



**REFORMED CHURCH UNIVERSITY**

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**FACULTY OF EDUCATION AND SOCIAL SCIENCES**

**BACHELOR OF EDUCATION DEGREE IN INCLUSIVE EDUCATION**

**ADVANCED RESEARCH METHODS AND STATISTICS**

**HIE 111**

**Part 1 Semester 2 Examination**

**Total Marks [100]**

**Date: APRIL 2024**

**Time: 3 Hours**

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## **INSTRUCTIONS**

- 1 This paper has *Five (5)* questions
- 2 Answer question 1 and any *any two (2)* questions
- 3 Start each question on a new page
- 4 Candidates may use non-programmable, noiseless and cordless calculators.
- 5 Candidates are provided with tables of statistical formulae.

1. Examine any five factors that you should consider in the choice of a research topic. (100 marks)
2. Discuss any five data trustworthiness issues that have to be considered in using data in qualitative research (100 marks)
3. Evaluate the essence of any five ethical principles to be considered in inclusive education research (100 marks)
4. The following data set represents ages of students (x) and their weights (y).

x	17	13	12	15	16	14	16	16	18	19
y	94	73	59	80	93	85	66	79	77	91

Using the data calculate the following:

- a. Mean x and mean y
  - b. Standard déviation x and standard déviation y
  - c. variance x and variance y
  - d. z score for 16 under x
  - e. z score for 85 under y
  - f. Pearson product moment correlation coefficient for the data
  - g. Coefficient of determination for the data [100 marks]
5. a) Identify a research topic you may want to explore in your area of study (100 marks)
  - b. formulate any two research questions for the chosen topic
  - c. Discuss the significance of any one research designs you may use to explore the research topic
  - d. Explain the essence of any one data collection method you may choose to use for the research
  - e. Briefly discuss a relevant sampling method you will use for the research
  - f. Briefly articulate any two ethical issues you will consider for this research

**END OF PAPER**