Que:1 [A] Attempt the following questions.

1. Define polymorphism.
2. Which are different types of java program?
3. What is narrowing?
4. Explain finalize ( ) method in java.
5. _____and _____ modifiers are mutually exclusive.
6. Explain random( ) method with prototype.
7. What is use of 'super' keyword?
8. Write default value of boolean data type.

[B] Write Differences. (Any Two)

1. Abstract class and Interface.
2. Instance variable and Class variable.
3. C++ and Java

Que:2[A] Write programs.

1. Write an interface called numbers, with a method int process(int x, int y). Write a class called Sum, in which the method process finds the sum of two numbers and returns an int value. Write another class called Average, in which the process method finds the average of the two numbers and returns an int. create a class with main method and instantiate both classes.
2. The abstract Fruit class has four subclasses named Apple, Banana, Orange and Strawberry. Write an application that demonstrates how to establish this class hierarchy. Declare one instance variable of type string that indicates the color of a fruit. Create and display instances of these object. Override the toString() method of object to return a string with the name of the fruit and its color.
3. Write an application that demonstrates a class inheritance hierarchy. Class M extends object and has two instance variables of type float and String. Class N extends M and has one instance variable of type Double. Instantiate class N initialize and display its variables.

[B] Attempt following questions

1. Explain the statement: 'public static void main(String args[])'.
2. If a=70 and b=35 then what will be the output of(a XOR b) aˆb.
3. Explain instance variable hiding with example.
4. Explain 'new' keyword in java.
5. Explain operator: '>>>' with example.
6. Which data types can be use with switch expression?

Que:3 Attempt following questions

1. Explain java architecture in detail.
2. Explain final keyword in java.
3. Explain use of try, catch and finally block for exception handling.
4. What is package? List out importance of package. Describe how you can put a class in package and how you can access the class from the package.
5. What is wrapper class? Explain any four methods of Character class.