General Instructions:

* The questions are 47 MCQs
* Read each question carefully and choose the most appropriate response
* Shade the circles that reflect the chosen answers in the computerized sheet using 2 HB pencil
* Consider the time period; if you are unable to answer a question, do not give the question that much time, proceed to the next question.
* MCQs: 47 (47 X 1 = 47, then the total grade will be converted to 40%)

1. Which one of the followings is a responsibility of a bachelor-prepared nurse with respect to research?
2. Independent conduction of a research study
3. Conduct statistical analysis required for a research study
4. **Indentify researchable nursing problem**
5. Write a research report for the purpose of publication
6. A researcher is planning to conduct a study about the effect of alcohol consumption of pregnant women on infants’ weight. The researcher requested information about prevalence of alcohol use among women. By this the researcher is looking for
7. Whether or not the research problem is ethical
8. Whether or not the main concepts are measurable
9. Whether or not the problem is within the researcher interest
10. **Feasibility of the problem in terms of subjects availability**
11. The strongest source of evidence for nursing practice is
    1. Advice / information from authority figures
    2. Personal experience
    3. Tradition based knowledge and skills
    4. **Findings of rigorous research**
12. Which source of information does the following statement reflect? “I seek advice from a physician to make clinical-related decisions”
13. Trial and error
14. **Authority**
15. Assembled information
16. Tradition
17. Literature review assists researchers in the following except
    1. **Determining the appropriate statistical analysis**
    2. Identifying gaps and consistencies in the body of research
    3. Identifying data collection methods
    4. Interpreting the study’s findings
18. A research article says that "before distributing the questionnaires, the participants were assured that identifying data would not be recorded". This statement reflects the researcher's attempt to maintain
19. Confidentiality of the data
20. **Anonymity of the participants**
21. Participants right for information disclosure
22. Participants’ human dignity
23. The following research design has the following characteristics except

R O1 X O2

R O1 - O2

* 1. Control group
  2. Random allocation of subjects into groups
  3. **Selection bias**
  4. Manipulation of the intervention

1. Which one of the following statements about professional conferences is correct?
   1. It takes approximately two years to present research findings in a conference
   2. Presentation of research findings in a conference is limited to oral presentation
   3. Professional conferences accept the research report without being peer-reviewed
   4. **Professional conferences promote rapid dissemination of research findings**
2. Based on research findings, a group of nurses is working on a protocol of placing mechanically ventilated patients on a prone position 4 times a day. What kind of research utilization does the group of nurses practice?
   1. Indirect research utilization
   2. **Direct research utilization**
   3. Persuasive research utilization
   4. Conceptual research utilization

(Q 10-12). Based on the theoretical assumption that “perceived barriers to a given health action negatively influences adoption of the health action”; a researcher hypothesised that “MI patients who exercised regularly would perceive less barriers to exercise than those who did not”

1. Which approach did the researcher use to formulate the hypothesis?
   1. Critical thinking
   2. Logical reasoning
   3. Inductive reasoning
   4. **Deductive reasoning**
2. The hypothesis is
   1. Null
   2. **Directional**
   3. Non directional
   4. Statistical
3. The independent variable in the hypothesis is
   1. MI patients
   2. Exercise
   3. Health action
   4. **Perceived barriers**
4. Which research paradigm does the following research situation reflect “values are desirable and the researcher interacts with the subjects”?
   1. **Qualitative**
   2. Positivist paradigm
   3. Triangulation
   4. Quantitative
5. Which one the following statements about structured method of data collection is not correct?
   1. **A structured method is appropriate for in-depth examination of a phenomenon**
   2. A structured method can be easily quantified
   3. A structured method limits participants’ opportunity to elaborate on their answers
   4. A structured method includes fixed questions with fixed responses
6. Which of the following statements about reliability is correct?
   1. Reliability is the extent to which an instrument measures what it intends to measure
   2. Reliability increases as the heterogeneity of the instrument’s items increases
   3. **Reliability increases as the number of items of the instrument increases**
   4. Reliability increases as the subjects are more homogeneous
7. A dean of a college of nursing attempted to describe the relationship between the students’ grade average of their bachelor degree and their academic achievement defined as whether or not they successfully complete their master’s degree. By this process, the dean was evaluating the
   1. Concurrent validity
   2. Content validity
   3. **Predictive validity**
   4. Construct validity
8. Measurement is
   1. **Operationalization of the study variables**
   2. Conceptually define the study variables
   3. Everything the researcher does to control extraneous variables
   4. Describing a phenomenon in a ell-standardized format
9. A researcher administered a newly-developed anxiety scale to a group of MI patients with high level of anxiety, and at the same time to a group of healthy person. He did a statistical analysis and found that anxiety of MI patients is significantly greater that that of the healthy group. In this procedure, the researcher was evaluating
   1. Concurrent validity
   2. Content validity
   3. Predictive validity
   4. **Construct validity**
10. Informed consent indicates that the researcher should provide and assure the research participants about the following except
    1. Purpose of the study
    2. Significance of the study for the population
    3. The data will be maintained confidential
    4. **That the researcher will provide monetary compensation for harm/injury**
11. In the research report of a completed study and in the conclusion part, the researcher usually
    1. Addresses the limitations of the study
    2. Presents the findings in a narrative format
    3. **Attempts to generalize the findings**
    4. Compares the study findings with findings of previous studies
12. A researcher examined the effect of placing mechanically ventilated patients on prone position 30 minutes for 4 times a day on PaO2 and length of stay. Which type of research did the researcher conduct?
    1. **Outcomes research**
    2. Basic research
    3. Qualitative research
    4. Exploratory research
13. The researchers most often use the world “Should” in what part of the research report of a completed study
    1. Limitations
    2. Conclusion
    3. **Implications**
    4. recommendations
14. Which one of the following statements about presentation of research findings in a written report is correct?
    1. The findings of the study is presented in narrative format only.
    2. The study findings should be written in present tense
    3. The researcher can address his/her opinion in the findings part of the research report
    4. **Interpretation of the findings can be made in the discussion section of the research report**
15. Which design does permit the researcher to compare between performance of a group of students in the mid-term and final exam.?
    1. Prospective design
    2. **Within group design**
    3. Between group design
    4. True experimental design
16. Which one of the following statement about literature review is not correct?
    1. Literature review is used to develop the conceptual framework of the study
    2. The literature review should include the researcher opinion
    3. **It should rely on secondary resources**
    4. In the literature review, the researcher can analyze inconsistent findings of previous studies
17. Content validity of a questionnaire can be evaluated based on responses of
    1. **A panel of experts in the area of interest**
    2. Two different groups of subjects with respect to the area of interest
    3. One group who completed the questionnaire at two occasions
    4. Research assistants after a session of training
18. A highly structured questionnaire, as a method of data collection, can be used when
    1. **The researcher has prior adequate knowledge about the variable of interest**
    2. The researcher needs to obtain detailed information about the variable of interest
    3. Subjects of the study have low educational level
    4. Subjects of the study are dispersed over a wide geographical area
19. Which method of data collection is most appropriate in exploratory research
    1. Highly structured interview
    2. **Non-structured interview**
    3. A likert-type questionnaire
    4. A semantic differential scale
20. Which one of the following statements about measurement is not correct?
    1. Measurement is assigning number to attributes/objects according to specific rules
    2. Error of measurement increases as research subjects show social desirability
    3. The true score of a concept being measured is always hypothetical
    4. **An observed score that is obtained by a reliable measure is exactly the true score**

