**Qus 1: How are you going to figure out the average heights of all the trees in Karnataka?**

We can do this by Hypothesis testing.

Take a sample of trees then apply some experiments (z-test/t-test) after getting the P-Value we can compare this with other sample data of Karnataka and accept the null/alternate hypothesis accordingly.

**Qus 2: What is hypothesis testing and how does it work?**

Steps

i) Define Null Hypotehsis (H0)

ii) Alternate Hypothesis (H1)

iii) Statistical Experiment and get the p value(z-test, t-test, f-test, chi-square-test, anova test........)

iv) Conclusion (Accept/ Reject the Null hypothesis)

**Qus 3: Explain the differences between Alpha and Beta errors. Which inaccuracy is the most hazardous?**

Alpha Error: The statistical error made in testing a hypothesis when it is concluded that a result is positive, but it really is not. Also known as false positive

Beta Error: The statistical error that is made in testing when it is concluded that something is negative when it really is positive. Also known as false negative

**Qus 4 : What is the significance of the p-value?**

In Step3 of Hypothesis testing we perform various type of testing, via these testing we get some value that is known as P value. Accordingly we will accept/reject the null/alternate hypothesis.

**Qus 5: What is the Probability Distribution Function and how does it work?**

PDF is just a smoother version of histogram. It contains multiple kernels to create smoother version.

We use PDF only when the values are continuous (means integer values)