(1) Draw the figure and give example wherever necessary.

1 Answer the following: (Attempt any nine) 18
   (1) Why is main method declared as public and static?
   (2) Inheritance must be performed, if two class or entities have _________ relation.
   (3) What should be installed in a java program developer's machine?
   (4) Can you override all the functions of Object class? Justify.
   (5) Can you import a package twice in Java program? Justify your answer.
   (6) You have a class named as Car. What happens, when we execute the following?
       Object o = new Car(); o.move();
   (7) What happens, if a variable is declared as transient?
   (8) What does notify( ), notifyALL( ), wait( ), interrupt( ) functions do?
   (9) What happens when a class is declared as non-public?
   (10) How can you call another constructor from a constructor in the same class?
2 Answer the following: (Attempt any three)

(1) What are abstract classes? Why do we need them? Explain with example.

(2) When do we implement serializable interface? Explain with example.

(3) What is deadly death of diamond? How can one resolve it?

(4) Explain what happens when you declare a class, function, variable and constructor as final? Give examples.

3 Do as follows: (Attempt any three)

(1) How multiple inheritance is implemented in Java? Explain it by giving suitable example.

(2) Explain Set interface in detail with a suitable example of its implementation.

(3) What is the use of Runnable interface? Explain with example.

(4) Explain checked and unchecked exception with an example.

4 Answer the following:

(1) What is an adapter class? Explain with an example.

(2) Write the steps of event handling. Write a program to handle MouseEvent.

OR

(2) State the hierarchy and life cycle of Applet. Give suitable example.

(3) Write a program to accept user details from user and insert it table using JDBC Java API.