(Q 30-34). A researcher examined differences in college level achievement between graduates of a private and a public secondary schools. He found that the means of Grade Points Average as an indicator of achievement on the college level were 67 (SD=5) and 72 (SD=8.6) for students coming from private and public schools respectively.

1. The independent variable was measured on
2. **Nominal leve**l
3. Ordinal level
4. Interval level
5. Ratio level
6. The dependent variable was measured on
   1. Nominal level
   2. Ordinal level
   3. Interval level
   4. **Ratio level**
7. The appropriate statistical test the researcher will use to examine the difference is
8. Chi square
9. Pearson correlation
10. **Independent t test**
11. One way ANOVA
12. Which sample has more variability regarding the Grade Point Average
13. The total sample
14. Sample coming from private high school
15. **Sample coming from public high school**
16. Both sample have same variability
17. In the public school related sample, the score of a student who had a score of 2 SDs above the mean is

1. 54.8
2. 45.8
3. **89.2**
4. 98.2
5. The appropriate statistical test to determine the relationship between two variables that were measured on continuous level (interval/ratio) is
6. Chi square
7. One way ANOVA
8. Paired t test
9. **Pearson product-moment**
10. Which of the following is a function of inferential statistics?
11. **Estimating a population parameter from the sample**
12. Obtaining the SD of a sample
13. Calculating the standard error of the sample’s variable
14. Obtaining frequency distribution of a variable
15. When a researcher sets .05 to achieve a statistical significance difference between two groups on a specific variable; he is controlling for
16. Internal validity
17. External validity
18. Type II error
19. **Type I error**
20. Which of the following statements about the Mean is not correct?
21. The mean is an indicator of central tendency
22. **The mean is an indicator of variability**
23. It is reported when the variable is normally distributed
24. It is sensitive to all values of the variable

1. A researcher examined the difference between group A and group B in stress. Which of the following could be a null hypothesis?

1. There is a significant difference in stress between group A and group B
2. Stress of group A is significantly greater than stress of group B
3. Stress of group A equals stress of group B
4. Stress of group A is significantly associated with stress of group B

(Q40-44). Read the following script “Despite the positive impact of regular exercise on physical and psychosocial function of MI patients, participation rates of those patients in exercise programs are discouraging. Only 15-21% of those who are eligible for cardiac rehabilitation participate. Based on Janis and Mann decisional conflict theory, it was hypothesized that “the exercise benefit-barriers interaction and stress predict exercise participation”; the researcher used the perceived stress scale (PSS) to measure stress. The PSS was evaluated using factor analysis that showed adequate factor loading of the scale 10 items.

1. The research problem in this script is
2. MI
3. **Exercise participation**
4. Psychosocial function
5. Stress
6. The dependent variable is

1. Stress
2. **Exercise participation**
3. Benefits -barriers interaction
4. MI
5. The hypothesis lacks
6. Independent variable
7. Dependent variable
8. **Population**
9. Nothing is missing
10. The hypothesis is
11. Simple
12. Directional
13. **Complex**
14. Correlational
15. It seems that the PSS was tested for
16. Concurrent validity
17. **Construct validity**
18. content validity
19. Predictive validity
20. The following design controls for the following except

O1 X O2

O1 - O2

1. **Selection bias**
2. History
3. Maturation
4. Measurement effect
5. The extent to which you are certain that the change in the dependent variable is related to changes in the independent variable is
6. Instrument reliability
7. Instruments validity
8. **Internal validity**
9. External validity
10. A researcher conducted a t test and the result was ( t = 4.33, p<.02). What is the appropriate interpretation of the result?
11. The difference is not significant: the null hypothesis should be rejected
12. The difference is not significant: the null hypothesis should be accepted
13. **The difference is significant: the null hypothesis is rejected**
14. There is no enough information to draw a conclusion.