**AOOP**

IMPORTANT QUESTION FROM GTU PAPER

UNIT 1:

1. List out features of JAVA and explain two of them. (W-2023)
2. Define array and explain types of arrays with syntax.(W-2023)
3. Write a program in JAVA to find maximum of three numbers using conditional operator.(W-2023)
4. Write a JAVA program to reverse 3-digit integer number. For example, number is 321 then its reverse is 123.(W-2023)
5. Explain JVM.(S-2023)
6. List out different types of operators in Java. Explain Logical and Bitwise Operators in detail.(S-2023)
7. Write a program that reads an integer between 0 and 1000 and adds all the digits in integer. For example if an integer is 931 then sum is 13.(S-2023)
8. Write a java program to implement Fibonacci series using Loop control statement.(S-2023)
9. List Java Language Features and Explain any Three of it.(W-2023)
10. List different types of operators in Java, Explain Ternary Operator in detail with example.(W-2024)
11. Write a program in Java to reverse the digits of a number using while loop.(W-2024)
12. Write a program in Java to add two 3\*3 matrices.(W-2024)

UNIT 2:

1. List access specifiers and describe their purpose in JAVA.(W-2023)
2. Define constructor overloading. Explain with suitable example.(W-2023)
3. Write a JAVA program to demonstrate use of “String” class methods : chatAt(), contains(), format(), length(), split().(W-2023)
4. Give the difference between static keyword and final keyword in JAVA.(W-2023)
5. Write a program in JAVA to demonstrate the use of any two wrapper classes.(W-2023)
6. Write a program in Java which has a class Shape having 2 overloaded methods area(float radius) and area(float length, float width). Display the area of circle and rectangle using overloaded methods.(W-2023)
7. Write any four difference between procedure oriented and object oriented programming language. (S-2023)
8. Define method overloading. Explain with suitable example(S-2023)
9. Write a java program to demonstrate use of “String” class methods : chatAt(), contains(), format(), length(), split().(S-2023)
10. What is wrapper class ? Explain use of any one wrapper class.(S-2023)
11. Write a program in Java demonstrate the use of “this” keyword.(S-2023)
12. Write Java program using copy constructor to find area of rectangle.(S-2023)
13. Differentiate POP and OOP.(W-2024)
14. Explain Method Overloading with example.(W-1024)
15. Write a JAVA program to demonstrate use of following “String” class methods: chatAt ( ) contains ( ).(W-2024)
16. Explain “this” keyword with example.(W-2024)
17. Explain Constructor Overloading with example.(W-2024)
18. Write a JAVA program to demonstrate use of following “String” class methods: format ( ) length ( ).(W-2024)
19. Explain Scanner Class with Example.(W-2024)
20. Explain “static” keyword with example.

UNIT 3:

1. Define inheritance in JAVA. Illustrate any two types of inheritance supported by Java.(W-2023)
2. Illustrate purpose of method overriding with example.(W-2023)
3. Write a program in JAVA to implement multiple inheritance using interfaces.(W-2023)
4. Define package in JAVA. Write advantages of package.(W-2023)
5. Explain equals(), toString() and finalize() methods with its usage in JAVA.(W-2023)
6. Write a program in Java which has an abstract class Shape having three subclasses: Triangle, Rectangle, and Circle. Define method area() in the abstract class Shape and override area() method to calculate the area.(W-2023)
7. Define abstract class in JAVA with example.(S-2023)
8. Explain how to implement multiple inheritances in java through interface.(S-2023)
9. Create a user-defined package and demonstrate use that package in one example.(S-2023)
10. List types of inheritance available in JAVA. Explain single inheritance with example.(S-2023)
11. Write a program in Java to demonstrate hierarchical inheritance.(S-2023)
12. Write a program in Java which has a class Car having two instance variables topSpeed and name. Override toString() method in Car class. Create 5 instances of Car class and print the instances.(S-2023)
13. Define abstract class in JAVA with example.(S-2023)
14. Explain how to implement multiple inheritances in java through interface.(S-2023)
15. Create a user-defined package and demonstrate use that package in one example.(S-2023)
16. Explain Abstract class with example.(W-2024)
17. Write a Java Program that demonstrate use of User Define Package.(W-2024)
18. Explain Single Inheritance with example.(W-2024)
19. Write a program in Java to demonstrate hierarchical inheritance.(W-2024)
20. Explain Multilevel Inheritance with example.(W-2024)
21. Write a program in Java which has a class Car having two instances variables topSpeed and name. Override toString () method in Car class and Create 5 instances of Car class and print the instances.(W-2024)
22. Explain Method Overriding with example.(W-2024)
23. Explain Abstract class with example.(W-2024)
24. Write a Java Program that demonstrate use of User Define Package.(W-2024)