Assignment 17

Ans1. Constructor in java is used to create the instance of the class. Constructors are almost similar to methods except for two things its name is the same as the class name and it has no return type. Sometimes constructors are also referred to as special methods to initialize an object.

Ans 2. Constructor chaining is the process of calling one constructor from another constructor with respect to current object.

One of the main use of constructors chaining is to avoid duplicate codes while having multiple constructor and make code more readable.

Constructor chaining can be done in two ways:

- **Within same class**: It can be done using **this()** keyword for constructors in the same class.
- **From base class:** by using **super()** keyword to call the constructor from the base class.

Ans 3. No, we cannot call subclass constructor from superclass constructor.

Ans 4. If we add a return type to a constructor, then it will become a method of the class. This is the way java

runtime distinguish between a normal method and a constructor.

Ans 5. If a constructor does not accept any parameters, it is known as a no-argument constructor. For example, private Constructor()

{ // body of the constructor }

a no-argument constructor is the default constructor and if you don't define it explicitly in your program. Then Java Compiler will create a default constructor with no arguments. The purpose is to call the superclass constructor.

Ans 6. Default Constructor is created to assign the default values to the instance variables of the class when an object is created. These are sometimes called no-arg constructors since they both work the same. But no-arg constructor is created by the user while default constructor can only be created by the compiler.

Ans 7.Need of constructor overloading:

Java supports Constructor Overloading in addition to overloading methods. In Java, overloaded constructor is called , based on the parameters specified when a new constructor is executed.

As constructors overloading enables the creation of the object of a specific class in several ways, it is most

commonly used in Java programs based on the requirement of the programmer. With the use of constructor overloading, objects can be initialized with different data types.

Ans 8.Default constructor:

A default constructor is created only when we don't declare any constructor in our code. Then, by default, the compiler automatically creates a default constructor.

The default constructor is used to provide the default values to the object like 0, null, etc., depending on the type.

Syntax of default constructor:

<class_name>(){}

For example:

```
class cons  {
   cons (){
   System.out.println("Constructor is called");}

   public static void main(String args[]){

   cons c=new cons();
   }

   }
```