

King Saud University

College of Applied Medical Sciences

Community Health Sciences

CHS 334epidemiology 1

First midterm Exam

Second Semester, 1433 – 1434 H

**Student name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Question one:State weather false (F) or true (T) and correct the false answer(4 marks)**

1. Epidemiology is a highly qualitative discipline based on the principles of statistics and research methodology()
2. Hospitalization is the most definite measure of ill health ( )
3. Children suffer commonly from infectious diseases as measles, whooping cough and malnutrition ()
4. Chronic diseases and degenerative disorders tend to increase with age( )
5. The term “Yearly variation” changes in the occurrence of disease over a long period of time generally several years or decades ( )
6. Cancer cervix is more common among those who marry at mid-30’s ( )
7. Age distribution curve show one peak in the disease frequency among different ages ( )
8. Automobile accidents and homicides are more frequent in weekends ( )

**Question two: circle the right answer(6.75 Marks)**

1. **In the definition of epidemiology, the terms “distribution” and “determinants” taken together refer to:**

A. frequency, pattern and causes of health events

B. dissemination of information to those who need to know

C. knowledge, attitude and practice related to health

D. public health services and resources

**2. Descriptive epidemiology includes all EXCEPT:**

A. what

B. who

C. when

D. where

E. why

1. **The time course of a disease outbreak is usually displayed as a/an:**

A. secular trend

B. seasonal trend

C. epidemic curve

D. endemic curve

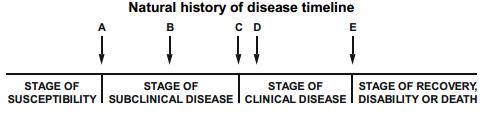
**4- Because socioeconomic status is difficult to quantify, we commonly use all of the following substitute measures EXCEPT:**

A. educational achievement

B. family income

C. occupation

D. social standing

**For each of the following, identify the appropriate letter from the time line in Figure representing the natural history of disease.**

**5. \_\_\_Onset of symptoms**

**6. \_\_\_Usual time of diagnosis**

**7. \_\_\_Exposure**

**8. An epidemic curve which follows the classic log-normal pattern of sharp rise and more gradual decline is most consistent with which manner of spread?**

A. Continuous source

B. Intermittent source

C. Point source

D. Propagated

**9. During the second week of February, 87 persons in a small community (population 460) attended a social event which included a meal prepared by several of the participants. Within three days, 39 of the participants became ill with a condition diagnosed as salmonella Gastroenteritis. The attack rate among participants was:**

A. 0.45/100

B. 8.5/100

C. 18.9/100

D. 44.8/100

**Question three (2.75 marks)**

1. **In 1989, 733151 new cases of gonorrhea were reported among the United States civilian population. The 1989 mid-year U.S. civilian population was estimated to be 246,552,000.**

Calculate the 1989 gonorrhea incidence rate for the U.S. civilian population using these data (1.75 mark)

1. **For each of the following outbreak settings, choose the most likely epidemic pattern.( 1 mark)**

**\_\_\_\_\_A. Outbreak of salmonellosis traced to turkey cooked and held at an improper temperature and served at a pot-luck supper.**

**\_\_\_\_\_B. Outbreak of influenza among nursing home residents, new cases occurring over a 3-week period (Hint: incubation period for influenza is less than 5 days.)**

**Question four (6.5 marks)**

1. **One of the sources for epidemiological data is population estimate.Population data are useful in:(1 mark)**

1.

2.

1. **What are the benefits of disease reporting? (1 mark)**

1.

2.

1. **Occupation may be related to disease frequency in several ways. List three of them. (1.5 marks)**

1.

2.

3.

1. **Explain in details and draw an epidemic graph of the propagated or contagious disease epidemic (3 marks)**