



- Notes
1. All questions carry marks as indicated
 2. Solve Question 1 OR Questions No. 2
 3. Solve Question 3 OR Questions No. 4
 4. Solve Question 5 OR Questions No. 6
 5. Solve Question 7 OR Questions No. 8
 6. Solve Question 9 OR Questions No. 10
 7. Assume suitable data whenever necessary

1. a) Write the significance of Java Virtual Machine 7
- b) What is the purpose of constructor in Java programming? 7

OR

2. a) How does polymorphism promote extensibility? Explain with example 7
- b) List the primitive data types available in Java and explain 7
3. a) What is type wrapper? What is the role of auto boxing? 7
- b) What is an array? How do you declare the array in java? Explain with suitable example 7

OR

4. a) Discuss about precedence of operators and associativity 7
- b) Write a java method to find minimum value in given two values 7
5. a) State difference between
 - i) Abstract classes & interfaces
 - ii) Method Overloading & Method overriding
- b) What is Interface? Describe syntax, feature & need of an interface 7

OR

6. a) What are advantages of using Exception handling mechanism in a program? 7
- b) Define inheritance. Describe different forms of inheritance 7
7. a) What are the different ways to create multiple threaded programs in java? Discuss the differences between them 7

- b) Write a program to create four threads using Runnable interface? 7

OR

8. a) Differentiate between multiprocessing and multithreading. Write a suitable program for multithreading 7
- b) Write a program that creates two threads. First thread prints the numbers from 1 to 100 and the other thread prints the numbers from 100 to 1 7
9. a) What is collection in Java? Differentiate between Vector and Array List 7
- b) Contrast between List and Set? 7

OR

10. a) What is difference between Array List and Linked List in collection framework? Explain 7
- b) Explain Map interface & its classes with suitable example 7
