



**SIR ARTHUR LEWIS COMMUNITY COLLEGE  
ACADEMIC YEAR (2024/2025) – SEMESTER ONE  
END OF SEMESTER EXAMINATION**

**COURSE CODE** : SOW106  
**COURSE TITLE** : RESEARCH METHODS 1 – (Final)  
**LECTURER(S)** : Hugh Maître  
**DATE** : December 17, 2024  
**TIME** : 9 am  
**DURATION** : 1 hour 30 mins.  
**STUDENT ID #** : \_\_\_\_\_

**GENERAL INFORMATION AND INSTRUCTIONS**

- Students must sign **IN** and **OUT** on the examination class list.
- Write your ID number on the question paper.
- Circle the correct answer on the question paper.

**INSTRUCTIONS**

This paper is divided into two (2) sections:

Sections 1 - Multiple Choice Questions (Answer all questions in this section)	80 Marks
Section 2– Short Answer Questions (Answer all questions in this section)	20 Marks

**DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO**

## SECTION 1: MULTIPLE CHOICE QUESTIONS (40 MARKS)

**INSTRUCTIONS: There are forty (40) questions in this section. Do all. Each correct answer is worth 2 marks.**

1. The purpose of research is all the following except:
  - A. Understand and explain phenomena
  - B. Pursue solutions to problems
  - C. Solve specific problems
  - D. What the research seeks to achieve
2. A 'hypothesis' is the research methods term used to describe the expected relationship between variables.
  - A. True
  - B. False
3. Cause/causality is used in science to try to determine the reason for the problem of interest.
  - A. True
  - B. False
4. \_\_\_\_\_ research deals with the data and numbers and relies on statistical analysis to address research questions.
  - A. Quantitative
  - B. Cusation
  - C. Validity
  - D. Qualitative
5. \_\_\_\_\_ research deals with in-depth personal analysis to address research questions.
  - A. Quantitative
  - B. Qualitative
  - C. Operationalization
  - D. None of the listed options
6. Mixed methods, or triangulation, is a type of research that combines qualitative and quantitative techniques into a single study.
  - A. TRUE
  - B. FALSE
7. Open ended questions are those that provide the answers for a respondent to select from in his or her responses to a survey question.
  - A. TRUE
  - B. FALSE
8. A \_\_\_\_\_ scale uses questions that have the option to select a range of answers, such as strongly agree, agree, disagree, or strongly disagree.
  - A. Nominal
  - B. Ratio
  - C. Becker
  - D. Likert

9. When researchers have little knowledge on the research topic what type of interview is conducted?
- A. Unstructured      C. Formal  
B. Semi-structured      D. Structured
10. Quantitative research designs are geared toward statistical associations and prediction.
- A. True  
B. False
11. In this research method, researchers systematically observe and record behaviours without interference.
- A. Case study      C. Interview  
B. Experiment      D. Survey
12. Which research method measures the extent variables change and how well they predict each other?
- A. Correlational      C. Case study  
B. Experiment      D. survey
13. A variable that is presumed to cause a change in another variable is called \_\_\_\_\_.
- A. An intervening variable      C. An independent Variable  
B. A dependent variable      D. A numerical variable
14. Qualitative research is used in all the following circumstances, EXCEPT.
- A. It is based on non-numerical data such as words and pictures  
B. It often uses small samples  
C. It uses the inductive method  
D. It is used when a great deal is known about the topic of interest.
15. Which of the following is not ethical practice in research with humans?
- A. Maintaining participants' anonymity.  
B. Gaining informed consent  
C. Informing participants that they are free to withdraw at any time.  
D. Requiring participants to continue until the study has been completed.
16. What do we call data that is used for a new study, but was collected for earlier research?
- A. Secondary data      C. Qualitative data  
B. Field notes      D. Primary data

17. When each member of a population has an equal chance of being selected, this is called.
- A. A snowball sample            C. A random sample  
 B. A stratified sample            D. A non-random sample
18. Which of the following is an advantage of using a questionnaire?
- A. Probe questions can be asked            C. Interview bias can be avoided  
 B. Respondents can be put at ease            D. Response rates are always high
19. A \_\_\_\_\_ researcher secretly becomes an active member of a group to observe its behaviours.
- A. An overt participant observer            C. A covert participant observer  
 B. A covert non-participant observer            D. None of the listed options
20. Secondary data can include which of the following?
- A. Government statistics            C. Organizational records  
 B. Personal diaries            D. All listed options
21. The 'reliability' of a measure refers to the researcher asking which question?
- A. Does it give consistent results?            C. Can the results be generalized?  
 B. Does it measure what it is supposed to?            D. Does it have face reliability?
22. Validity in interviews is strengthened by all the following EXCEPT.
- A. Building rapport with interviewees  
 B. Multiple questions cover the same theme  
 C. Constructing interview schedules that hold themes drawn from the literature  
 D. Prompting respondents to expand on initial responses
23. All the following are sources of secondary data EXCET.
- A. Official statistics            C. The researcher's research diary  
 B. A television documentary            D. A company's annual report
24. What is the function of literature review?
- A. To provide a theoretical background to the study  
 B. To provide reliable research findings  
 C. To identify a research problem  
 D. All the above
25. Literature reviews help to achieve which of the following?
- A. Brings clarity to a research problem            C. Improve knowledge of research area  
 B. Improve the research method            D. All the above

