## **STATISTICS**

<ul><li>1. Which of the following can be considered as random variable?</li><li>d) All of the mentioned</li></ul>
2. Which of the following random variable that take on only a countable number of possibilities? a) Discrete
<ul><li>3. Which of the following function is associated with a continuous random variable?</li><li>d) all of the mentioned</li></ul>
<ul><li>4. The expected value or of a random variable is the center of its distribution.</li><li>c) mean</li></ul>
5. Which of the following of a random variable is not a measure of spread? a) variance
<ul><li>6. The of the Chi-squared distribution is twice the degrees of freedom.</li><li>b) standard deviation</li></ul>
7. The beta distribution is the default prior for parameters between c) 0 and 1
8. Which of the following tool is used for constructing confidence intervals and calculating standard errors for difficult statistics? b) bootstrap
<ul><li>9. Data that summarize all observations in a category are called data.</li><li>b) summarized</li></ul>
10. What is the difference between a boxplot and histogram?  Ans- Histogram are a special kind of bar graph that shows a bar for range of data values instead of a single value. While box plot is a data display that draws a box over a number line to show the interquartile range of the data.
11. How to select metrics? Ans- By classification, regression and ranking.
12. How do you assess the statistical significance of an insight? Ans- By using hypothesis testing.
13. Give examples of data that does not have a Gaussian distribution, nor log-normal. Ans-
14. Give an example where the median is a better measure than the mean.  Ans- INCOME

## 15. What is the Likelihood?

Ans- The likelihood is the probaboility that a particular outcome is observed when the true value of the parameter is equivalent to the probability mass on it is not a probability density over the parameter.