"Few Questions"

(1) what is encapsulation in java? why is it called data hiding?

Binding of data and corresponding methods into a single unit is called encapsulation. If any java class follows data hiding and abstraction then such class refered as encapsulated class. Encapsulat is the combination of data hiding and data abstraction

To the outside world, the data should not be exposed directly it is called data hiding. By using private modifiers we can implement data hiding. and what operations does on the data is hide to the outside world it is called data abstraction

(2) what are the important features of encapsulation?
Encapsulation is a way to restrict direct access to some components of an object so users cannot access the state values for all of the variables of a particular object.

(3) what are getter and setter method in java?

⇒ setters ⇒

setter methods are used to set the value to instance variable of class. The rules for writting the setter method are :-

(a) It should be public and return type should be void

(b) The method name should start with set and it should have some arguments.

getters ⇒

getter methods are used to get the value from instance variable of class. The rules for writting the getter method are :-

(a) It should be public and return type should not be void.

(b) The method name should start with get and it should not have arguments.

(4) what is the use of this keyword explain with example.

If both local variable and instance variable have same name inside the method then it would result in name clash and jvm will always give preference for local variable. This problem is called shadowing problem. To solve this problem we use this keyword this keyword would always point to current object.

(5) what is the advantage of encapsulation?
→(1) we can achieve security.
(2) It provides flexibility to the user to use the system very easily.

(6) How to achieve encapsulation in java?
→ To achieve encapsulation we declare all data members should be private. private modifiers accessible inside the class. To access outside the class we use getters and setters.