



DIPLOMA IN TECHNICAL TRAINER EDUCATION

**RESEARCH METHODS II**

**PAPER CODE: ED 7304**

QUALIFICATION: Technical Trainer Level 6

UNIT CODE: **ED/CUR/TT/CR/15/Pro/A**

UNIT OF COMPETENCY: Conduct education research

END OF TERM FINAL EXAMINATION

APRIL, 2022

**INSTRUCTIONS TO CANDIDATES**

1. Time allowed **2 hours**
2. Cell phones and unauthorised materials are **NOT** allowed
3. Answer **ALL** questions in section A and any **THREE** in Section B in the answer booklet provided.

**SECTION A: (QUESTION 1 = 40 MARKS)**

Q1. You have just concluded your data collection exercise on students in Kongowea Group of Schools Mombasa County on university courses choice. The total sample size was 10. The following is the data gathered from respondents.

Questionnaire Number	Gender	Age	Overall student performance	Best subject	University courses choice
1	Male	Less than 14 years	Fair	Mathematics	Engineering
2	Female	15 - 18	Excellent	English	Medicine
3	Female	19- 22	Fair	Physics	Nursing
4	Male	Over 22 years	Good	Mathematics	Aviation
5	Male	15 - 18	Poor	History	Nursing
6	Female	19- 22	Good	Geography	Education
7	Female	Less than 14 years	Fair	Physics	Engineering
8	Female	Over 22 years	Very good	Chemistry	Medicine
9	Male	15 - 18	Very good	Chemistry	Education
10	Female	19- 22	Fair	English	Flight attendant

- a) From the data above prepare a coding scheme to enable you to tabulate the data. (15 marks)
- b) Prepare a data matrix from the above coded data. (10 marks)
- c) Prepare a frequency table to show the variable best subject. (6 marks)
- d) By use of a bar graph, show the students university courses choice (9 marks)

## SECTION B: (ANSWER ANY THREE QUESTIONS = 60 MARKS)

Q2. You have been appointed to conduct a survey on effects of drugs on students' performance;

- a) Explain THREE reasons why you will combine qualitative and quantitative methods in data analysis. (6 Marks)
- b) Discuss THREE roles of objectives and research questions in data analysis (6 Marks)
- c) Explain FOUR differences between quantitative and qualitative methods (8 Marks)

Q3. The following data represents shoe sizes of Grade 2 pupils in Kihara Primary School.

76	84	76	103	92
47	98	54	80	91
69	86	83	75	93
89	96	65	94	85

- a) Construct a frequency distribution table for grouped data with 6 classes/groups (7 marks)
- b) Calculate the mean from the frequency distribution table above (3 marks)
- c) Describe FIVE (5) types of graphics that you can use to summarize and present your data (10 marks)

Q4 . (a) Discuss FOUR (4) stages in data processing showing the importance of each stage (12 marks)

- (b). Explain the FOUR levels of measurement of variables recognized by social scientists (8 marks)

Q5. (a). Discuss the content and purpose of the following sections of a research report.

- i. Data analysis and interpretation. (6 marks)
- ii. Summary of findings. (4 marks)
- iii. Recommendations. (4 marks)

- (b) Explain any THREE ethical rules a researcher needs to take into consideration when conducting research (6 Marks)