

1. The process of drawing inferences about the population parameter.
A. Statistical Inference
B. Statistical Analysis
C. both b and c
D. None of these
2. Estimation is the branch of.
A. Statistic
B. Statistical Method
C. Both A and B
D. Statistical Inference
3. Testing of hypothesis is the branch of.
A. Statistical Method
B. Statistical Inference
C. Both A and B
D. None of these
4. The process of finding true but unknown value of population parameter is called.
A. Statistical Inference
B. Estimation
C. Both B and C
D. None of these
5. Part of population is called.
A. Statistical Inference
B. Statistical Analysis
C. Sample
D. None of these
6. Types of estimation are.
A. Two
B. Three
C. One
D. Four
7. The formula uses to estimate the true but unknown value of population parameter is called an.
A. Estimation
B. Estimate
C. Estimator
D. None of these

8. The value which is obtain by applying an estimator on sample information is known as an.
- A. Estimation
 - B. Estimator
 - C. Both A&B
 - D. Estimate
9. Statistic may be an.
- A. Estimator
 - B. Estimate
 - C. Both A & B
 - D. None of these
10. The properties of an estimator are.
- A. Unbiasedness
 - B. Sufficiency
 - C. Consistency
 - D. All of these
11. Different method of estimation are deals with.
- A. Point estimation
 - B. Interval estimation
 - C. Both A & B
 - D. None of these
12. If expected value of an estimator is equal to its respective parameter then it is called an.
- A. Biased estimator
 - B. Unbiased estimator
 - C. Estimator
 - D. None of these
13. If expected value of an estimator is greater than the parameter then estimator is called.
- A. Unbiasedness
 - B. Positively Biased
 - C. Efficiency
 - D. None of these
14. If expected value of an estimator is equal to its respective parameter then this property known is.
- A. Biasedness

- B. Estimation
- C. Unbiasedness
- D. Both B & C

15. If expected value of an estimator is less than the parameter then estimator is called.

- A. Negatively biased
- B. Positively biased
- C. Only biased
- D. None of these

16. Mean square of an estimator is equal to.

- A. $\text{Variance} + (\text{Bias})^2$
- B. $E(x) + (\text{Bias})^2$
- C. $(\text{Bias})^2$
- D. Variance

17. For a random sampling from Normal Population, s^2 is a consistent estimator of.

- A. Population mean
- B. population variance
- C. Both A and B
- D. Sufficient

18. Normal Distribution is applied for _____

- a) Continuous Random Distribution
- b) Discrete Random Variable
- c) Irregular Random Variable
- d) Uncertain Random Variable

19. The shape of the Normal Curve is _____

- a) Bell Shaped
- b) Flat
- c) Circular
- d) Spiked

20. Normal Distribution is symmetric is about _____

- a) Variance
- b) Mean
- c) Standard deviation
- d) Covariance

21. For a standard normal variate, the value of mean is?

- a) ∞
- b) 1
- c) 0
- d) not defined

22. The area under a standard normal curve is?
a) 0
b) 1
c) ∞
d) not defined
23. The standard normal curve is symmetric about the value _____
a) 0.5
b) 1
c) ∞
d) 0
24. Normal Distribution is also known as _____
a) Cauchy's Distribution
b) Laplacian Distribution
c) Gaussian Distribution
d) Lagrangian Distribution
25. Skewness of Normal distribution is _____
a) Negative
b) Positive
c) 0
d) Undefined
26. For a normal distribution its mean, median, mode are equal.
a) True
b) False
27. In Normal distribution, the highest value of ordinate occurs at _____
a) Mean
b) Variance
c) Extremes
d) Same value occurs at all points
28. The shape of the normal curve depends on its _____
a) Mean deviation
b) Standard deviation
c) Quartile deviation
d) Correlation
29. In Standard normal distribution, the value of mode is _____
a) 2
b) 1
c) 0
d) Not fixed
30. In Standard normal distribution, the value of median is _____
a) 1
b) 0
c) 2
d) Not fixed

31. In randomly constituted two groups-experimental and control, a researcher obtains the following results after using a parametric 't' test: Value of $t = 3$ for $N = 300$ On the basis of this evidence which decision in respect of substantive research hypothesis and the null hypothesis will be justified?

(t tabulated value two tailed at $p=0.05$, $t = (-\infty \text{ to } -1.985)$ and $(\infty \text{ to } 1.985)$)

- a) Accepting the null hypothesis and accepting the alternate hypothesis
- b) Rejecting the null hypothesis and rejecting the alternate hypothesis.
- c) Accepting the null hypothesis and rejecting the alternate hypothesis
- D) Rejecting the null hypothesis and accepting the alternate hypothesis**

32. Which of the following examples involves paired data?

A. A study compared the average number of courses taken by a random sample of 100 freshmen at a university with the average number of courses taken by a separate random sample of 100 freshmen at a community college.

B. A group of 100 students were randomly assigned to receive vitamin C (50 students) or a placebo (50 students). The groups were followed for 2 weeks and the proportions with colds were compared.

C. A group of 50 students had their blood pressures measured before and after watching a movie containing violence. The mean blood pressure before the movie was compared with the mean pressure after the movie.

D. None of the above.

33: Which of the following is not an assumption for simple linear regression?

- a. Normally distributed variables
- b. Multicollinearity**
- c. Linear relationship
- d. Normally distributed residuals

34. The 'variance inflation factor' (VIF) can be used to identify this issue

- a) Multicollinearity**
- b) Homoscedasticity
- c) Outlier
- d) Normality

35. A term used to describe the case when the predictors in a multiple regression model are correlated is called:

- a) Homoscedasticity
- b) Multicollinearity**
- c) Heteroscedasticity

d) Polynomial

36. Which of the following is true about the adjusted R^2 ?

- a. It is usually larger than the R^2
- b. It is only used when there is just one predictor
- c. It is usually smaller than the R^2
- d. It is used to determine whether residuals are normally distributed

Which of the following would be considered a very strong negative correlation?

- a. .89
- b. -.09
- c. -.89
- d. .09