# OF RESEARCH (FONT SIZE 24 ARIAL) 

Year<br>ASSINGMENT -IV RM<br>2015

For the Degree of
Doctor of Philosophy
In
SUBJECT
Submitted
to


Mewar University
Knowledge to wisdom

# MEWAR UNIVERSITY GANGRAR, CHITTORGARH (RAJASTHAN) (FONT SIZE 22 ARIAL) 

Research Supervisor:
Scholar: Dr.

Research
Name

## MEWAR UNIVERSITY <br> 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: - Fratio and its interpretation;

- Significance of the analysis of variance;
- 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.

