***(STATISTICS WORKSHEET-6 ANSWERKEY)***

ANSWER-1) D)

ANSWER-2) A)

ANSWER-3) A)

ANSWER-4) C)

ANSWER-5) B)

ANSWER-6) B)

ANSWER-7) C)

ANSWER-8) B)

ANSWER-9) B)

ANSWER-10) Histograms are preferred to determine the underlying probability distribution of a data. **Box plots on the other hand are more useful when comparing between several data sets.** **They are less detailed than histograms and take up less space**.

ANSWER-11) Similar to vectors, you can **use the square brackets [ ] to select one or multiple elements from a matrix**. Whereas vectors have one dimension, matrices have two dimensions. You should therefore use a comma to separate the rows you want to select from the columns.

ANSWER-12) **Steps in Testing for Statistical Significance**

1. State the Research Hypothesis.
2. State the Null Hypothesis.
3. Select a probability of error level (alpha level)
4. Select and compute the test for statistical significance.
5. Interpret the results.

ANSWER-13) **Any type of categorical data** won't have a gaussian distribution or lognormal distribution. Exponential distributions - eg. the amount of time that a car battery lasts or the amount of time until an earthquake occurs.

ANSWER-14) “The mean is typically better when the data follow a symmetric distribution. **When the data are skewed, the median is more useful because the mean will be distorted by outliers**.

ANSWER-15) The **likelihood function** (often simply called the **likelihood**) represents the probability of [random variable realizations](https://en.wikipedia.org/wiki/Realization_(probability)) conditional on particular values of the [statistical parameters](https://en.wikipedia.org/wiki/Statistical_parameter).�(�∣�)�(�∣�)��