

## Java Open Book Test.

Write the difference between nested classes & inner classes with minimum 5 difference.

- List the advantages of packages.
- List any 10 classes (or) Interfaces of java.io package.

### Nested classes

→ A nested class is any class defined within another class.

→ It can be static or non-static.

→ used for organising code logically

→ can be created without creating an object of the outer class.

→ Static nested classes are mainly used for grouping utility

→ Static nested classes are accessed using the outer class name.

### Inner classes

→ An inner class is nested class that is non-static.

→ It is always non-static.

→ Used for tight interface with outer class members.

→ Requires an object of the outer class to be created.

→ Inner classes are used when an object of inner class depends on an object of outer class.

→ Inner classes are accessed through an instance of the outer class.



## 2.) Advantages of packages :-

- Avoids confusion - some class names can be used in different packages without conflict.
- Easy to manage - makes big projects simple to handle and update.
- Easy to use again - you can use classes from a package in other programs.
- Control access - you can decide which parts of the code can be used by others.
- Supports modular work - Divides a large program into small easy parts.
- Easier maintenance.

## 3.) (i) Buffered input stream.

(ii) file writer.

(iii) file Reader.

(iv) Buffered Reader.

(v) Buffered writer.

(vi) Buffered Output stream.

(vii) Filter reader.

(viii) filter writer.

(ix) file Descriptor.

(x) file input-stream.