



The University of Fiji
(An Entity of Arya Pratinidhi Sabha of Fiji)



Umanand Prasad School of Medicine & Health Sciences
Department of Nursing
Semester 1, 2026

FINAL EXAMINATION PAPER

BNSC402: RESEARCH METHODOLOGY

Important Instructions to Students:

1. Read the questions and instructions carefully and answer the questions.
2. You are allowed an **extra 10 minutes of reading time** (during this time, you are not allowed to write with a pen) and **180 minutes (3 Hours) to complete this paper**.
3. Silent, non-programmable calculators are allowed, but not supplied.
4. Write all your answers in the answer booklet provided. If you need extra sheets, please ask the supervisor. Write your name, course code, and student identification number in the answer booklet and in the attendance sheet.
5. This paper contains six (6) sections: A, B, C, D, E, and F. All questions are compulsory to answer.
6. Write all your answers legibly. The marker has the right to award zero for answers that are not legible.
7. This is a **Closed Book Examination**. The University views plagiarism, cheating, and dishonest practice as serious offences, and if found, offenders are penalized.

Examination Paper Content (Format):

Section	Question	Content	Marks	Suggested Time
A	1 - 15	Multiple Choice Questions	15	20 minutes
B	16 - 20	True and False Questions	5	5 minutes
C	21 - 30	Matching Questions	10	15 minutes
D	31 - 34	Short Answer Questions	20	30 minutes
E	35 - 42	Discussion Questions	40	50 minutes
F	43 - 57	Case Scenario Questions	30	60 minutes
		TOTAL	120	180 Minutes

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SECTION A: MULTIPLE CHOICE QUESTIONS

(15 marks)

QUESTIONS 1 – 15

Read each question carefully and select the best possible answer.

1. Which data collection technique is most appropriate for exploring the lived experiences of patients with chronic illness?
 - A. Observation checklist.
 - B. Secondary data review.
 - C. Structured questionnaire.
 - D. Semi-structured interview.

2. Which of the following data collection techniques allows researchers to minimize interviewer bias while collecting large amounts of data efficiently?
 - A. Self-administered questionnaires.
 - B. Focus group discussions.
 - C. Participant observation.
 - D. In-depth interviews.

3. A systematic process of gathering information to answer a research question is best described as _____.
 - A. secondary data.
 - B. data collection.
 - C. data analysis.
 - D. primary data.

4. What is the purpose of using a pilot test for a questionnaire in a research proposal?
 - A. To identify and correct problems in the questionnaire.
 - B. To replace the initial questionnaire.
 - C. To reduce the sample size.
 - D. To finalize the results.

5. Which of the following best reflects an appropriate opening question for the qualitative study on clinical learning Experiences of Year 4 nursing students?
- A. Did you enjoy your rural clinical placement?
 - B. Was the supervision adequate in your placement?
 - C. How many procedures did you perform during your placement?
 - D. What were your clinical experiences like during your rural placement?
6. What is the mean in a data set?
- A. The value that appears most frequently.
 - B. The middle value when the data is arranged in order.
 - C. The difference between the highest and lowest values.
 - D. The sum of all values between the highest and lowest values.
7. What is the mode of a data set?
- A. The middle value.
 - B. The average of all values.
 - C. The highest value in the dataset.
 - D. The value that occurs most frequently.
8. What is the main purpose of a frequency table?
- A. To calculate the average of the data.
 - B. To compare two (2) different data sets.
 - C. To arrange the data in alphabetical order.
 - D. To summarize how often each value occurs.
9. Which of the following is commonly identified as a challenge in designing research tools?
- A. Printing the questionnaire.
 - B. Submitting assignments on time.
 - C. Writing the participants' names correctly.
 - D. Ensuring questions are clear and relevant.

