



COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NACP 501: BIOSTATISTICS

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2023

LECTURER: DR. S. CHAKEREDZA

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES

INSTRUCTION

Answer All Questions from Section A
And Answer Three Questions from Section B

SECTION A: Answer ALL questions

Question 1

1. Define the term Biostatistics. [3]
2. Define population. [2]
3. Define sample. [2]
4. What is primary data? [3]
5. What is secondary data? [3]
6. What is research and its notable characteristics? [5]
7. What is statistics and its use? [6]
8. What is a Quantitative variable? [2]
9. What is a Qualitative variable? [2]
10. Define continuous variable. [2]
11. Define inferential statistics. [2]
12. Define descriptive statistics. [2]
13. For the values: 10, 8, 7, 2, 8, 7 [6]
 - a. Find the mean
 - b. Median
 - c. Mode

SECTION B: Answer Three Questions

1. Discuss the concept of randomization as it affects the conduct of an experiment and why it is important. [20]

2. Answer the following sections as one question

- a. What is a variable? [4]
- b. What do you understand by the term range? [4]
- c. What is standard deviation and how do you calculate it? [4]
- d. What is sample size? [4]
- e. What do you understand by the term parameter? [4]

3.

- a. Write four main components of research proposal. [5]
- b. When do we resort to the use of questionnaire as research instrument? [5]
- c. Explain the two types of Questionnaire format briefly. [5]
- d. Highlight the possible pitfalls in questionnaire construction. [5]

4. Using the following data set

- a. A national random sample 29, 26, 13, 23, 23, 25, 17, 22, 17, 19, 12, 26, 30, 30, 18, 14, 12, 26, 17.
- b. Calculate the sample mean, median, variance and standard deviation [20]

- 5. a) Outline and briefly discuss the principles involved in experimental design. [10]
- b) Discuss the different sampling methods and understand the purpose and importance of sampling and the advantages made possible by sampling. [10]

END OF EXAMINATION PAPER