School of Liberal Education
Master of Arts in Applied Psychology
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem II - K1PM201T - Statistical Techniques in Psychology

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Discuss p-values and significance levels, and how are they used to determine the statistical significance of findings? — K2 (2)

2) List the steps of calculating SD. — K1 (3)

3) Calculate the standard deviation for the following set of scores: 18, 15, 12, 16, 20, 14, 17, 19, 16, 15. — K2 (4)

4) Explain Positive, Negative and Zero Correlation? — K2 (6)

5) Calculate the mean, median, and mode of the following set of scores: 18, 20, 15, 16, 21, 18, 16, 15, 20, 22, 15. — K3 (6)

6) In a study on self-esteem, the recorded scores were as follows: 30, 35, 32, 28, 31, 33, 29. Calculate the average deviations and standard deviation for the self-esteem scores. — K3 (9)

7) In a study on reaction times, the following scores were obtained: 220, 245, 250, 260, 270, 290, 310. Calculate the average deviation from the mean for the reaction times. — K4 (8)

8) Consider the following grouped frequency distribution for a set of heights (in centimeters):
Class Interval Frequency
150-160 12
160-170 18
170-180 20
180-190 15
Calculate the standard deviation for the heights. — K4 (12)

OR

A researcher wants to examine the relationship between age and memory performance in a sample of 25 participants. The age of the participants and corresponding memory performance scores are as follows:
Age: 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145
Memory Performance: 75, 80, 90, 85, 70, 60, 65, 55, 75, 80, 90, 85, 70, 60, 65, 55, 75, 80, 90, 85, 70, 60, 65, 55, 75
Calculate the Pearson's correlation coefficient between age and memory performance. — K4 (12)