



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
BACHELOR OF SCIENCE IN NURSING
END OF JANUARY-APRIL SEMESTER 2023 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 324 COMMUNITY HEALTH NURSING III

DATE: 6TH APRIL 2023

Duration: 2 HOURS

Start: 11:15 AM

Finish: 1:15 AM

INSTRUCTIONS

- 1.** This exam is out of 70 marks
- 2.** This Examination comprises **THREE** Sections. Section I: Multiple Choice Questions (20 marks) Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
- 3.** Answer **ALL** Questions.
- 4.** Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION A: MULTIPLE CHOICE QUESTIONS

1. The rate of a disease in excess of the usual or expected frequency is referred to as: -
 - a) Pandemic
 - b) Epidemic
 - c) Endemic
 - d) Epidemiology

2. The type of outbreak where an infectious agent is communicable from person to person is :-
 - a) Point source
 - b) Continuing common source
 - c) Common source
 - d) Propagated

3. The following study design is best suited for testing hypotheses versus generating hypotheses: -
 - a) Cross-sectional
 - b) Prospective cohort
 - c) Retrospective cohort
 - d) Case-control

4. Point prevalence is: -
 - a) The number of existing cases of a disease at a point in time
 - b) Useful for evaluating the effect of exposure
 - c) The proportion of existing cases of a disease during an interval of time
 - d) The number of new cases of a disease over a period of time

5. Infant mortality is calculated as :-
 - a) Number of deaths of infants under one month of age
 - b) Number of deaths of infants under one year by 1000 total live births
 - c) Number of deaths of infants under one year of age in one calendar year by 1000 of total live births
 - d) Number of deaths of infants of death of children under five in one calendar year

6. Fluoridation of water is an example of: -
 - a) Primary prevention strategy
 - b) A secondary prevention strategy
 - c) A tertiary prevention strategy
 - d) Primordial prevention strategy

7. The direction of time in a case control study is: -
- Prospective
 - Retrospective
 - At one point in time
 - Introspective
8. The time taken for a disease to manifest through a laboratory test is referred to as: -
- Incubation period
 - Window period
 - Latent period
 - Infectious period
9. The study design appropriate for determining the incidence of disease is:-
- Ecological study
 - Cross-sectional study
 - Case-control study
 - Cohort study
10. The ratio between the incidence of disease among exposed and non-exposed is called: -
- Causal risk
 - Attributable risk
 - Relative risk
 - Odds ratio
11. The sources of demographic data include: -
- Census
 - Cross-sectional studies
 - Experimental studies
 - Media
12. Indicate if the following statements are true or false : -
- The Total fertility rate is the rate or ability to carry pregnancy to term
 - The crude birth rate indicates the number of live births of children below 28 days per 1000 mid-year population in a given year.
13. Disability-adjusted life years (DALYs) provide a similar summary measure of: -
- The years of potential life lost due to premature birth
 - The years of productive life lost due to disability
 - The life expectancy
 - The prognosis of a disease

For questions 14 and 15 match choices in column A with the characteristics in column B : -

COLUMN A

- a) Incidence
- b) Prevalence

COLUMN B

- i. Measure of risk.
- ii. Generally preferred for chronic diseases without clear date of onset.
- iii. Used in calculation of risk ratio
- iv. Affected by duration of illness

16. A true statement about the different types of data is: -

- a) Discrete data has a true decimal
- b) Continuous data reflects a number obtained by counting with no decimal.
- c) Interval scale is data where order and distance implied.
- d) Ratio scale has a true zero.

17. A disease that is earmarked for eradication is: -

- a) Cholera
- b) Measles
- c) Neonatal tetanus
- d) Guinea worm disease

18. A good population screening program requires: -

- a) Suitable disease, Suitable test
- b) Suitable program, Suitable agent
- c) Suitable disease, Suitable agent
- d) Suitable test, Suitable agent

19. The physiological ability of individuals or couples to have children is referred to as: -

- a) Fecundity
- b) Crude Fertility
- c) Morbidity
- d) Total fertility rate

20. The research design that can generate the highest level of evidence is : -

- a) Cohort study
- b) Cross-sectional study
- c) Experimental study
- d) Case control study

SECTION B: SHORT ANSWER QUESTIONS (SAQS) (30 marks)

1. Describe three (3) uses of an epidemiological curve (6 marks)
2. Describe two (2) measures of dispersion that one can use to analyse data with extreme variable/outliers (4 marks)
3. Differentiate between the following terms as used in experimental study design: - (3 marks)
 - i. Blinding and manipulation
 - ii. Randomization and random allocation
4. 200 women with risk factors for breast cancer have been referred to a breast surgeon for screening. Of these women, 90 have palpable lumps and 80 of these are found to be cancerous. An additional 20 women without palpable lumps are also diagnosed with breast cancer: -
 - I. Construct a 2 by 2 table (3 mark)
 - II. Calculate sensitivity of the test (2 marks)
 - III. Calculate specificity of the test (2 marks)
5. Describe the phases of demographic transition (6 marks).
6. Explain the iceberg concept as used in disease causation (4 marks)

SECTION C: LONG ANSWER QUESTION (LAQS) (20 marks)

1. You have been appointed as part of the task force to conduct a study and establish the outcome of shisha use over a five-year period among adolescent youth in Nairobi.
 - a) Name the study design you are going to employ for this design and give reasons(2 marks)
 - b) Discuss the steps you will undertake to design the study named above (8 marks)
 - c) Outline the advantages and disadvantages of the study you have named above (10 marks)