Instructions:

(1) Fill up strictly the details of ▶️ signs on your answer book.

Name of the Examination:

B. Sc. (I.T.) (SEM. 6)

Name of the Subject:

JAVA

Subject Code No. : 1 7 4 0 ▶️ Section No. (1, 2,....)  NIL

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

1 Answer the following : (attempt any nine) 18

(i) Why is main method declared as public and static ?

(ii) Inheritance must be performed, if two class or entities have ______ relation.

(iii) State whether the following statement is true or false with justification.

“One can override all the functions of Object class”.

(iv) What happens, if a variable is declared as transient ?

(v) What does notify(), notifyAll(), wait(), interrupt() functions do ?

(vi) What happens when a class is declared as non-public ?

(vii) What are the java beans ? What is introspection ?

(viii) Compare the use of “instance of” and getClass() method.

(ix) Explain garbage collection in java.

(x) Explain Implicit and explicit type casting.
Answer the following: (attempt any three)

(i) What is the difference between abstract class and interface? Explain with example.

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

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

(iv) Write a program to create deadlock.

Do as follows: (attempt any three)

(i) How can you perform multiple inheritance in Java? Explain it by giving suitable example.

(ii) Write a note on package. Discuss various access protections with it.

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

(iv) Difference Vector and array with example.

Answer the following:

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

(ii) Write a program to accept course name in combo box and display number of semester on the selection.

OR

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

(iii) Write a program to create user defined checked exception.