

**DEPARTMENT OF MANAGEMENT
SCHOOL OF MANAGEMENT & BUSINESS STUDIES
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Ph.D. Course Work Examination April 2022

Subject Name: Research Methodology and Statistics

MM: 75

Subject Code: DRM – 101

Time: 03Hours

Note: Answer any five Question, each carry equal marks.

Q1: “Qualitative and quantitative research should supplement each other.” Discuss and briefly explain the tools used in Qualitative research.

Q2: Discuss the significance of research design and explain various types of research design.

Q3: Prepare a questionnaire to ascertain the efficacy of a new brand of pain-killer (assume other details)

Q4: What are the different types of measurement scales available to researchers? Explain and discuss the suitability of various scales in context of data type.

Q5: What are the steps involved in hypothesis testing? What are the different methods of hypothesis testing? Explain

Q6: Apply a suitable sampling technique to draw a sample of respondents to determine the average monthly household expenditure on entertainment in Delhi.

Q7: Explain the significance of a research report and discuss the various steps involved in writing a research report.

Ques8.: A researcher wants to know whether owning a dog has any effect on the ability to throw a Frisbee.

She collected the required data and tested the same for normality.

1. Observe the SPSS output for the test of normality and state if the data is normally distributed or not. Also state the Null and Alternative hypothesis for the test of Normality.

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Frisbee Throwing Distance (Metres)	.133	50	.027	.914	50	.001
a. Lilliefors Significance Correction						

2. Observe the output generated when the Mann-Whitney U Test was applied on the data (below). And answer the following questions.

Ranks				
	Dog Owner	N	Mean Rank	Sum of Ranks
Frisbee Throwing Distance (Metres)	No Dog	31	22.19	688.00
	Owns Dog	19	30.89	587.00
	Total	50		

Test Statistics ^a	
	Frisbee Throwing Distance (Metres)
Mann-Whitney U	192.000
Wilcoxon W	688.000
Z	-2.049
Asymp. Sig. (2-tailed)	.040
a. Grouping Variable: Dog Owner	

- State the Independent and Dependent variable as per the tables above.
- State the Null & the alternate Hypothesis.
- Interpret the SPSS Output.