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

Television has different types of attributes like screen size, colour, sound, aspect ratio, modes etc. By taking the example of television we can explain the concept of abstraction. The user is able to see the essential attributes like pictures, watch videos, listen to the audios, and even can browse different contents in smart tv. but the user can’t see the non-essential attributes like the internal working of the different devices like speakers, display, circuit boards etc inside the television.

So the main purpose of abstraction is displaying the essential details or information to the users and hiding the unnecessary details or information from the users.

**2 ) Questions : Given an entity named Hospital ,explain Encapsulation with respect to it ?**

By taking the example of hospital we can explain the concept of encapsulation. There are different departments like dental department, ICU, gynaecology, obstetrics, X-rays, paediatrics, infectious diseases etc. Each departments will performs a specific functions.so patients have to consult specific consult departments according to there needs .Examples ,if a person want x-ray he has to consult x-ray unit. These departments performs different tasks but are encapsulated inside the single unit called hospital which solves the peoples health issues.

**3 Question : Given an entity named Traffic Signal explain Polymorphism with respect to it?**

Polymorphism means “many forms” and it occurs when we have many classes that are related to each other by inheritance. In traffic signal there will be button such that it contains three radio buttons Red ,Yellow , Green. When red is clicked you want to display “Stop”, when orange is clicked you want to display “ready”, when the green button is clicked Display ”Go” .In a single traffic signal performing 3 different form this is the best example for polymorphism.

**4 Question : Given an entity named Broad band connection explain inheritance with respect to it ?**

Inheritance is a mechanism in which one object acquires all the properties and behaviours of a parent object .the broad band connection commonly refers it is the high speed Internet access that is always on and faster than the traditional dial-up access .it is a connection uses area cell towers to connect to the internet .child classes are (Digital Subscriber Line(DSL) Modem, fiber, wireless,Satellite,Broadband over Powerlines(BPL). for example voip (voice internet over protocol) technology that allows you to make voice calls using broadband connection instead of a regular(analog) phone line.

**5.Question : Given a named entity Mobile phone identify its static or dynamic attributes?**

Dynamic attributes is a represent changing characteristics of the mobile phones such as unlock failures, application usage, SIM Card ,physical location ,Screen ,password .static attributes are fixed characteristics which cannot be changed its (fixed) such as battery ,storage ,phone weight ,phone dimensions.