26. The study population is \_\_\_\_\_.
- A. The number of elements from which information is obtained
  - B. Findings based on the information obtained
  - C. The way elements are selected for the sample
  - D. The group with interest to the study
27. A research instrument can be all the following except:
- A. Not Reliable and valid      C. Reliable but not valid
  - B. Reliable and valid              D. Neither reliable, nor valid
28. All the following are reasons for collecting secondary data except:
- A. Because collecting primary data is difficult, time-consuming, and expensive
  - B. Because you can never have enough data
  - C. Because it makes sense to use it if the data you want already exists in some form
  - D. Because it may not shed light on, or complement, the primary data you have collected
29. A data set with only one mode is called:
- A. Unimodal                          C. Trimodal
  - B. Bimodal                             D. Nonmodal
30. All the following are things that may go wrong when undertaking a research project except:
- A. You run out of time
  - B. You complete the research project on time
  - C. You discover that someone has already done your research
  - D. You change your job, making access to the site of your research difficult
31. An initial tryout, through which you can judge the feasibility of your overall research plans, and then make modifications as necessary is referred to as:
- A. Informal Piloting                  C. Interviewing
  - B. Formal Piloting                    D. A Proposal
32. \_\_\_\_\_ is the using of someone else's words or ideas and passing them off as your own.
- A. Respect for colleagues      C. Confidentiality
  - B. Plagiarism                        D. Anonymity

33. The process by which written (or audio or visual) material is altered by the addition of notes or comments, is called:
- A. Coding
  - B. Labelling
  - C. Annotating
  - D. Choice
34. More objective: provides observed effects (interpreted by researchers) of a program on a problem or conditions.
- A. Qualitative Methods
  - B. Quantitative Methods
  - C. Interviews
  - D. Experiments
35. Which of the following is not a good sampling method?
- A. Simple random sampling
  - B. Stratified random sampling
  - C. Cluster sampling
  - D. Voluntary response sampling
36. In which sampling method is the population first split into groups.
- A. Simple random sampling
  - B. Stratified random sampling
  - C. Cluster sampling
  - D) Voluntary response sampling
37. Which of the following concepts is not characteristic of a research design?
- A. Neutrality
  - B. Validity and Reliability
  - C. Generalization
  - D. Ethics
38. Which of the following best describes ethics in research?
- A. An immoral action that causes mistrust
  - B. Deliberate revelation of confidential information
  - C. A set of moral obligations defining right and wrong
  - D. Bias scientific claims
39. All the following are ethical principles, except:
- A. Honesty
  - B. Objectivity
  - C. Carefulness
  - D. Speculation
40. One of the following is not a type of knowledge, research contributes to
- A. Control
  - B. Descriptive
  - C. Explanation
  - D. Improvement

**SECTION 2: SHORT ANSWER QUESTIONS (20 MARKS)**

**INSTRUCTION: Answer ALL question from this section. Each correct answer is worth 2 marks.**

1. Which type of research requires quantifying findings?

Answer.....

2. A Researcher who breaches confidentiality in the conduct of research does not practice what is specifically called?

Answer.....

**Calculating Variance**

The following values represent student scores on a mathematics examination:

The scores comprise the following 8 values: **5, 10, 12, 15, 18, 20, 25, 30**

STUDENTS	SCORES
Jacob	5
Harry	10
Jane	12
Mary	15
Lenny	18
Joe	20
Peter	25
Prince	30

**INSTRCTIONS:** Calculate the following:

3. The **Mean** of the scores Answer (.....)

- a. Calculate the distance of each **value** from the **Mean for the scores** in the category **Distance of Values**.  
 b. Square the difference that are missing in the category **Squared Difference**

Values	Distance of Values	Squared Difference
4. 5 – ..... =	- 11.875	.....
5. 10 – ..... =	- .....	47.265625
6. 12 - ..... =	- 4.875	23 .765625
7. 4. 15 – ..... =	- 1.875	.....
8. 18 - ..... =	.....	1.265625
9. 20 - ..... =	3. 125	9.765625

10.  $25 - \text{-----} = \text{-----}$

66.015625

11.  $30 - \text{-----} = \text{-----}$

172.265625

12. Calculate the **population variance** to **4** decimal places    **Answer (-----)**