2013

Time: 3 hours

Full Marks: 80

Candidates are required to give their answers in their own words as far as practicable

The questions are equal value.
*Answer any **five** questions in which*
Q.No. 1 is compulsory.

1. Indicate the correct answer of the following:

   (a) Which among the following Java tool is used to compile a Java Program?

   (i) Javap

   (ii) Java

   (iii) Javah

   (iv) Javac

   (b) Which process automatically removes objects that are not being referenced?

   (i) Multithreading

   (ii) Object Reclamation

   (iii) Garbage Collection

   (iv) Object Collection

   (c) Which keyword is used for class derivation in Java?

   (i) Implements

   (ii) Extends

   (iii) Throws

   (iv) Inherits

   (d) Which keyword is used to prevent inheritance?

   (i) Final

   (ii) Super

   (iii) This

   (iv) None of these

(e) The keyword used for accessing features of a package is:
    (i) Export
    (ii) Import
    (iii) Package
    (iv) None of above

(f) The parent class of all the exceptions in Java is:
    (i) Throwable
    (ii) Throw
    (iii) Exception
    (iv) None of the above

(g) Which interface is used to create a thread?
    (i) Thread
    (ii) Runnable
    (iii) Cloneable
    (iv) None of the above

(h) Which of the following is not a method of an applet's life cycle?
    (i) Init ( )
    (ii) Start ( )
    (iii) Sleep ( )
    (iv) Stop ( )

2. Explain the structure of a Java application. What are the steps for executing a Java Program?

3. Discuss the total available in JDK. How do they help in application development?

4. What are classes and objects? How can you define and instantiate a class? Explain with example.

5. Can constructor be overloaded? Justify your answer with suitable example.

6. What is inheritance? How can you derive a class in Java? Discuss the use of 'super' and 'this' keyword.

7. What are Packages? How are they created and used?

8. What is a Thread? Discuss thread life cycle in java.

9. Create a complex number class. The class should have a constructor and methods to add, subtract and multiple two complex numbers.

10. Write an applet that draws a circle, a line and an arc inside the applet's visible area.