

3402/203  
RESEARCH IN EDUCATION AND TRAINING  
June/July 2008  
Time: 3 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL  
HIGHER DIPLOMA IN EDUCATION MANAGEMENT  
MODULE II

RESEARCH IN EDUCATION AND TRAINING

3 hours

**INSTRUCTIONS TO CANDIDATES**

*You should have the following for this examination:*

*Answer booklet*

*This paper has **EIGHT** questions.*

*Question **ONE** is compulsory.*

*Answer **FOUR** other questions.*

*All questions carry equal marks.*

*Maximum marks for each part of a question are as shown.*

**This paper consists of 3 printed pages.**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and no questions are missing.**

*Answer question ONE and FOUR other questions.*

1. A non governmental organisation wishes to carry out a baseline survey to establish the ability of Form Four dropouts in utilising development funds to be provided by the government for enterprise activities. You are nominated as the Principal researcher for the project in a specified district.
- (a) Explain the importance of drafting a research proposal for the project. (6 marks)
  - (b) State **three** possible objectives for the study. (6 marks)
  - (c) Why will it be necessary to employ a combination of qualitative and quantitative approaches in collecting and analysing data in this study? (8 marks)
2. A researcher prepared an instrument to predict the success of educational management trainees in their jobs. The assumption made was that those who passed on administering the instrument will be successful in their jobs. The instrument was administered on 100 candidates and a follow up was made to establish those who were successful and those who failed in their job performance. The data generated is presented below:
- |              | Fail | Pass | Total |
|--------------|------|------|-------|
| Successful   | 20   | 40   | 60    |
| Unsuccessful | 25   | 15   | 40    |
| Total        | 45   | 55   | 100   |
- (a) Formulate a hypothesis for this study. (2 marks)
  - (b) Draw a conclusion for this study with evidence ( $df = 1$  Critical  $\chi^2, 0.05 = 3.841$ ) (10 marks)
  - (c) Explain the **four** levels of measurement scales giving an example for each. (8 marks)
- 3.
- (a) Define "Training evaluation". (2 marks)
  - (b) Explain the qualities of a good test as a tool for evaluating training. (12 marks)
  - (c) Discuss the reasons for constructing and using a marking scheme for scoring a trainee's answer script. (6 marks)
4. Discuss how Information Communication Technology (ICT) facilitates the following aspects of educational research:
- (a) Literature review (4 marks)
  - (b) Data collection (8 marks)
  - (c) Data analysis and reporting. (8 marks)

5. (a) Discuss the importance of carrying out literature review in research. (12 marks)
- (b) Discuss the methods commonly used in presenting reviewed literature. (8 marks)
6. A teacher prepared a Computer Assisted Instruction (CAI) Package on pollution for form three students. He wished to determine the effectiveness of the package in assisting to meet the syllabus objective in the topic. Two groups of 20 learners were selected from a population of 200 students. One group was subjected to the CAI Package and the other was taught in the conventional way. A pre-test was given and in a period of six weeks a post test was given. The average of the post test for the experimental group was 70% and that of the control group was 65%.
- (a) State the title for this study. (2 marks)
- (b) Identify the independent and dependent variables. (2 marks)
- (c) State a null hypothesis for this study. (2 marks)
- (d) If a 't' test was used and the computed value was 2.53 when the critical value is 2.048 at 5% confidence limit, what conclusion will the teacher draw. (2 marks)
- (e) Explain the factors that can threaten the internal validity of this study. (12 marks)
7. (a) Discuss the importance of sampling in educational research. (10 marks)
- (b) Explain the qualities of a good sample. (8 marks)
- (c) Distinguish between simple random sampling and purposive sampling. (2 marks)
8. (a) Discuss the sources of educational research problems. (8 marks)
- (b) Discuss how survey and case study techniques can supplement each other in solving a problem of persistent poor performance of a given secondary school in national examinations. (12 marks)