



- Notes :
1. All questions are compulsory.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) What are the operators used in java? Explain with an example. **8**
b) Discuss the features of java and also state the benefits of object-oriented programming. **8**

OR

2. a) Why java is said to be robust, secure, portable & architecture neutral? Explain it. **8**
b) Explain the following terms with example. **8**
i) Passing object as parameter ii) Returning object as parameter.

3. a) When to use super keyword & why? Explain with example. **8**
b) State the difference between method overloading and overriding with program. **8**

OR

4. a) Explain Final classes with example. **8**
b) Explain the life cycle of thread along with its all methods. **8**

5. a) Discuss various common java exceptions. Write a java program to catch an exception finally block? **8**
b) How multithreading is achieved using Runnable interface? Explain with program code. **8**

OR

6. a) What do you mean by applet? With the help of neat diagram illustrate the life cycle of an applet? **8**
b) State & explain different exception handling methods with an example. **8**

7. a) Explain files & also explain different types of files with syntax. **8**
b) Explain reading and writing bytes with example. **8**

OR

8. a) Write a program to copy characters from one file to another using character stream class. **8**
b) Describe random access files in detail. **8**

9. a) Write a program for implementing client – server interaction by sending a character from client to server using socket programming. **8**
b) Write a program to load a document from a URL into a browser. **8**

OR

10. a) What is servlet? Explain the task performed by servlet. **8**
b) Explain the following terms with example. **8**
i) JAVA DOC. ii) CORBA
