paper Code: MCSB GE 13

MAX. MARKS: 60

SECTION – A (4*5=20 Marks)

Attempt all FOUR Questions. Each question carries 5 marks.

Question	CO	BL
Q1. Explain constructor overloading with code example.	1	L2
Q2. What happens when a class is declared “final”. Explain with suitable example of your choice.	3	L1
Q3. What is inheritance in java? Assume a class “Animal” with methods eat() and move(). Explain inheritance by giving the code of the “Animal” class and of the “Dog” and “Cat” as its derived class. Demonstrate inheritance.	2	L4
Q4. What is an exception in Java? Explain with code example.	3	L3

SECTION – B (4*10= 40 Marks)

Attempt any FOUR Questions out of SIX. Each question carries 10 marks.

Question	CO	BL
Q1. Write a java program to demonstrate steps of JDBC connection. Explain each step in short.	2	L6
Q2. Explain the life cycle of a thread with the help of a diagram.	5	L4
Q3. Differentiate between abstract class and a normal class (concreate class) definition. When would you prefer using an abstract class instead of an interface? Explain with a suitable coding example?	3	L4
Q4. i. Explain how platform-independence in java is achieved. Explain with the help of proper diagram. ii. Give the output of the following code- public class Test { public static void main(String args[]) { int arr[] = new int[2]; System.out.println(arr[0]); System.out.println(arr[1]); } }	1	L1
Q5. Explain the similarities and differences between STRAP and BIOJAVA?	3	2
Q6. Explain following terms: a) SymbolList b) Feature c) FeatureHolder d) Features of BioJava	3	1