



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2010/2011

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE (AGRIBUSINESS AND TRADE, INTERGRATED SOIL FERTILITY MANGEMENT, LAND AND WATER MANAGEMENT)

KCU 501: RESEARCH METHODS AND SCIENTIFIC WRITING

DATE: Monday, 28th March 2011

TIME: 9.00 a.m – 12.00 noon

INSTRUCTIONS

Answer question ONE and any other THREE questions.

1. (a) Distinguish between the following:

(i) Basic and Action research	[2 marks]
(ii) Justification and Significance of research	[2 marks]
(iii) Concrete and Abstract variables	[2 marks]
(iv) Case study and content analysis	[2 marks]
(v) Causal comparative and Correlational research	[2 marks]

- (b) Explain the three types of hypotheses. **[6 marks]**

- (c) In the research process objectives drive the study. Briefly explain this statement. **[4 marks]**

- (d) Explain the difference between internal and external validity of information or data in research. **[4 marks]**

- (e) Construct two directional hypotheses and two non-directional hypotheses that relate to agriculture. **[4 marks]**

- (f) With examples, explain why active voice is preferred in scientific writing. **[2 marks]**
2. A researcher is planning to conduct qualitative research. Discuss any five approaches the researcher may use for this type of research. **[10 marks]**
3. (a) Explain objectives of on-farm experimentation. **[5 marks]**
- (b) Briefly discuss different types of on-farm trials and explain their applicability in collecting biophysical and socio-economic data. **[5 marks]**
4. With examples, explain five principles in scientific writing. **[10 marks]**
5. A graduate student in second year of study has completed data collection and writing thesis. In addition the student has written a journal paper out of the research work and wishes to submit to peer reviewed journal. Discuss what reviewers of this paper are likely to look for in the abstract, in the results, and the discussion sections. **[10 marks]**
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