Java Question Sheet

- *One Marker*

1. What is the purpose of Javadoc tool?
2. What happens when we are trying to access index of an array that is greater than size of an array?
3. List any two methods of object class.
4. Inheriting two classes into one class is allowed in Java. State true or false. Justify.
5. What is the use of throws statement?
6. Give the name of predefined final class.
7. Write a statement to check if file exist or not.
8. List any two methods from keylistener interface.
9. Write name of the package which contains applet class.
10. List any two names of wrapper classes.
11. Define final variable with an example.
12. List any four layout managers.
13. What is 'this'? Give example.
14. Name any four tags of Javadoc.
15. Write any two advantages of inner class.
16. What is Applet Viewer?
17. What is the basic difference between 'throw and 'throws' keywords?
18. "Super keyword is used by subclass to refer its immediate superclass." State true or false. Justify.
19. Define AWT and swing.
20. Give two ways to create string object with an example.

21. What is Javadoc?
22. List primitive data types in Java with their width in bits.
23. What is the use of this keyword in Java?
24. What is AutoBoxing and unboxing?
25. What is assertion?
26. What is the use of final keyword?
27. What is an adapter class?
28. One interface can implement another interface. True/False—Justify.
29. List any four methods of JButton class.
30. Differentiate '= =' and equals( ).
31. What are packages?
32. Name the method and interface to create an identical copy of an object.
33. Give difference between throw and throws.
34. Justify True/False: Java is not fully object oriented.
35. What will be the output of the following statement?
    Justify:
    system.out.println(35+40+975+"Are Integers").
36. Write two types of nested classes.
37. What is the use of Adapter class?
38. Define an Applet.
39. Which stream is used to read primitive data from file?
40. Give two types of Dialogs.
41. What is the use of javap tool?
42. What is blank final variable?
43. "Java is platform dependant language." True/False? Justify.
44. Write down syntax for equals( ) method.
45. What is deep copy in cloning?

46. State the use of toString( ) method.
47. What is the use of finally block?
48. Which method is used to set the current position of the file pointer within the file?
49. State any four methods of WindowListener.
50. Which method is used for first time initialization in applet?
51. What do you mean by jdb?
52. List any two methods of object class.
53. When we declare a method or class final?
54. How print( ) is differ from print( ) method ?
55. Define unchecked exception.
56. What is meant by Garbage collection?
57. Explain the use of repaint ( ).
58. Write a syntax of JFileChooser class.
59. Which method is used to compare values of 2 string objects?
60. Why swing objects are called as light weight components?
61. What is JAR file?
62. What is meant by Garbage collection?
63. What is use of final keyword?
64. "Import statement is not essential in Java". True/False? Justify.
65. What are Javadoc comments?
66. Define Unchecked exception.
67. List any two methods of file class.
68. Which method is used for first time initialization in Applet?
69. What are Anonymous classes?
70. What is difference between repaint and update method.

- *Five Marker (first)*

1. Write a program to store phone book information (name, phone no) in file “phone book .dat”. Accept ‘n’ details of phone book and store them in file.
2. Create a package “college” which contains teacher class (name, degree). Teacher has two methods accept( ) and display( ). Write a test class outside of package to access teacher class.
3. What is checked and unchecked exceptions? Explain the use of try, catch and finally block.
4. Explain features of Java in detail.
5. Write a note on Garbage collection.
6. Write a Java program to set background colour of dialog box using Jcolor chooser.
7. Why is Java called purely object-oriented programming language? Explain features of Java.
8. Create an abstract class order having members id and description. Create two subclasses PurchaseOrder and SalesOrder with member customer name and vendor name respectively. Define methods accept and display in all classes. Create 5 objects each of PurchaseOrder and SalesOrder. Accept and display details.
9. Write a Java program to accept a file name from command prompt. If the file exists, then display number of words and lines in that file using FileReader class.
10. Explain the process of compilation of a Java program.
11. Create two packages, pack; contains two classes as student & course. Both classes have method to read corresponding Information. $Pack_2$ contains class college

with method accept( ). Write a java program to display all information.

12. Explain in brief the event handling mechanism in java with the help of suitable example.
13. Write a java program to implement operations of queue which is of the fixed size. It uses an interface queue, containing two methods addq() and delqQ, which are implemented by queue class.
14. Write a java program to create a package named student. Define class studentInfo with method to display information about student such as rollno, name, class and percentage. Create another class studentPer with method to find percentage of the student. Accept student details like rollno, name, class and marks of three subject from user.
15. What is stream? Explain the types of streams supported by java.
16. Differentiate between Java & C++.
17. How do we design, create and access a package in java? Discuss with suitable example.
18. Write a program in java to create a screen which contains three checkboxes (.net, php, java) and displays the selected items in a textbox.
19. Explain Inner and Nested class with example.
20. Write a Java program to illustrate multilevel inheritance such that state is inherited from country. City is inherited from state. Display city, state and country.
21. Write a Java program to find second smallest element in an array.

