



Technical University of Mombasa

Faculty of Applied and Health Sciences

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
MEDICAL LABORATORY SCIENCES
BMLS 13M

AML 4313 : EPIDEMIOLOGY

SEMESTER EXAMINATION

APRIL 2014 SERIES

2

HOURS

Instructions to candidates:

This paper consists of **TWO** sections **A** and **B**

Section A -Contains MCQS, Answer **ALL** questions in **Section B**.

SECTION A - MCQs - (30marks)

1. Which of the following is an example of a non modifiable risk factor for coronary heart disease
 - a) Diet high in cholesterol
 - b) Hypertension
 - c) Alcohol intake
 - d) Physical inactivity
 - e) Age above 50 years
2. Which of the following are non modifiable risks factors for diabetes mellitus ?
 - a) Diet high in cholesterol
 - b) Male sex
 - c) Alcohol intake
 - d) Genetic factors
 - e) Physical inactivity
3. Which of the following terms describes the time from infection to development of symptomatic disease
 - a) Symptomatic period

- b) Latent period
 - c) Incubation period
 - d) Infectious period
 - e) Hibernation
4. Which of the following terms describes the time interval from infection to development of infectiousness
- a) Incubation period
 - b) Symptomatic period
 - c) Latent period
 - d) Infectiousness period
 - e) None of the above
5. The following methods are part of the basic epidemiologic methods except
- a) Count cases (events)
 - b) Define involved population
 - c) Make inferences
 - d) Field investigation
 - e) Compare rates
6. The following are key words in the definition of epidemiology except?
- a) Distribution
 - b) Study
 - c) Application
 - d) Determinant
 - e) Policy
7. Who among the following people is considered the father of field epidemiology?
- a) William Farr
 - b) John Snow
 - c) John Gaunt
 - d) David Livingstone
 - e) Hippocrates
8. Which of the following terms describe a sudden increase in the number of cases of a disease above what is normally expected
- a) Epidemic
 - b) Pandemic
 - c) Cluster
 - d) Endemic
 - e) Sporadic
9. An aggregation of cases grouped in place and time
- a) Epidemic

- b) Pandemic
- c) Cluster
- d) Endemic
- e) Outbreak

10. _____ refers to a disease that occurs infrequently and irregularly

- a) Cluster
- b) Sporadic
- c) Endemic
- d) Epidemic
- e) Pandemic

11. _____ Refers to the amount of a particular disease that is usually present in a community

- a) Cluster
- b) Sporadic
- c) Endemic
- d) Epidemic
- e) Pandemic

12. The following terms are among the host factors in the epidemiologic Triad except

- a) Food sources
- b) Lifestyle
- c) Marital status
- d) Exercise
- e) Behaviour

13. The following terms include the environmental factors influencing the exposure of a hosts to disease causative agents except?

- a) Noise
- b) Trauma
- c) Social economic factors
- d) Air quality
- e) Disease vectors

14. The following terms include the agent factors influencing the development of a health related event except

- a) Physical forces
- b) Pathogenicity
- c) Religion
- d) Nutrition
- e) Radiation

15. Which one of the following diseases is an example of a zoonotic disease ?

- a) Anaemia
- b) Rabies
- c) Typhoid
- d) Gonorrhoea
- e) Arthritis

16. Which one of the following is not a characteristics of a non communicable disease

- a) Functional impairment
- b) Indefinite sunset
- c) Known etiology
- d) Prolonged course of illness
- e) Indefinite onset

17. Which of the following is an example of an intervention study design

- a) Clinical trial
- b) Cohort study
- c) Case control study
- d) Cross sectioned study
- e) Case series

18. Which one of the following is an example of a descriptive study design

- a) Clinical trial
- b) Cohort study
- c) Case control study
- d) Cross sectional study
- e) None of the above

19. Which one of the diseases has the human host as a reservoir of its causative

- a) Syphilis
- b) Sickle cell anaemia
- c) Pelvic cancer
- d) Hepatitis
- e) Ebola

20. Which of the following diseases has an animal as a reservoir of its causative agents

- a) Malaria
- b) Diabetes insipidus
- c) Typhoid
- d) Rabies
- e) None of the above

21. Which of the following disease has the environment as a reservoir of its causative agent

- a) HIV/AIDs
- b) Diabetes mellitus
- c) Cholera
- d) Pelvic cancer
- e) None of the above

22. Which of the following study designs selects individuals on the basis of disease status

- a) Clinical trial
- b) Cohort study
- c) Case control study
- d) Cross sectional study
- e) Thallasenia

23. Which of the following provides a “ soap short” of health experience
- Clinical trial
 - Cohort study
 - Case control study
 - Cross sectional study
 - Case series
24. Which of the following is an advantages of cohort studies?
- Is relatively quick
 - Is in expensive
 - Is well suited to evaluate disease with long latency period
 - Is of value when exposure is rare
 - None of the above
25. Which one of the following is an example of a communicable disease?
- Diabetes mellitus
 - Coronary heart disease
 - Hypertension
 - Dysentery
 - Breast cancer
26. Which one of the following is a component of the epidemiologic triad
- Time
 - Place
 - Agent
 - Person
 - Disease
27. Factors contributing to emergence of infectious disease include the following example
- Human demographics and behaviour
 - Economic development and land use
 - Disease surveillance
 - Break down of public health measures
 - Marital status
28. Which one of the following describe a determinant as used in the definition of epidemiology
- Are the factors that influence the occurrence of health related events
 - The occurrence of health related events by time, place and person
 - Anything that affects the well being of a person
 - Time during which a host can infect another host.
 - Host of an infectious disease
29. The following include steps in outbreak investigation except
- Verify diagnosis
 - Define a case
 - Develop hypothesis
 - Prepare report
 - Design drugs for treatment

30. The following are objectives of outbreak investigation except
- a) To control ongoing outbreaks
 - b) To prevent future outbreaks
 - c) To advance knowledge about a disease
 - d) To provide training opportunities
 - e) None of the above

SECTION B ESSAY
(ANSWER ALL QUESTION IN THIS SECTION)

- 1. (a) Describe any two functions of epidemiology **(10 marks)**
- (b) Describe the modes of infectious disease transmission **(10 marks)**

- 2. (a) Describe the factors that can increase prevalence **(10 marks)**
- (b) Describe a case control study design and give its advantages and disadvantages

(10

marks)