**ASSIGNMENT-2**

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

Ans: pick the properties you need from the object

Example: TV – Sound, Visuals, Power Input, Channels Input.

If you have seen important TV machine, TV connections and TV color tube is

hidden inside the TV case which is not been exposed for viewers like us and

exposed only necessary things of a TV like TV Channel keys, TV volume keys,

ON/OFF switch, Cable Switch and TV remote control for viewers to use it. This

means TV machine, TV connections and TV color tube is an unwanted data and

not needed for viewers to see is been hidden from outside the world.

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

Ans: Encapsulation means bundling data and methods that work on that data within one unit

Attributes in Hospital are:

1)Patients

2)Doctors

3)Nurses

4)Ambulance service

5)Workers

6)Receptionist

Initially receptionists took the details of patients but the details are not shown to outside.

then doctor took the details from the patients, examine them and give them suitable

medicines and advice some precautions to them.

1. Given an entity named **TrafficSignal,** explain Polymorphism with respect to it

Ans: Polymorphism means one task can be performed in different ways, It allows us to perform a

single action in different ways.

The traffic Signal has one object but it contains forms like polymorphism.

In traffic signal there will be three indicator those three acts three different things

They are: “Red, Green, Yellow”

Red indicates the vehicle to stop, Green light indicates the vehicle to go ahead, Yellow indicates

the vehicle to slow down and get ready to move.

Based on the working mechanism, traffic control signals are of three types. Like that

Polymorphism means one object or variable or model behaves different forms.

1. Given an entity named **BroadBandConnection,** explain inheritance with respect to it.

Ans: BroadBandConnection means high-speed Internet access that is always on and faster than

the traditional dial-up access.

Broadband includes several high-speed transmission technologies like airtel,jio,fiber etc

All broadband objects have the same properties and behaviours. For example the

Broadbands can provide the good internet,modem,router etc. Instead of creating these

classes individually, a general broadband class(superclass) with all the attributes and

behaviours of a broadband can be used to model all broadband objects. The other classes

then inherit or are created based on the superclass attributes and methods.

1. Given an entity named **MobilePhone,** identify its static & dynamic attributes.

Ans: In general, dynamic means energetic, capable of action and/or change, or forceful,

While static means stationary or fixed.

Static Attributes: In mobile phone the static attributes are Mobile IP Address, mobile

body case,Mobile,mother board etc.

Dynamic Attributes: In mobile phone the main dynamic attribute is User Interface like

Apps, wallpapers, etc. Settings, Charging of battery etc.