

S.S.R. DEGREE COLLEGE, (AUTONOMOUS)
II SEMESTER INTERNAL ASSESSMENT-II
EXAMINATIONS RESEARCH METHODOLOGY
QUESTION BANK

I. Multiple Choice Questions (MCQs)

1. Which of the following is NOT a measure of central tendency?

- a. Mean
- b. Median
- c. Mode
- d. Variance

Answer: d) Variance

2. The square root of variance is called:

- a. Mean
- b. Standard deviation
- c. Range
- d. Median

Answer: b) Standard deviation

3. Which test is used to compare paired samples?

- a. Independent t-test
- b. Paired t-test
- c. Chi-square test
- d. ANOVA

Answer: b) Paired t-test

4. Which of the following is a parametric test?

- a. Mann-Whitney U test
- b. Kruskal-Wallis test
- c. t-test
- d. Chi-square test

Answer: c) t-test

5. Which distribution is often used in hypothesis testing?

- a. Normal distribution
- b. Poisson distribution
- c. Binomial distribution
- d. Exponential distribution

Answer: a) Normal distribution

6. Which test is used for categorical data association?

- a. Chi-square test
- b. t-test

- c. Regression
 - d. ANOVA
- Answer: a) Chi-square test

7. Which correlation coefficient is used for ordinal data?

- a. Pearson's correlation
 - b. Spearman's correlation
 - c. Kendall's tau
 - d. Regression coefficient
- Answer: b) Spearman's correlation

8. Which of the following is a measure of variability?

- a. Mean
 - b. Median
 - c. Range
 - d. Mode
- Answer: c) Range

9. Which test compares more than two independent group means?

- a. t-test
 - b. ANOVA
 - c. Chi-square test
 - d. Regression
- Answer: b) ANOVA

10. Which of the following is used to predict outcomes?

- a. Regression analysis
 - b. Chi-square test
 - c. ANOVA
 - d. Median test
- Answer: a) Regression analysis

11. Which of the following is NOT a probability distribution?

- a. Normal
 - b. Binomial
 - c. Poisson
 - d. Variance
- Answer: d) Variance

12. Which test is used for small sample sizes and categorical data?

- a. Fisher's exact test
 - b. Chi-square test
 - c. ANOVA
 - d. Regression
- Answer: a) Fisher's exact test

13. Which of the following is a graphical representation of data distribution?

- a. Histogram
 - b. Scatter plot
 - c. Pie chart
 - d. All of the above
- Answer: d) All of the above

14. Which measure is least affected by extreme values?

- a. Mean
 - b. Median
 - c. Mode
 - d. Range
- Answer: b) Median

15. Which test is used to check normality of data?

- a. Shapiro-Wilk test
 - b. Chi-square test
 - c. ANOVA
 - d. t-test
- Answer: a) Shapiro-Wilk test

16. Which of the following is a non-parametric test for two independent samples?

- a. Mann-Whitney U test
 - b. Paired t-test
 - c. ANOVA
 - d. Regression
- Answer: a) Mann-Whitney U test

17. Which of the following is a measure of relative position?

- a. Percentile
 - b. Mean
 - c. Variance
 - d. Mode
- Answer: a) Percentile

18. Which test is used for repeated measures design?

- a. ANOVA
 - b. Repeated measures ANOVA
 - c. Chi-square test
 - d. Regression
- Answer: b) Repeated measures ANOVA

19. Which of the following is used to measure goodness of fit?

- a. Chi-square test
- b. t-test
- c. ANOVA

d. Regression

Answer: a) Chi-square test

20. Which of the following is used to measure strength and direction of linear relationship?

a. Correlation coefficient

b. Regression coefficient

c. Variance

d. Standard deviation

Answer: a) Correlation coefficient

 II, Fill-in-the-Blank Questions

1. The average of a dataset is called the mean.
2. The middle value of an ordered dataset is called the median.
3. The most frequently occurring value is called the mode.
4. The difference between maximum and minimum values is called the range.
5. The square of the standard deviation is called variance.
6. The test used to compare two independent means is the t-test.
7. The test used to compare more than two group means is ANOVA.
8. The test used to check association between categorical variables is Chi-square test.
9. The measure of linear relationship between two continuous variables is correlation.
10. The correlation coefficient ranges between -1 and +1.
11. The test used for small sample categorical data is Fisher's exact test.
12. The test used to check normality of data is Shapiro-Wilk test.
13. Regression analysis is used to predict the value of a dependent variable.
14. Spearman's correlation is used for ordinal data.
15. Pearson's correlation is used for continuous data.
16. Percentiles are measures of relative position in a dataset.
17. Histogram is a graphical representation of frequency distribution.
18. Scatter plot is used to show relationship between two variables.
19. Repeated measures ANOVA is used when the same subjects are measured multiple times.
20. Median is least affected by extreme values.

III. Answer the following Questions:-

1. Methods of collecting primary data..
2. Ranking and rating scales.
3. Types of data.
4. Chi-Square test.
5. Rank Correlation.