1. **What is Encapsulation in java? Why is it called Data hiding?**

   Ans: A class's variable is hidden from other classes and only accessed by the method of the class is called encapsulation . or in java class data hiding and abstraction are called.

2. **What are the important features of Encapsulation?**

   Ans: combine the data of our application and its manipulation in one place.
   Encapsulation allows the state of an object to be accessed and modified through
   Behaviors, Reduce the coupling of modules and increase the cohesion inside them

3. **What are getter and setter methods in java Explain with an example**

   Ans: Getter returns the value, it returns the value of data types int, string, double,
   Float, byte, etc., and setter sets the value, it sets the value for any variable used in a class program.

```
 class Student{
    private int age;
    public void setAge(int age){
       this.age= age;
    }
    public int getAge(){
       return age;
    }
}
public class lecture_19 {
    public static void main(String[] args) {
       Student obj= new Student();
       obj.setAge(23);
   }
}
```

4. What is the use of this keyword explain with an example

Ans: This keyword refers to the current object in a method or constructor.

```
class Student{
    private int age;

    public void setAge(int age){
        this.age= age;
    }
    public int getAge(){
        return age;
    }
}
public class lecture_19 {
    public static void main(String[] args) {
        Student obj= new Student();
        obj.setAge(23);

    }
}
```

5. What is the advantage of Encapsulation?

Ans: We can achieve security.
Enhancement becomes easy.
Maintainability and modularisation become easy etc.

6. How to achieve encapsulation in java? Give an example.

Ans: Example: To calculate an area, we need two variables: length and breadth,

and a method: getArea()