



Q.1. Give short answers of the following: (15x2=30)

1. Write down importance of statistics in Psychology.
2. Define descriptive statistics with examples.
3. Find median for the following set of data: 12, 21, 15, 13, 16, 18, 15, 19, 15, 19, 19, 12, 13, 17, 19, 20, 15, 13
4. Write down properties of mean.
5. Define measures of dispersion and name their types.
6. If scores on a test are normally distributed with mean = 50 and standard deviation is equal to 8, what is the z score of a student whose marks in the test are 68?
7. What are the differences between t test and ANOVA?
8. Write down steps in construction of Histogram.
9. What is normal distribution? Draw normal and positively and negatively skewed distributions to elaborate.
10. Define discrete and continuous variables with examples.
11. Differentiate between positive and negative correlation with the help of examples.
12. What is the difference between simple and multiple regression?
13. What is Chi square test? What are two types of Chi Square test?
14. Define critical region and elaborate with the help of curve.
15. Differentiate between correlation and causation.

Q.2. Solve the following questions. (3x10=30)

1. A psychologist conducted a study to find relationship between creativity and academic performance. A random sample of 8 people was obtained and creativity test scores and GPAs were obtained. Find Pearson correlation between the variables.

Creativity	5	8	5	6	9	4	7	7
GPA	2.5	4.0	2.5	3.0	3.7	2.0	3.7	3.0

2. Two independent groups of individuals, one with agoraphobia and other without agoraphobia, reported how often they had ventured out in the past month. Find if there is any significant mean difference in number of trips participants take at $\alpha = .05$.

With agoraphobia	Without agoraphobia
0	4
0	0
3	11
3	8
2	9
0	7
0	4
2	8
3	3
3	7

3. For the following set of scores, find regression coefficient (b).

X	7	4	6	4	5	5
Y	12	3	5	6	7	6