



REFORMED CHURCH UNIVERSITY

Research Methods and Statistics

HRCU 201

Part 2 Semester 2 Examination

Total Marks [100]

Date January 2022

Time: 3 Hours

INSTRUCTIONS

1. This paper has *six (6)* questions
2. Answer question *one (1)* and *any* other **three (3)**
3. Each question carries **25 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. Examine any five ethical principles which you should consider when undertaking research in your area of study. (25)
2. The increasingly complex nature of our society has focused attention on the use of research in solving operational problems. Explain five characteristics of good research. (25)
3. Proposal writing is one of the important stages in the research process. A student wishing to carry out research is first required to submit a research proposal which will be assessed and approved by the relevant academic department before embarking on the actual study (Saunders et al, 2015).
 - a) Define the term research proposal. (5)
 - b) Explain any 5 steps in developing a research proposal. (5)
 - c) Examine the purpose of a research proposal. (15)
4. Identify any 2 types of probability sampling techniques and 2 non-probability sampling techniques, and discuss the conditions under which each of them can be applied in research. (25)
5. a. Explain the important points in designing a questionnaire (15)
 - b. Discuss the pros and cons of a questionnaire survey (10)
6. The following sample observations were randomly selected.

X	5	3	6	3	4	4	6	8
Y	13	15	7	12	13	11	9	5

You are required to;

- a) Calculate the mean of X. (2)

- b) Calculate the mean of Y. (2)
- c) Compute the standard deviations of X and of Y. (8)
- d) Find Z-scores when X is 9 and Y is 14 (4)
- e) Calculate correlation coefficient of the two variables and comment on it. (5)
- f) Calculate the coefficient of determination and comment on your result. (4)

End of paper