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UNIVERSITY EXAMINATIONS 2023/2024

SECOND YEAR THIRD SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN NURSING

NNU 3234: RESEARCH METHODOLOGY

DATE: APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS: *All questions are compulsory*

Ensure that all your answers are properly numbered

Part 1 Multiple Choice Questions (MCQs): Write the correct answer on the space provided in the answer booklet. Each MCQ is one mark.

Part 11: Short Answer Questions-Answer questions following each other on the answer booklet

Part 111: Long Answer Questions-Answer the questions on the answer booklet.

SECTION A: Multiple Choice Questions (20 MARKS)

1. When studies analyze existing clinical records, survey data, or population data rather than collecting new information from study participants, this is known as:
 - a) Primary analysis
 - b) Secondary analysis
 - c) Tertiary analysis
 - d) In-depth analysis
2. A ...is the careful compilation and summary of all publications relevant to a particular research topic
 - a) Meta-analysis
 - b) Literature review

- c) Systematic review
 - d) Selective review
3. Which of the following describes a single blind experiment?
- a) They help reduce placebo effect
 - b) They reduce research bias
 - c) They are experiments in which the subjects don't know whether they are receiving a real or a fake treatment
 - d) None of the above
4. In what type of study does a researcher study a population at one point in time?
- a) Laboratory observation
 - b) Cross-sectional study
 - c) Case-control study
 - d) Longitudinal study
5. Ethics in Nursing Research has always been an issue when it comes to the identity of the respondents. When the topics of research are very sensitive, which of the following rights of individual participants must be ensured when the researcher cannot link the information given by the respondent from the source of the information?
- a) Confidentiality
 - b) Anonymity
 - c) Propability
 - d) Volunteerism
6. How can a researcher determine if a test has good validity?
- a) It produces the same result when it is given at different times to the same group of people
 - b) It produces the same result no matter which version of the test is used
 - c) It measures what it is supposed to measure
 - d) All of the questions on it can be answered accurately by the subject
7. The _____ is controlled by the experimenter, while the _____ represents the information collected and statistically analyzed by the experimenter.
- a) Dependent variable; independent variable
 - b) Independent variable; dependent variable
 - c) Placebo effect; experimenter bias
 - d) Experiment bias; placebo effect

8. Married-unmarried, child-adult, male- female is.....
- Ordinal scale
 - Interval scale
 - Ratio scale
 - Nominal scale
9. The social desirability bias can affect which of the following?
- The validity of a test
 - The reliability of a test
 - Self-report data
 - Significance of the test
10. Sampling error can be attributed to following except:
- Sampling procedure
 - Research design
 - Sample design
 - Recording
11. Which of the following is not ethical practice in research with humans?
- Maintaining participants' anonymity
 - Gaining informed consent
 - Informing participants that they are free to withdraw at any time
 - Requiring participants to continue until the study has been completed
12. The significance level.....
- Is set after a statistical test is conducted
 - Is always set at 0.05
 - Results in a p-value
 - Measures the probability of rejecting a true null hypothesis
13. The Literature Review will identify the work of previous researchers and it will..
- Ignore their methodology
 - Evaluate their methodology
 - Not be concerned with their methodology
 - Will copy their methodology
14. What does "triangulation" involve?
- Using three research study designs in one study
 - Using three research theories in one study
 - Using different data collection methods in one study

- d) Conducting research in three different hospitals
15. Asking in a questionnaire for gender gives you...
- a) Ordinal data
 - b) Nominal data
 - c) Interval data
 - d) Ratio data
16. What is the first step a researcher should take when designing a questionnaire?
- a) Select specific question topics
 - b) Choose question and answer types
 - c) List the topics that the survey instrument must cover
 - d) None of the above
17. provides essential information about research projects to potential study participants so that they can make a reasoned decision about whether to enroll in the study
- a) Surveys
 - b) Interviews
 - c) Informed consent statements
 - d) Research protocols
18. The common characteristic that both experimental and quasi-experimental studies should possess is.....
- a) Manipulation
 - b) Control groups
 - c) Randomization
 - d) None
19. Observation checklist is the.....of data collection
- a) Tool
 - b) Method
 - c) Manual
 - d) Guideline
20. As a nurse, you know the following functions of theoretical framework, except:
- a) Specifies relationship among the concepts
 - b) Give a graphic view of the data
 - c) Clarifies the concept on which the study is built
 - d) States assumptions

SECTION B: SHORT ANSWER QUESTIONS (30 MARKS)

- 1) Outline two ways of ensuring validity and reliability of a research tool?(2marks)
- 2) Describe the 2 main sampling techniques in research (6marks)
- 3) Explain the significance of a conceptual framework in a research (2 marks)
- 4) Suggest four ways which researchers can apply to control for the effects of extraneous variables research (4 marks)
- 5) State 4 guiding principles to consider when selecting a research topic (4 marks)
- 6) A lecturer noticed that some students on her course commented that they were better able to recall information if they could read the information rather than listen to it in lectures. Write a hypothesis for this observation (2 marks)
- 7) State four uses of a work plan in implementation in nursing research (4 marks)
- 8) Identify four ways of dealing with ethical issues when conducting research (4 marks)

SECTION C: LONG ANSWER QUESTIONS (20 MARKS)

- 1) Before data collection a nurse conducted a pilot study with a group of 5 patients under home-based care management and 5 patients in hospital management. State reasons (5 marks)
- 2) A group of children enrolled in an immunization period from 2 villages were followed for a period of 5 years to assess the effect of immunization on children's' health status.
 - a. Describe this type of research (5 marks)
 - b) State five limitations of this type of research design (5 marks)
 - c) The researcher will seek informed consent from parents/guardians before data collection.
 - d) State four objectives of informed consent in this research (5 marks)