



- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw well labelled diagram wherever necessary.
 3. Avoid vague answers.

Either

1. a) Explain any four primitive data types used in Java. Give example. 8
- b) Write a program to generate Fibonacci series. 8

OR

- c) Explain various features of Java. 8
- d) Explain control structures with suitable example. 8

Either

2. a) Explain Interface. Write a program to demonstrate single Inheritance. 8
- b) Explain following. 8
 - i) Static method.
 - ii) Packages.

OR

- c) Explain class and object with suitable example. 8
- d) Write a program to demonstrate Abstract class. 8

Either

3. a) What do you mean by Multithreading? Explain thread life cycle in detail. 8
- b) What is Exception Handling? Explain with suitable example. 8

OR

- c) Discuss various types of Exception in detail. 8
- d) Explain Thread Priorities in detail. 8

Either

4. a) Explain following. 8
 - i) Grid Layout.
 - ii) Card Layout.

- b) Explain Graphics and Font class with suitable example. 8

OR

- c) Write a program to read a content from file and print them. 8

- d) Explain the serialization and de-serialization. 8

5. Solve all the Questions.

- a) Write a short note on Java virtual machine. 4

- b) Explain the concept of Java. Explain how it can be created. 4

- c) What do you mean by Named thread? Explain. 4

- d) Explain flow layout with suitable example. 4
