



ZIMBABWE EZEKIEL GUTI UNIVERSITY

COLLEGE OF LIFELONG LEARNING

EXAMINATION PAPER

MODULE CODE : DUWC125
MODULE TITLE : RESEARCH METHODS
DURATION : 3 Hours
LEVEL : 1.1
DATE :

11 JUN 2025

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. Use of silent, non-programmable calculators is allowed
3. Answer **Question 1** and any other **one** in Section B.
4. Begin each question on a new page.
5. The number of marks for each question or part question is shown in brackets []
6. Show all workings, where applicable.

Section A (Compulsory)

Question 1

For each research situation below:

- (a) Identify the independent and dependent variables and
- (b) Classify the level of measurement of each variable.
- (c) Decide the statistical applications to be used: descriptive statistics (single variable), descriptive statistics (two or more variables), or inferential statistics

i. A graduate student is studying sexual harassment on college campuses and asks 500 female students if they personally have experienced any such incident. Each student is asked to estimate the frequency of these incidents as either often, sometimes, rarely, or never. The researcher also gathers data on age and major to see if there is any connection between these variables and frequency of sexual harassment. **[7 marks]**

ii. The adult bookstore near campus has been raided and closed by the police. Your research class has decided to poll the student body and get their reactions and opinions. The class decides to ask each student if he or she supports or opposes the closing of the store, how many times each one has visited the store, and if he or she agrees or disagrees that "pornography is a direct cause of sexual assaults on women." The class also collects information on the sex, age, religious and political philosophy, and major of each student to see if opinions are related to these characteristics. **[7 marks]**

iii. For a research project in a research module, a student has collected information about the quality of life and the degree of political democracy in 50 nations. Specifically, she used infant mortality rates to measure quality of life and the percentage of all adults who are permitted to vote in national elections as a

measure of democratization. Her hypothesis is that quality of life is higher in more democratic nations.

[7 marks]

iv. A highway engineer wonders if a planned increase in speed limit on a heavily traveled local avenue will result in any change in number of accidents. He plans to collect information on traffic volume, number of accidents, and number of fatalities for the six-month periods before and after the change.

[7 marks]

v. A researcher monitored the levels of river pollution near a factory. Before the factory was closed down she took 100 random samples of water from different parts of the river and found an average weight of pollutants of 10 mg l^{-1} with a standard deviation of 2.64 mg l^{-1} . After the factory was closed down the social worker collected a further 120 random samples and found that they contained 8 mg l^{-1} of pollutants on average with a standard deviation of 1.94 mg l^{-1} .

[7 marks]

SECTION B (Choose one question)

Question 2

This challenge exercise pertains to an aspect of research that is new and has been given little consideration even by the current APA Ethics Code. However, it is becoming a common event and one that should be considered—it is research conducted over the Internet. Think about a study that is being conducted via the Internet regardless of whether this is a survey or an experimental study.

a. What are the ethical issues that must be considered and that might create difficulty in conducting such a study? [12 marks]

b. Make recommendations to the Ethics Code such that it can sufficiently cover research conducted in cyberspace? [13 marks]

Question 3

Assess the strengths and weaknesses of the major random sampling techniques? [25 marks]

Question 4

Consider a field experiment conducted after a severe hurricane. Imagine that the findings indicated that aggression was higher among children who had to change schools after the storm (due to their school being damaged and closed). Identify the independent and dependent variables in this study and justify them. [25 marks]

--- The End ---

---Asanteni---

10/10 AM