AQ_11April2020

Total points 6/10

The respondent's email address (**jaiswal.5@iitj.ac.in**) was recorded on submission of this form.

✓ A Type I error is when: * 2/2

- ○ We obtain the wrong test statistic
- ◉ We reject the null hypothesis when it is actually true ✓
- ○ We fail to reject the null hypothesis when it's actually false
- ○ We reject the alternate hypothesis when it's actually true

✓ Selecting a confidence level of 95% indicates what? * 2/2

- ○ The researcher is willing to accept a 95% chance of making a type I error
- ○ The researcher is willing to accept a 5% chance of making a type II error
- ○ The researcher is willing to accept a 95% chance of making a type II error
- ◉ The researcher is willing to accept a 5% chance of making a type I error ✓

✓ IIT Jodhpur uses thousands of Philips light bulbs each year. A new manufacturer, Wipro, claims that its new brand of bulbs, which cost the same as the Philips light bulbs, has a mean life of 6000 hours. IITJ has never studied how long Philips bulbs last and they decided they're curious to see how long Philips bulbs last compared to Wipro bulbs. IITJ decides to conduct a significance test at the 0.05 significance level. 64 Philips bulbs are tested and the mean life time is found to be 5910 hours. Both manufacturers report that the standard deviation for the lifespan of a light is 400 hours. Considering the lifespans of the two brands of lights what would be the Null Hypotheses. * 2/2

- ○ H0: mu=5910
- ◉ H0: mu=6000 ✓
- ○ Insufficient information to formulate H0

✗ Which of the following factor will help in avoiding Type II error? * 0/4

- ☐ Small Sample Size
- ☑ Minimum Variance ✓
- ☑ Low level of Significance ✗
- ☐ All three options given above

Correct answer

- ☑ Minimum Variance

This form was created inside of IIT Jodhpur.

Google Forms