

MEWAR UNIVERSITY
PhD Course Work
Research Methodology
ASSIGNMENT- IV

- Q.1 (a) Explain the meaning of analysis of variance. Describe briefly the technique of analysis of variance for one-way and two-way classifications.
(b) What do you mean by the additive property of the technique of the analysis of variance? Explain how this technique is superior in comparison to sampling.
- Q.2 Write short notes on the following:
F-ratio and its interpretation;
(a) Significance of the analysis of variance;
(b) Situation when 'F' test is followed by 't' test and vice versa.
- Q.3 (a) What is logical form? Discuss the western and oriental conceptions of logic.
(b) Define deductive and inductive reasoning.
- Q.4 Define the terms: Reliability and; validity of research tools. Explain how are they estimated.
- Q.5 (a) Give your understanding of non-parametric or distribution free methods explaining their important characteristics.
(b) Narrate the various advantages of using non-parametric tests. Also point out their limitations.
- Q.6 Briefly describe the different non-parametric tests explaining the significance of each such test.
- Q.7 Under what circumstances is the Mann Whitney u test used? Explain. What is the main limitation of this test?
- Q.8 (a) What is the purpose of sign test?
(b) Explain briefly the Spearman's rank correlation and Kendall's coefficient of concordance.
- Q.9 (a) What do you mean by multivariate analysis?
(b) Discuss the significance of Factor analysis ?
- Q.10 Write short notes on:
(a) Relationship between z and t test in reference to their distribution.
(b) Path analysis