GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Basic Sciences

Bachelor of Science Honours in Physics
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - R1UC420B - Object Oriented Programming

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Write a Java code to perform addition of two integer numbers	K1(2)
2)	Write a note on float data types in Java.	K2(4)
3)	Write a Java program that demonstrates method overloading and method overriding in a class hierarchy.	K2(6)
4)	Describe the difference between instance variables and class variables.	K3(9)
5)	Explain the concept of inheritance in Java in detail. Discuss the types of inheritance supported by Java, their advantages, and limitations. Provide examples demonstrating the use of inheritance in Java programming.	K3(9)
6)	Write a program to print all the prime numbers between 1 to 100.	K5(10)
7)	Explain following clause w.r.t. exception handling: (i) try (ii) catch (iii) throw (iv) finally	K4(12)
8)	Explain the difference between abstract classes and interfaces.	K5(15)
9)	Explain the concept of method overloading in Java, including its significance in code organization and reuse. Provide examples of method overloading with different parameter types and numbers.	K5(15)
10)	Discuss the concept of method overriding with respect to polymorphism.	K6(18)