

VINAYAKA MISSION'S RESEARCH FOUNDATIONS, SALEM
(Deemed to be University)

M.OPTOMETRY DEGREE EXAMINATION – February 2020

First Semester

EPIDEMIOLOGY AND COMMUNITY EYECARE

Time: Three hours

Maximum: 100 marks

I .Choose the best answer

(20 x 1 = 20)

1. In the definition of epidemiology, “determinants” generally includes:
 - A. Causes
 - B. Control measures
 - C. Risk factors
 - D. Sources
2. The hallmark feature of an analytic epidemiologic study is:
 - A. Use of an appropriate comparison group
 - B. Laboratory confirmation of the diagnosis
 - C. Publication in a peer-reviewed journal
 - D. Statistical analysis using logistic regression
3. A *specific* case definition is one that:
 - A. Is likely to include only (or mostly) true cases
 - B. Is considered “loose” or “broad”
 - C. Will include more cases than *asensitive* case definition
 - D. May exclude mild cases
4. A study in which children are randomly assigned to receive either a newly formulated vaccine or the currently available vaccine, and are followed to monitor for side effects and effectiveness of each vaccine, is an example of which type of study?
 - A. Experimental
 - B. Observational
 - C. Case-control
 - D. Clinical trial
5. The epidemiologic triad of disease causation refers to
 - A. Experimental
 - B. Observational
 - C. Case-control
 - D. Clinical trial
6. Indirect transmission includes which of the following?
 - A. Droplet spread
 - B. Mosquito-borne
 - C. Foodborne
 - D. Doorknobs or toilet seats

(p.t.o)

7. A propagated epidemic is usually the result of what type of exposure?
- A. Point source
 - B. Continuous common source
 - C. Intermittent common source
 - D. Person-to-person
8. What is the likely relationship between mean, median, and mode of the distribution shown in Figure 2.12?
- A. Mean < median < mode
 - B. Mean = median = mode
 - C. Mean > median > mode
 - D. Mode < mean and median, but cannot tell relationship between mean and median
9. Which of the following are considered measures of spread?
- A. Interquartile range
 - B. Percentile
 - C. Range
 - D. Standard deviation
10. The interquartile range covers what proportion of a distribution?
- A. 25%
 - B. 50%
 - C. 75%
 - D. 100%
11. The algebraic relationship between the variance and standard deviation is that:
- A. The standard deviation is the square root of the variance
 - B. The variance is the square root of the standard deviation
 - C. The standard deviation is the variance divided by the square root of n
 - D. The variance is the standard deviation divided by the square root of n
12. Which of the following are frequency measures?
- A. Birth rate
 - B. Incidence
 - C. Mortality rate
 - D. Prevalence
13. Women in Country A who died from lung cancer in 2004 estimated / women living in Country A on July 1, 2004 is a
- A. Ratio
 - B. Proportion
 - C. Incidence proportion
 - D. Mortality rate

14. What is the following fraction?
Number of children < 365 days of age who died in Country A in 2004 / Number of live births in Country A in 2004
- A. Ratio
 - B. Proportion
 - C. Incidence proportion
 - D. Mortality rate
15. Public health surveillance can be described primarily as which of the following?
- A. A method to monitor occurrences of public health problems.
 - B. A program to control disease outbreaks.
 - C. A system for collecting health-related information.
 - D. A system for monitoring persons who have been exposed to a communicable disease.
16. Data collected through which of the following methods is commonly used for surveillance?
- A. Vital registration.
 - B. Randomized clinical trials.
 - C. Disease notifications.
 - D. Population surveys.
17. Vital statistics are important sources of data on which of the following?
- A. Morbidity.
 - B. Mortality.
 - C. Health-related behaviors.
 - D. Injury and disability.
 - E. Outpatient health-care usage.
18. ____ State-based, with subsequent reporting to CDC.
- A. Notifiable disease surveillance
 - B. Surveillance for consumer product-related injuries
 - C. Both.
 - D. Neither.
19. Evaluating and improving surveillance should address which of the following?
- A. Purpose and objectives of surveillance.
 - B. Resources needed to conduct surveillance.
 - C. Effectiveness of measures for controlling the disease under surveillance.
 - D. Presence of characteristics of well-conducted surveillance.
20. ____ Surveillance detected 23 of 30 actual cases of a disease.
- A. Predictive value positive.
 - B. Sensitivity.
 - C. Specificity.
 - D. Validity.

II .Write an Essay on:

(4 x 10 = 40)

21. Measures of mortality.
22. List the key features and uses of analytic epidemiology
23. Explain the prevention strategies of Myopia
24. Types of screening

III .Write an Long Essay on :

(2 x 20 = 40)

25. Case control and cohort study.
26. Enumerate the actions taken to prevent avoidable blindness

(Sl.No. M21663)