- *Five Marker (second)*

1. What is listener? Explain any two listeners.
2. What is the difference between method overloading and method overriding?
3. Design a swing program to display three labels, two text boxes and two buttons as “Addition” and “Subtraction” respectively. In first label display text as “First Number” and in second label display text as “Second Number”. Accept two numbers from two text box perform addition and subtraction operations, display the result in third label.
4. Write a Java program to illustrate multilevel inheritance such that state is inherited from country. City is inherited from state. Display the areas, city, state and country.
5. Write a Java program to count number of whitespace character in character stream.
6. Explain various ways to read input string from console or keyboard.
7. What is wrapper class? Explain with example.
8. List and describe any five methods of InputStream class along with their syntax.
9. Explain JComboBox class with their constructor and methods.
10. Create an abstract class Employee. Derive two classes manager and worker from it. Use proper method to accept and display the details for the same. The fields of manager are mid, mname and phno. Similarly, fields for worker are name and working hours.

11. Write a java program to delete all the files from the current directory having extension as .doc also display the count number of .doc files deleted separately.
12. Explain the Applet Life Cycle.
13. Write a java program to accept the details of product as productcode, productname and weight. If weight > 100 then throw an exception as InvalidProduct Exception and give the proper message. Otherwise display the product details. Define required exception class.
14. How is menu created in java? Explain with suitable example.
15. Explain inner class with an example.
16. What is runtime polymorphism? How is it. implemented in java? Give suitable example.
17. Write a java program which display the contents of file in reverse order.
18. Write a java program to find second smallest element in an array.
19. Write a Java program to appends the content of one file to another.
20. What is user defined exceptions? Illustrate them with an example.
21. What is package? How to create a package. Explain with example.

- *Ten Marker*

1. Questions
    a. Write an applet program to handle keyboard events. [4]
    b. Explain final variable, final method and final class with example. [4]
    c. What is the output of the following program? Justify your answer. [2]
    If input is: java-enable assertions test —5

```
Public class test
{
        Public static void main (string [ ] arg)
        {
            int a = Integer.parse Int (arg to);
            assert (a > 0) : “a is negative or zero’;
            svstem.out.printm (“Result -” + (a * a));
        }
}
```

2. Questions
    a. Explain any two swing components. [4]
    b. Discuss any four java features. [4]
    c. What is wrong in the following piece of code? [2]
    Justify your answer.

```
interface A { }
interface B implements A { }
```

3. Questions
    a. Write a Java program to copy a file to another file. Use proper error handler to handle runtime

exception. File names are accepted as argument from command prompt. [5]

b. Explain different types of streams. [3]
c. Define anonymous class. [2]

4. Questions
    a. Write a note on applet life cycle. [5]
    b. Explain object cloning with one example. [3]
    c. What is an event? What is an event handling? [2]
5. Questions
    a. Write a Java program to accept email address of a user and throw a user defined exception InvalidEmailException if it starts with digit or does not contain @ symbol. [5]
    b. Explain in detail the Applet life cycle with diagram. [3]
    c. Differentiate String and StringBuffer classes. [2]
6. Questions
    a. Write a Java program using AWT to print “Welcome to T.Y. B.Sc. Computer Science” with Times New Roman font face and size is 16 in Red Colour. When we click on a button text colour should change to Blue. [5]
    b. Explain method overriding with example. [3]
    c. What is Package? How to create a package? Give
    d. example. [2]
7. Questions
    a. Write a java program which stores the username and password in two variables. If username and password are not same, then raise “Invalid password” with appropriate message. [5]

b. Explain any 3 methods of the Input Stream Class. [3]
c. List any two names of Wrapper Class. [2]

8. Questions
    a. Explain how the input is accepted from command line with the help of program. [5]
    b. Explain the use of keywords super and final with reference to inheritance. [3]
    c. What are the features of swing? [2]

9. Questions
    a. What is the use of Checkboxes and RadioButtons? Explain with suitable example. [4]
    b. Explain the Applet Life Cycle. [4]
    c. What is checked and unchecked exceptions? [2]

10. Questions
    a. Explain Layout Managers used in AWT. [4]
    b. Write a java program to display the contents of the file in reverse order. [4]
    c. Write down any two differences between the abstract class and interface. [2]

11. Questions
    a. What is user-defined exceptions? Illustrate them with an example. [5]
    b. What is difference between string and string buffer class. [3]
    c. Explain the use of this keyword in java. [2]

12. Questions
    a. Create an applet which contains three radio buttons red, green and blue and change the background colour to the selected colour. [5]

b. Explain 2 types of Inheritance with suitable example. [3]
c. What is use of layout manager? Explain any one layout manager? [2]

13. Questions
    a. Write a program to read string from user, reverse it and display the reverse string on textbox using Applets. [5]
    b. Write difference between Abstract class and Interface. [3]
    c. Enlist any two methods of string with syntax. [2]
14. Questions
    a. Write a Java program which will create a frame if we try to close it. It should change its colour Red and it display closing message on the screen. (Use swing) [5]
    b. What are the different types of dialogs in Java? Write any one in detail. [3]
    c. Which swing classes are used to create menu? [2]