

**M.Sc. (Ag.) Examination, 2017**  
**Semester-II**  
**Agricultural Extension**  
**Course – EXT-507**  
**(Research Methods in Behavioural Sciences)**

**Time: 3 Hours**

**Full Marks: 50**

*Questions are of value as indicated in the margin.*

Answer **any five** questions

1. Define variable. Explain Dependent and independent variables, continuous and discrete variables with example. What is extraneous variable? 1+7+2=10
  2. What is measurement? Discuss different levels of measurement citing appropriate examples. 3+7=10
  3. Define Sampling. Why sampling is done in social science research? Discuss different types of Probability sampling method or Non-probability sampling method. 1+2+7=10
  4. Define Hypothesis. Explain 'Null' and 'Alternative' hypothesis with example. In hypothesis testing why the researcher select the level of significance? What do you mean by 5 percent and 1 percent level of significance? 1+4+2+3=10
  5. What is Research Design? Write in brief the traits of scientific method of research. 2+8=10
  6. Define Reliability and Validity. Between reliability and validity, which one is more important and why? Discuss in brief different methods of estimating reliability or validity of a scale. 2+2+6=10
  7. Write the importance of Pilot Study. Discuss different methods of data collection with their advantages and limitations. 3+7=10
  8. Write short notes (**any four**): 2.5×4=10
    - a) Review of Literature
    - b) Research problem and objectives
    - c) Case study research
    - d) Type I and Type II error
    - e) Social research
    - f) Rating scale
    - g) Writing research report
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