1) Explain in detail the Principles of Object Oriented Programming and its Applications

<div align="center">**OR**</div>

1) Explain the role of JVM in Java.

2) What are different primitive data types in Java? Give their sizes in bits.

1) Define a class. What is the general form of a class? How objects are declared?

2) Discuss the importance of constructor? Write a java program to perform constructor overloading.

<div align="center">**OR**</div>

1) Differentiate call-by-value and call-by-reference with example.

2) What is method overloading explain with example?

1) Discuss declaration, allocation and accessing array elements in java with suitable example

2) Discuss about Array class and its methods.

<div align="center">**OR**</div>

1) What is method overriding? Illustrate the concepts of method overriding

1) How to create packages and use them in java?

2) Explain the different types of controls in AWT

<div align="center">**OR**</div>

1) What is an exception? Explain exception handling in java with examples.

1) Explain String class and its methods with an example.

<div align="center">**OR**</div>

1) Briefly explain about Thread Life Cycle.

1) List and explain Java buzzwords. Which factors are making Java famous language?

<div align="center">**OR**</div>

1) Explain the Control Statements in detail.

1) What are objects and how they are created from Class? Explain the dynamic initialization of objects using constructors.

<div align="center">**OR**</div>

1) Explain the use of 'this' keyword with an example.

2) Develop a program that shows an Employee class which contains various methods for accessing employee's personal information and methods for paying an employee.

1) What is meant by Inheritance and why it is important in Object Oriented Programming? Explain different types of inheritance supported in JAVA

<div align="center">**OR**</div>

1) Give a detail note on interfaces in Java.

1) Explain Autoboxing and Unboxing with example.

2) Describe Applet Life Cycle.

<div align="center">**OR**</div>

1) Briefly explain User Defined Exception with example.

2) Demonstrate the finally statement.

1) Explain ResultSet and ResultSetMetaData
Develop a JDBC Program to retrieve data from database.

1) What is JDBC? Explain the role & responsibility of JDBC API.
Discuss about interfaces of java.sql package.

1) Differentiate between Procedural Programming vs. Object Oriented Programming
2) How to implement precedence rules and associativity in java language? Give an example.

<div align="center">**OR**</div>

1) How to use break and continue statement in Java?
2) Develop a Java Program to check whether the Number is ArmStrong or Not.

1) Write an example program to show the calling sequence of constructors
2) Write a Java program to illustrate the use of static keyword.

<div align="center">**OR**</div>

1) Define class and object.
Design a class that represents a bank account and construct the methods to
i) Assign initial values ii) Deposit an amount iii) Withdraw amount after checking balance

1) Illustrate the use of super keyword with suitable example.
2) Can you identify and explain the differences between interfaces and Abstract classes in Java?

<div align="center">**OR**</div>

1) How two dimensional arrays are created in Java? Write a Java program for Matrix Multiplication.

1) Describe the different types of Layout Managers in AWT

<div align="center">**OR**</div>

1) What is Event Handling? List out the different types of Event Listener Interfaces.
Develop a Java Program to implement Action Listener

1) What is a Thread? Write a program to implement multithread programming in java.

<div align="center">**OR**</div>

1) What is JDBC? Describe the steps need to execute a SQL query using JDBC.

1) Explain Command Line arguments with example.
2) Discuss about Data Type Conversion in Java.

<div align="center">**OR**</div>

1) Explain Bitwise Operators in Java with example.
2) Develop a Java Program to find the factorial of a number.

1) What are class methods? How they are different from instance methods?
2) How do you achieve call by reference in Java?

<div align="center">**OR**</div>

1) How to assign the values to the variables in the class at the time of creation of Object to that class? Explain with example.

1) Explain different types of inheritance in java.
2) Explain dynamic binding in java with suitable example.

<div align="center">**OR**</div>

1) Develop a Java Program to search an element using Binary Search.
2) Explain the concept of Jagged Arrays in Java.

1) Why do you think exception handling is useful in Java? Explain briefly?
OR
1) What is a package? How to create package and sub packages? Explain with suitable example.

1) Explain about Thread Synchronization in Java.
OR
1) What is a JDBC driver? Explain each with a simple architecture.

1) Give a brief note on operators in java.
2) Write the structure of java program.
OR
1) How garbage collector plays its role? Explain.
2) Develop a Java Program that inputs an number from the command line and find the sum of the digits of a number.

1) How to share the data among the functions with the help of static keyword? Give example.
OR
1) What is a Constructor? What is the main purpose of Constructors? How to invoke a constructor in JAVA?

1) What is inheritance? Explain in detail inheritance in java with examples.
OR
1) What is an Interface? Give the general form of an Interface and also discuss the Implementation details of Interfaces.

1) What are different ways to use import statement in Java?
2) Discuss Math class and its methods.
OR
1) What is the importance of Exception Handling in Java? Define and distinguish between checked and unchecked exceptions.
2) Why to use finally block in java exception handling?

1) What is JDBC? Develop a JDBC program to implement the following:
    1. Create a table
    2. Insert a record
    3. Delete a record.
OR
1) What is PreparedStatement? Write a Java Program to update a record using PreparedStatement.