1. **What do you understand by ' Reasoning' in AI ? Why is it relevant?**

* It is the process by which the AI mimics human intelligence with the help of a knowledge base.

1. **After going through the reasoning approaches like deduction, induction & abduction , Give minimum of 3 examples each for each of these reasoning approaches.**

***Deduction***

* All cars have four wheels, and all cars cannot fly, therefore an Airbus A380 is not a car.
* All mangoes are fruits and is yellow in color and all fruits have seeds therefore, mangoes have seeds.
* I was born on 22nd December. Today is not 22nd December, therefore today is not my birthday.

***Induction***

* Even though an Airbus A380 has 4 wheels it is not a car as it can fly.
* All fruits which have seeds are not mangoes.
* Today is not my birthday as I was born on December 22nd.

***Abduction***

* An A380 has 4 wheels but it can also fly, so it must not be a car.
* If an object contains a seed and is yellow in color, then it must be a mango.
* Today is not my birthday because today is not 22nd December.