



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2009/2010
INSTITUTIONAL BASED PROGRAMME (APRIL SESSION)
EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION

ECT 505: RESEARCH METHODS AND STATISTICS

DATE: Wednesday 1st September 2010

TIME: 9.00a.m – 12.00p.m

INSTRUCTIONS:

Answer question ONE and any other TWO questions

1. a) Why is it important to pilot your research instruments? [4marks]
- b) i) What is research instrument? [2marks]
ii) Name three types of research instrument. [3marks]
- c) State three prerequisites to the design of a survey. [6marks]
- d) What is the importance of a control group in experimental research? [2marks]
- e) For the following list of test scores 58, 88, 66, 75, 55, 70, 57, 82
i) Find the mean and SD [2marks]
ii) Add 6 to each score and recalculate Mean and SD. [2marks]
iii) Multiply each by 2 and calculate the Mean and SD. [2marks]
- f) In what situation would you use the following statistical approaches in data analysis in educational research?
i) t-test [2marks]
ii) Chi-Square [2marks]
iii) ANOVA [2marks]

2. You notice that KCSE achievement in your subject has been very poor over the last five years in the district where you are teaching. You have decided to carry out a research to investigate the factors that contribute to this poor achievement.
- State the title of your research [4marks]
 - Outline the research design for your study. [8marks]
 - Discuss the instruments you would use and how you would validate them. [8marks]
3.
 - What is the significance of research in education? [2marks]
 - Discuss SIX characteristics of social research. [18marks]
4. A researcher was interested in studying the performance of teacher trainee students in a Diploma Teachers Training College. Her results were as shown in the table below.

Performance	Intensive	Good	Average	Total
Above average	90	140	30	260
Average	90	90	90	270
Poor	40	70	140	250
Total	220	300	260	720

Use Chi-Square test to test if the two attributes are independent at level of 0.5. [20marks]

5.
 - Discuss how ICT has aided research in education. [8marks]
 - You have just administered 350 questionnaires to students as part of your M.ED research. Outline the procedure you would follow in order to use SPSS packages in your data analysis. [12marks]