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

Ans:-

Attributes of Television

Screen

Remote

Body

Buttons

Cable

Plugin wires

Set top box

We can achieve abstraction by hiding circuit designs and internals of remote and set top box.

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

Ans:-

Branches of hospital

Patient

Security

Reception

Meeting with doctor

Health technicians

Treatment solutions

Pharmacy

Billing

Discharge

These all are different units but they are encapsulated into a single unit called Hospital.

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

The different forms of traffic signal can be as follows

One traffic light can emit three different colours which are red, yellow and green which helps controlling traffic like red is used stop the vehicles ,yellow is used to get ready to move

green is used to move. In this way the traffic lights works as a single entity with different forms

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

In broad band connection we can take an example of FM radio, here the main station works as parent, and its child are service provider next child is branch operators and the last is the user.in this way we can explain inheritance with respect to Broad Band connection.

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

Static attributes

Mobile Screen

Mobile body dimension

Circuit

Battery

Memory card

RAM

Dynamic attributes

Battery percentage

Network

Storage status

Performance

Operating systems

Applications