

CENTRAL UNIVERSITY

FACULTY OF ARTS & SOCIAL SCIENCES

DEPARTMENT OF THEOLOGY & EDUCATION

END OF FIRST SEMESTER EXAMINATION

NOVEMBER/DECEMBER

2019/2020



INSTRUCTIONS: FOLLOW THE INSTRUCTIONS IN EACH SECTION

TIME: THREE (3) HOURS

COURSE TITLE: RESEARCH METHODOLOGY

COURSE CODE: MPTS 610

DATE: 11TH DECEMBER 2019

**CENTRAL UNIVERSITY
FACULTY OF ARTS AND SOCIAL SCIENCES
DEPARTMENT OF THEOLOGY AND EDUCATION
Research Methods (MPTS610)**

End of Semester one examinations, 2019/2020 academic year

**Instruction: Answer Part One sections A and B questions in separate
Answer Booklet and Part Two Sections A and B in another Answer Booklet
Time: Three hours**

PART ONE SECTION A. COMPULSORY QUESTION.

1. You have been asked by an NGO to help them reduce HIV-related stigma and discrimination in the Koforidua Municipalities. The NGO wants you to conduct a research using qualitative approach to help them understand the 'lived experience' of persons living with HIV/AIDS.
 - a. Which type of qualitative research design will you select for the study and why? (4 Marks)
 - b. Which sampling method(s) will you use to select twelve respondents for the study and why? (4 Marks)
 - c. Which data collection methods will be appropriate for the study and why? (4 Marks)
 - d. State six major ethical principles you will observe in conducting the study. (6 Marks)
 - e. How will you ensure rigour in your study? (6 Marks)
 - f. What data analytical tool(s) will be suitable for such study and why? (4 Marks)
 - g. What research philosophy will be relevant for your research approach (2 Marks)

PART ONE SECTION B. ANSWER ONE QUESTION ONLY

2. Paradigms are 'hidden' in research yet they influence its practice. Based on your knowledge of paradigms, use six key points to explain the difference between qualitative and quantitative research. (20 Marks)
3. Examine the relationships, interconnection or similarities between:
 - a. Independent variable and effect variable (4 Marks)
 - b. Objectives of the study and research questions (4 Marks)
 - c. Theoretical review and literature review (4 Marks)
 - d. In-text citations and list of references (4 Marks)
 - e. The statement of the problem and the purpose of the study (4 Marks)

PART TWO Sections A and B. (Sec. A is Compulsory Question for 30 Marks)

As part of your final year thesis, you have obtained students quantitative research methods test scores for the end of the first semester examinations at Central University

Table 1: Students Test Scores

Marks (x)	$0 \leq x < 10$	$10 \leq x < 20$	$20 \leq x < 30$	$30 \leq x < 40$	$40 \leq x < 50$
Frequency (f)	6	16	24	25	17

1. Calculate the mean, variance and standard deviation [15 Marks]
2. Briefly discuss your results [5 Marks]
3. Use the information in Table 2 to answer the questions that follow

Table 2: Linear Regression Results of a car and its features

Source	SS	df	MS	Number of obs	=	74
Model	186321280	2	93160639.9	F(2, 71)	=	14.74
Residual	448744116	71	6320339.67	Prob > F	=	0.0000
				R-squared	=	0.2934
				Adj R-squared	=	0.2735
Total	635065396	73	8699525.97	Root MSE	=	2514

price	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
mpg	-49.51222	86.15604	-0.57	0.567	-221.3025 122.278
weight	1.746559	0.6413538	2.72	0.008	.467736 3.025382
_cons	1946.069	3597.05	0.54	0.590	-5226.245 9118.382

Note: mpg is mileage covered by the car, price is price of the car in Ghana cedis, weight is the weight of the car.

- a. Interpret the regression results in Table 2 [5 Marks]
- b. Comment on any two model diagnostic tests reported in Table 2 [4 Marks]

Section B (Answer any one question for 20 Marks)

1. With practical examples from literature, explain the following research strategies:
 - a. Survey [10 Marks]
 - b. Experiment [10 Marks]
2. You are required to:
 - a. Distinguish between a probability sampling technique and a non-probability sampling technique. [10 Marks]
 - a. State and practically explain any two probability and two non-probability sampling techniques commonly used in social science research. [10 Marks]

Examiners: Dr. Moses K. Asamoah (Rev.), Senior Lecturer

Dr. Anthony Amoah (Evang.), Senior Lecturer