**1.Given an entity named Television, identify its attributes and explain how will you do Abstraction?**

**Abstraction**: process of taking away or removing characteristics from something in order to reduce it to a set of essential characteristics.

We use a remote control for tv is an abstraction. we can change channels ,increase sound ,can display picture  but things happens with help of buttons the functions .

**2. Given an entity named Hospital, explain Encapsulation with respect to it?**

Encapsulation : Information hiding is the process of hiding the details of an object or function.   
In the hospitals as we seen that many of the capsules are made of chemicals ,powder or with some drugs.

This process of filling empty capsules with substances is termed encapsulation.

**3. Given an entity named Traffic Signal, explain Polymorphism with respect to it?**

**Polymorphism:** A real-life example of polymorphism is a person who at the same time can have different characteristics. Like a man at the same time is a father, a husband and an employee. So the same person exhibits different behavior in different situations. This is called polymorphism.

Coming to traffic signal it has three colors (red,yellow,green) and these colors having there own specialization.

* red indicates the vehicles to stop
* yellow indicates the vehicles to slow down
* green light indicates the vehicles to go ahead

The intersection of the two road is controlled by a traffic signal with a cycle time of 60 seconds.so simply we can say that at the same time it acts into different forms.

**4. Given an entity named Broad Band Connection, explain inheritance with respect to it?**

**Inheritance:** Inheritance in Java is a mechanism in which one object acquires all the properties and behaviors of a parent object.

The term broadband commonly refers to high-speed Internet access that is always on and faster than the traditional dial-up access. Broadband includes several high-speed transmission technologies such as: Digital Subscriber Line (DSL) Cable Modem.

Cable TV, for example, plays an important role in delivering broadband services, which in turn redefining the popular perception of home entertainment. Broadband is simply a bandwidth-rich connection to the public Internet.

**5. Given an entity named Mobile Phone, identify its static & dynamic attributes?**

**Dynamic:** In general, dynamic means energetic, capable of action and/or change, or forceful, . In computer terminology, dynamic usually means capable of action or change.

**Static:** A static website is one with stable content, where every user sees the exact same thing on each individual page

For example Mobile phone ,Static applications are not reliant on connection to an online server or database. Apps built in this way are downloaded once, usually periodically updated, and are able to function offline only with the device on which they are installed. Dynamic applications are in some way reliant on an online server or database.