### True and false:

1. Epidemiology is the study of the distribution and determinants of health-	Т
related states or events in specified populations	
2. natural history of the disease is the progress of a disease process in an	F
individual over time following the effect of intervention.	
3. death is among process of natural history of a disease	Т
4. Basic triad of descriptive epidemiology includes time	Т
5. Familial tendency is among personal characteristics	Т
6. When diarrhea increases in summer this is called secular trend	F
7. The value obtained by dividing one quantity by another is called ratio	Т
8. Attack rate is a variant of prevalence rate during epidemics	F
9. Both incidence and prevalence are used for acute diseases	F
10. In calculation of secondary attack rate, you must subtract the number of	Т
primary cases from the total number of people residing in those	
households	
11. Incidence rate is a measure of the frequency of new cases of a disease	F
among the contacts of known cases.	
12. Number of deaths per 1000 population is case fatality rate	F
13. Maternal mortality rate is mortality rate from all causes of death for all	F
ages	
14. Neonatal mortality rate is the number of deaths in children during the	F
first year of life	
15. Rate of natural increase is calculated by subtracting number of deaths	F
from number of live births during a given time	
16. Epidemic is occurrence of a disease within an area is clearly in excess of	Т
the expected level for a given time period.	
17. A propagated outbreak is one that is usually food borne	F
18. Describing the epidemic is the first step in the investigation of it	F
19. An epi curve is a graphic depiction of the number of outbreak cases by	Т
date of illness onset	
20. Increase resistance of local population is among control of epidemic	Т
steps	

### MCQ

- 1. The course and outcome of diseases in individuals and groups is called
  - a. epidemiology
  - b. natural history
  - c. health status
  - d. Interventions
- 2. study the different etiologies of a disease or any health-related event
  - a. disease causation
  - b. natural history
  - c. health status
  - d. Interventions
- 3. compare the health status of a certain population before and after application of the health program.
  - a. Disease causation
  - b. natural history
  - c. health status
  - d. Interventions evaluation

#### 4. Place when used in description of disease includes

- a. <u>Residence</u>
- b. Education
- c. Occupation
- d. income
- 5. changes in the disease occurrence take long period of time is called
  - a. Recurrent time trends
  - b. <u>Secular variation</u>
  - c. Rapid fluctuation
  - d. Seasonal variation
- 6. When infectious disease increases at a certain time of the year, it is called
  - a. Recurrent time trends
  - b. Secular variation
  - c. Rapid fluctuation
  - d. Seasonal variation

- 7. Sudden increase or decrease in occurrence of a certain disease is called
  - a. Recurrent time trends
  - b. Secular variation
  - c. <u>Rapid fluctuation</u>
  - d. Seasonal variation
- 8. All the following is correct about recurrent and periodic time-trends **EXCEPT** 
  - a. May be due to changes in people immunity

#### b. Influenza is an example

- c. Is regular increase or decrease in their occurrence
- d. changes in the virulence may be the cause
- 9. Host factors include
  - a. Biological
  - b. Physical
  - c. Chemical

#### d. Immunologic status

10.Epidemiology is which of the followings?

a. The study of physical, chemical, biological, social and psychosocial factors in the environment that affect human health

# **b.** The study of distribution and determinants of heal events in specified populations

c. The ongoing, systematic collection, analysis and interpretation of health-related data

d. The study of actions taken by an individual or group of individuals to change or maintain their health status or prevent illness or injury

11.Descriptive epidemiology involves the followings elements EXCEPT:

#### a. Severity

- b. Person
- c. Place
- d. Time

- 12.Epidemiology can be used for:
  - a. Disease control
  - b. Evaluation of health programs
  - c. Accidents prevention

#### d. All of the above

13. The most important personal factor affecting disease occurrence is

<u>a. Age</u>

- b. Climate
- c. Place of residence
- d. Periodic time trend

14.----- is a set of standard criteria for deciding whether a person has a particular disease or other health-related condition

- a. case definition
- b. Population at risk
- c. Proportion
- d. Ratio

15. The value obtained by dividing one quantity by another is called

- a. Rate
- b. Denominator
- c. <u>Ratio</u>
- d. Proportion

16.Incidence is used for

- a. studying implication on health services
- b. studying causation of the disease
- c. measuring burden of the disease
- d. none of the above

#### 17.the numerator for the incidence is

- a. <u>Number of new cases</u>
- b. Number of all cases
- c. Population at risk
- d. All the population

- 18.In the case of a food borne disease outbreak, ----- can be calculated for each type of food eaten, then compared to identify the source of the infection.
  - a. Secondary attack rate

#### b. Attack rate

- c. Prevalence rate
- d. Case fatality rate

19.----- is a measure of the frequency of new cases of a disease among the contacts of known cases

#### a. <u>Secondary attack rate</u>

- b. Attack rate
- c. Prevalence rate
- d. Case fatality rate

20. Which of the followings is the calculation for prevalence?

a. The number of new cases divided by the number of people in the population, over a specific period of time

## **b.** The number of existing cases divided by the number of people in the population

c. The number of exposed cases divided by the number of new cases over a specific period of time

d. The number of existing cases divided by the number of new cases in a specific population

21. Which of the following is the calculation for incidence?

#### <u>a. The number of new cases divided by the number of people in the</u> population, over a specific period of time

b. The number of existing cases divided by the number of people in the population

c. The number of exposed cases divided by the number of new cases over a specific period of time

d. The number of existing cases divided by the number of new cases in a specific population

22.From the following mortality rates, which two use the same denominator? a. Crude mortality rate and cause-specific mortality rate

b. Age-specific mortality rate and Sex-specific mortality rate

- c. crude mortality rate and Sex-specific mortality rate
- d. age specific mortality rate and cause specific mortality rate
- 23.In Egypt the number of women who died due to pregnancy, labor, or perperium was 50/100,000 live births in the year 2012. This is:
  - a. Infant mortality rate

#### **b.** Maternal mortality ratio

- c. Maternal morbidity rate
- d. None of the above

24.---- is a measure of disease severity

- a. Crude death rate
- b. Cause specific death rate
- c. Proportionate mortality rate
- d. Case fatality rate

25.----is the number of death in children during the first year of life

#### a. Infant mortality rate

- b. Neonatal mortality rate
- c. Children mortality rate
- d. None of the above

26.Maternal mortality is a

- a. rate
- b. <u>ratio</u>
- c. proportion
- d. percentage

### 27.Number of live births in a certain place & time / number of women in reproductive age (15- 49) refers to

- a. Age specific fertility rate
- b. Crude birth rate
- c. <u>General fertility rate</u>
- d. Natural increase rate

28.persistently high level of disease occurrence is called ------

- a. epidemic
- b. pandemic
- c. hyper-endemic
- d. endemic

#### 29. The first step in investigation of infectious disease epidemic is:

#### a. Establishing the diagnosis of reported cases

- b. Make a proper health education to the public
- c. Demonstrate the existence of the epidemic
- d. Reporting the findings of epidemic

### 30.In the investigation of an epidemic a disease, the most appropriate measure to describe the frequency the disease is the:

- a. Incidence rate
- b. Attack rate
- c. Case fatality rate
- d. Cause specific death rate