REFORMED CHURCH UNIVERSITY

FACULTY OF EDUCATION AND SOCIAL SCIENCES

BACHELOR OF EDUCATION HONOURS IN INCLUSIVE EDUCATION

RESEARCH METHODS AND STATISTICS

HIE 102

PART 1 SEMESTER 1 EXAMINATION

TOTAL MARKS   [100]

DATE: DECEMBER 2022

TIME: 3 HOURS

INSTRUCTIONS

1. This paper has *five (5)* questions

2. Answer any *three (3)* questions

3. Each question carries *100 marks*

4. Start each question on a new page

5. Candidates may use non-programmable, noiseless and cordless calculators.

6. Candidates are provided with tables of statistical formulae.

1. Discuss the advantages and the disadvantages of using participant observations as methods of collecting data in inclusive settings.   100 marks

2. Justify the use of any three types of non-probability sampling in selecting participants when doing research in inclusive settings.   100 marks

3. Identify a research problem that you may possibly face in an inclusive class. For the identified problem:
   i.   Formulate three research questions.   40 marks

   ii.   Identify and justify a relevant research approach you may use in researching the problem.   20 marks

   iii. Identify and justify any three methods of data collection relevant to the problem.   40 marks

4. The following table shows the distribution of marks obtained by students in a class of 15 in a Science end of term test:

student	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
mark	75	69	80	57	48	56	72	81	64	64	52	64	65	73	90

   i)   Calculate the mean of the data set   20 marks
   ii)   Find the median   20 marks
   iii) Find the mode   20 marks
   iv)   Calculate the standard deviation   20 marks
   v)   What are the z-scores of the following students and comment on each of the z-scores:
         a) F   10 marks
         b) N   5 marks
         c) E   5 marks

5. Discuss the utility of the standard deviation as a measure of dispersion in quantitative analysis of research data.   100 marks

End of Paper