

STATISTICS WORKSHEET- 6

1. d) All of the mentioned
2. a) Discrete
3. a) pdf
4. c) mean
5. a) variance
6. a) variance
7. c) 0 and 1
8. b) bootstrap
9. b) summarized
10. _Box plot – gives the quartiles and indicates the median data to compare easily and
Histogram – gives only the count.
- 11.
12. Hypothesis testing would use to assess statistical significance. First the null hypothesis and alternate hypothesis would be started. Second , calculate the p- value, which is the likelihood of getting the test's observed findings if the null hypothesis is true. Finally, you would select the threshold of significance and reject the null hypothesis.
13. Any type of categorical data won't have a Gaussian distribution or log normal distribution.
For ex- the amount of time that a car battery lasts or the amount of time until an earthquake occurs.
14. The mean is not an appropriate measure of central tendency but the medians is an appropriate measure of central tendency.
Ex- score of students in a class are =
1,2,3,4,20
$$\frac{1+2+3+4+20}{5} = \frac{30}{5} = 6$$

Median = 3
So, its better to take median than mean.
15. The likelihood function represents the probability of random variable realizations conditional on particular values.