10. Why is it important to ensure clarity when designing research tools?
- A. To make the tool longer.
 - B. To impress the participants.
 - C. To reduce the number of questions.
 - D. To ensure participants understand and respond accurately.
11. When participants freely agree to participate in the research after fully understanding the study, it is best described as _____.
- A. coercion.
 - B. informed consent.
 - C. power relationship.
 - D. involuntary participation.
12. A clinical instructor tells the students that if they don't participate in her research, their clinical marks will be affected.
Which ethical principle is most violated in this scenario?
- A. Justice.
 - B. Beneficence.
 - C. Confidentiality.
 - D. Voluntary participation.
13. A situation where one person has authority over another in research is best described as _____.
- A. friendship relationship.
 - B. mutual understanding.
 - C. power relationship.
 - D. all of the above.
14. Why is accurate data collection important in nursing research?
- A. It ensures findings are valid and reliable.
 - B. It shortens the research process.
 - C. It reduces the need for analysis.
 - D. It eliminates ethical approval.

15. How does data sorting help researchers during data analysis?

- A.** It replaces statistical analysis.
- B.** It eliminates the need for data entry.
- C.** It reduces the amount of data to be analysed.
- D.** It organizes data to make the patterns easier to identify.

SECTION B: TRUE AND FALSE QUESTIONS

(5 marks)

QUESTIONS 16 – 20

Write 'True' or 'False' beside each question to indicate your correct answer.

16. Accurate data collection impacts the validity of research findings.
17. Data sorting is unnecessary if the data has already been collected correctly.
18. Ethical research mostly focuses on protecting institutional reputation rather than the individual participants' rights.
19. Obtaining approval from a Research Ethics Committee (for example, the Fiji National Research Ethics Review Committee) is optional if the study poses minimal risk.
20. In research, vulnerability often means an increased likelihood of being wronged or harmed due to reduced autonomy, dependence, or unequal power.

SECTION C: MATCHING QUESTIONS**(10 marks)****QUESTIONS 21 – 30****Match the items in Column A with the best answers in Column B.**

COLUMN A		COLUMN B	
21.	A registered nurse uses findings from a recent study on wound management techniques to dress her patient's complex wound, resulting in faster healing.	A.	Strengthen clinical decision-making.
22.	The Lautoka Aspen Medical Hospital introduces a new infection-control protocol informed by multiple research studies.	B.	Credibility
23.	A nursing educator teaches students using updated research findings to enhance patient outcomes.	C.	Reliability of methods.
24.	A registered nurse refers to research evidence to guide the team's decision in choosing the best medication for a patient's condition.	D.	Improve patient care.
25.	A national midwifery body updates its maternal guidelines after reviewing recent research findings on safe motherhood.	E.	Applicability to a specific population.
26.	A registered nurse reviews a study and assesses whether the data collection methods and tools were appropriate and produced accurate results.	F.	Validity.
27.	A researcher examines whether the study findings can be applied to patients in a rural I -Taukei community setting.	G.	Inform policies and guidelines.
28.	A student nurse evaluates whether the study's authors are trustworthy and if the study was conducted ethically and transparently.	H.	Support professional accountability.
29.	A clinical preceptor questions whether the study results on recent wound management techniques truly measure what they intended to measure, before teaching the students.	I.	Support evidence-based practice (EBP).
30.	A clinical team at the CWM Hospital assesses whether the conclusions of the diabetic amputation study are true and supported by the data presented.	J.	Relevance to nursing practice.
		K.	Enhance nursing education and practice.

SECTION D: SHORT ANSWER QUESTIONS

(20 marks)

QUESTIONS 31 – 34

Answer all the questions. Your responses should demonstrate understanding and application of relevant concepts.

31. Distinguish at least two (2) key characteristics of each for quantitative and qualitative research in nursing. **(5 marks)**

The Labasa Hospital clinical team implements a new clinical guideline on hypertension management, based on a research study conducted in another international country.

32. Differentiate two (2) strengths and two (2) weaknesses of applying this research in the local nursing context. **(5 marks)**

33. Interpret data collection, and describe the difference between analysing data in quantitative research and qualitative research. **(5 marks)**

34. Define data interpretation, and explain the difference between interpreting data in qualitative research and interpreting data in quantitative research. **(5 marks)**

SECTION E: DISCUSSION QUESTIONS

(40 marks)

QUESTIONS 35 – 42

Answer the following questions.

