MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
SECOND YEAR SECOND TRIMESTER

SCHOOL OF HEALTH SCIENCE
DIPLOMA IN NUTRITION AND DIETICS

COURSE CODE: DND 1202
COURSE TITLE: NUTRITION EPIDEMIOLOGY

DATE: 21/4/2023   **TIME: 1430-1630 HRS**

INSTRUCTION

- THERE ARE **THREE** SECTIONS: SECTIONS **A, B AND C**
- ANSWER **ALL** MULTIPLE QUESTIONS IN **SECTION A** AND ALL SHORT ESSAYS IN **SECTION B** AND **ANY TWO LONG** QUESTIONS IN **SECTION**

1. The person considered to be a father of field epidemiology is?
   A. William Farr
   B. James Graunt
   C. John Snow
   D. Hippocrates

2. By which means does Epidemiology use to quantify the distribution and determinants of health events in groups of people rather than individuals
   A. Biostatistical tools and methods
   B. Epidemiological tools and methods
   C. Research methods and tools
   D. Quantitative method and tools

3. The following are Health related events **EXCEPT?**
   A. Death
   B. Diseases
   C. alcohol consumption
   D. utilization of health services

4. Select the best definition of applied epidemiology.
   A. To give an account of the natural history and prognosis of a disease
   B. *Describe the application or practice of epidemiology to address public health issues*
   C. To evaluate new preventive and therapeutic measures and new modes of health care delivery
   D. The impact of cost sharing on health care delivery system

5. The number of health events such as the number of cases of malnutrition in a population is called
   A. frequency
   B. occurrence
   C. disease pattern
   D. Determinants

6. What is the best term in this activity: Compare food histories between persons with Staphylococcus food poisoning and those without?

   A. Distribution
   B. Determinants
   C. Application

D. occurrence

7. Compare frequency of worms among school going children with frequency in general population. The right epidemiological term for this statement is-?
   A. Determinants
   B. Application
   C. Frequency
   D. Distribution
8. Cross-sectional or Prevalence Studies is-?
   A. Data are collected on the whole population at a single point in time
   B. Data are collected on the whole population at for some time
   C. Data are collected on the part of population at a single point in time
   D. Data are collected on the whole population for three years at point in time
9. A type of epidemiology that focuses on relationship between our diet and health is -?
   A. Dietary epidemiology
   B. Food epidemiology
   C. Nutrition epidemiology
   D. Descriptive epidemiology
10. Choose the appropriate core function to this statement? "Developing guidelines/criteria about which patients coming to the clinic should be screened (tested) cancer"
   A. Analytic studies
   B. Evaluation
   C. Linkages
   D. Policy development
11. Interviewing women with underweight children to identify their feeding habits is?
   A. Field investigation
   B. Analytic studies
   C. Evaluation
   D. Linkages
12. Among the following the following are frequency measures:
   A. Birth rate
   B. percentage
   C. Mortality rate
   D. Prevalence
13. The units for the quantity you calculated for prevalence can be expressed as:
   A. cases per 100 persons
   B. percent

C. cases per person-year

D. cases per person per year

14. In a population of 10,000 there are 4 cases of malnutrition: calculate the prevalence

    A. 0.0004 %

    B. 0.4%.

    C. 0.004%

    D. 0.04%

15. The following are among the goals of study design EXCEPT

    A. Represent desired population

    B. Non-Evaluate the intervention

    C. Allow appropriate determination of exposure/outcome

    D. Eliminate and reduce bias

16. The statement that describes the term Bias in epidemiology is?

    A. systematic error that results in an incorrect or invalid estimate of the measure of association

    B. systematic error that results in a correct or invalid estimate of the measure of association

    C. systematic error that results in a correct or valid estimate of the measure of association

    D. nonsystematic error that results in an incorrect or invalid estimate of the measure of association

17. Random and systematic errors are measures of?

    A. Sensitivity

    B. Validity

    C. Efficiency

    D. Bias

18. Randomization. Blinding, Placebo-control and Ethical considerations (informed consent) are key features of?

    A. Cohort study

    B. Case control

    C. Clinical trials

    D. Quasi experimental

19. Pattern refers to the occurrence of health-related events by?

    A. Number of cases of a disease in relationship of that number to the size of the population

    B. Time, place and person

    C. Factors which may be responsible for increasing the risk (risk factor)

    D. Knowledge gained by the studies to community-based practice.

20. All are true about case control studies, EXCEPT:

    A. Relative risk can be calculated

    B. Less expensive

    C. Suitable for rare diseases

    D. Backward study

SECTION B

○ **ANSWER ALL QUESTIONS IN THIS SECTION**

1. State three (3) areas that involve research in epidemiology of nutritional determinants? (**6marks**)
2. Outline four (4) goals of nutrition epidemiology(**4marks**)
3. Draw epidemiologic disease model **5 marks**
4. List four demographic factors which may be related to risk of illness, injury, or disability? - **4 marks**
5. Differentiate between prevalence and incidence- **4 marks**
6. Explain steps of case control study- **5 marks**
7. Describe three (3) essential characteristics we look for in a descriptive study-**6 marks**
8. Describe the two types of populations in epidemiology-**6 marks**

SECTION C (40MARKS)

○ **SELECT AND ANSWER ONLY TWO (2) QUESTIONS IN THIS SECTION**

1. Population screening is an important part of preventive medicine.
   a). Define population screening from the nutritional perspective-2 marks
   b).Discuss two types of population- 8 marks
   c) . Describe with any three most of common conditions that screened in Public Health-**10 marks**
2. Epidemiological study designs are very important especially is disease epidemics
   a). Discuss Cohort versus case-control-**10 marks**
   b). Differentiate between Retrospective and prospective cohort-
   10 marks
3. Discuss the uses of Epidemiology and the information generated by epidemiologic methods (20 marks)

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