1 Q) Write the differences between Nested classes and inner classes with minimum 5 differences?

2) + List the advantages of packages? and

3) List any 10 classes or interfaces of java.io package.

3A:- 10 classes or interfaces of java.io package are given below:

1. Buffered Input stream.
2. Buffered Reader
3. Console
4. Random Access file
5. StreamTokenizer.
6. Data Input and DataOutput.
7. Flushable
8. ObjectInputFilter
9. Object Input Validation
10. Object Stream Constants.

[Reference :-
   ORACLE - Java
              The Complete Reference
                         pg no: 680]

2) Advantages of packages

1. Packages are a good compartmentalizing diverse classes from each other.

2. It is easy to see why all the built-in java classes are stored in packages.

3. Packages are both means of encapsulating and containing the name space and scope of variables and methods.

4. Packages acts as a containers for classes and other subordinate packages.

5. All real programs that you write in java will be contained within packages.

6. Packages are an important part of the Java programming environment.

7. Package is a mechanism for partitioning the class name space into more manageable chunks.

3)

Nested class	Inner class
1. To define a class within another class we use nested class	1. An inner class is a non static nested class.
2. Two types of nested class i) static ii) Non static	2. No static keyword is used.

Sample program

public static vo

public class OuterDemo
{ static int x = 10;

p. s. class staticNested

} public void display ()

} s.o.pln ("value of x"
                        + x);
    }
}
}

Sample program

public classOuter
{ private int x = 10;

class Inner
{
void display ()
} s.o. pln ("value
                    of x" + x); }

}
}

4. It cannot refer to members of its enclosing class directly.

5. static keyword is used

4. An Inner class is fully within the scope of its enclosing class.

5. It has access to all of variables & methods of outer class

Inner   Nested