35. Critically evaluate how ethical principles (autonomy, beneficence, non-maleficence, and justice) influence the selection of research topics in nursing. In your answer, argue whether all researchable topics are suitable for investigation. **(10 marks)**

36. Analyse the mixed-method approach in nursing research. In your answer, examine the importance of integrating this approach in enhancing the understanding of patient care. **(10 marks)**

37. Evaluate how a nurse researcher should respond when faced with an ethical dilemma in nursing practice. In your discussion, provide an example, and explain how the dilemma should be identified, the possible options considered, and how a final decision should be made and justified to ensure the protection of participants. **(10 marks)**

Refer to the dataset below on stress levels among nursing students during their clinical placements at the Lautoka Aspen Hospital Emergency Department, to answer questions 38 to 42.

Statement: *"I feel stressed during clinical placement."*

Scores: 5, 4, 3, 4, 2, 5, 3, 4, 2, 3.

(Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Not Sure; 4 = Agree; 5 = Strongly Agree)

You are required to analyze and interpret the data by answering the following questions.

- 38.** How many students participated in the study? **(1 mark)**
- 39.** Calculate the mean. **(1 mark)**
- 40.** Identify the mode. **(1 mark)**
- 41.** Describe the pattern/trend in the data. **(3 marks)**
- 42.** Provide two (2) interpretations of what the findings suggest about stress levels. **(4 marks)**

QUESTIONS 43 - 57

Answer the following three (3) case scenario questions.

CASE SCENARIO 1:

Nadi Hospital has recently reported an increase in patient complaints regarding waiting times and poor communication from nurses. The Nurse Unit Manager (NUM) wants to conduct a study to understand the issue and improve patient care.

In your answer, you are required to formulate a research approach to address the following.

- 43. Propose a research question. (2 marks)**
- 44. Select an appropriate research method. (2 marks)**
- 45. Justify your choice by discussing the importance of the selected method(s). (2 marks)**
- 46. Suggest one data collection method for each type of research data. (2 marks)**
- 47. Explain how the findings could improve patient care. (2 marks)**

CASE SCENARIO 2:

The Fiji Human Immunocompromise Virus (HIV) Surveillance Report 2025 provides a full analysis of HIV trends, testing, and care in Fiji. The report highlights a significant surge in HIV cases, with 2,016 new cases in 2025, the highest recorded since surveillance started. This rise is attributed to both improved transmission and expanded testing services.

The epidemic is mainly focused among young adults aged 20-34 years, who account for the majority of cases. Geographically, the Central Division brings the highest burden, followed by the Western Division. Main transmission courses include injection drug usage and sexual transmission, although a large percentage of cases remain unknown due to inadequate data.

The report also identifies major challenges such as late diagnosis of HIV, gaps in linkage to care, and inadequate data on admission routes.

Despite improvements in testing and treatment (including Anti-Retroviral Therapy), there is a need to strengthen early detection strategies, prevention programs, and community-based interventions.

Overall, the report emphasizes the importance of data-driven, evidence-based public health responses to improve outcomes and reduce HIV transmission in the country.

Critically appraise the findings of the report and discuss how they can be applied in nursing practice.

In your answer, you are required to:

- 48. Evaluate two (2) strengths and two (2) limitations of the reported data. (4 marks)**
- 49. Assess the credibility and usefulness of the findings for decision-making. (2 marks)**
- 50. Discuss how clinical and community/public health nurses can use these findings. (2 marks)**
- 51. Justify how the report can improve HIV prevention and patient care in Fiji. (2 marks)**

CASE SCENARIO 3:

A registered nurse plans to conduct a research study to investigate why patients with uncontrolled diabetes attending the Special Outpatient Department (SOPD) in Lautoka Health Centre, are not adhering to their medications and follow-up visits. The nurse decides to use both a survey and interviews to collect data.

You have been tasked to assist the nurse in designing a data collection tool for this study. In your answer, include the following:

- | | |
|---|--------------------|
| 52. Develop five (5) demographic questions for participants. | (2.5 marks) |
| 53. Formulate five (5) survey questions suitable for quantitative data using a Likert scale. | (2.5 marks) |
| 54. Create one (1) opening interview question for qualitative data. | (1 mark) |
| 55. Create two (2) core interview questions. | (2 marks) |
| 56. Create one (1) probing interview question. | (1 mark) |
| 57. Create one (1) closing interview question. | (1 mark) |

THE END