

EXERCISES

STAT – 109

BIOSTATISTICS

Q1: For each of the following variables indicate whether it is quantitative or qualitative variable:

- (a) The blood type of some patient in the hospital. (**qualitative nominal**)
 - (b) Blood pressure level of a patient. (**qualitative ordinal**)
 - (c) Weights of babies born in a hospital during a year. (**Quantitative continues**)
 - (d) Gender of babies born in a hospital during a year. (**qualitative nominal**)
 - (e) The distance between the hospital to the house . (**Quantitative continues**)
 - (f) Under-arm temperature of day-old infants born in a hospital. (**Quantitative continues**)
-

Q2: For each of the following situations, answer questions (a) through (d):

- (a) What is the population?
- (b) What is the sample in the study?
- (c) What is the variable of interest?
- (d) What is the type of the variable?

Situation A: A study of 300 households in a small southern town revealed that if she has school-age child present.

- a- All households in a small southern town
- b- 300 households in a small southern town
- c- Does households had school age child present
- d- Variable is qualitative

Situation B: A study of 250 patients admitted to a hospital during the past year revealed that, Distance the patient live away from the hospital .

- a- All patients admitted to a hospital during the past year

- b- 250 patients admitted to a hospital during the past year
 - c- Distance the patient live away from the hospital
 - d- Variable is Quantitative continuous
-

Q3:Choose the right answer:

1-The variable is a

- a. subset of the population.
- b. parameter of the population.
- c. relative frequency.
- d. characteristic** of the population to be measured.
- e. class interval.

2-Which of the following is an example of discrete variable

- a. the number of** students taking statistics in this term at KSU.
- b. the time to exercise daily.
- c. whether or not someone has a disease.
- d. height of certain buildings.
- e. Level of education.

3-Which of the following is not an example of discrete variable

- a. the number of students at the class of statistics.
- b. the number of times a child cry in a certain street.
- c. the time to run** a certain distance.
- d. the number of buildings in a certain street.

e. number of educated persons in a family.

4-Which of the following is an example of qualitative variable

a. the blood pressure.

b. the number of times a child brush his/her teeth.

c. whether or not someone fail in an exam.

d. Weight of babies at birth.

e. the time to run a certain distance.

5-The continuous variable is a

a. variable with a specific number of values.

b. variable which can't be measured.

c. variable takes on values within intervals.

d. variable with no mode.

e. qualitative variable.

6- which of the following is an example of continuous variable

a. The number of visitors of the clinic yesterday.

b. The time to finish the exam.

c. The number of patients suffering from certain disease.

d. Whether or not the answer is true.

7- The discrete variable is

a-qualitative variable.

b-variable takes on values within interval.

c-variable with a specific number of values.

d-variable with no mode.

8-Which of the following is an example of nominal variable :

a-age of visitors of a clinic.

b-The time to finish the exam.

c-Whether or not a person is infected by influenza.

d-Weight for a sample of girls .

9-The nominal variable is a

a-A variable with a specific number of values

b-Qualitative variable that can't be ordered.

c-variable takes on values within interval.

d-Quantitative variable .

10-Which of the following is an example of nominal variable :

a-The number of persons who are injured in accident.

b-The time to finish the exam.

c-Whether or not the medicine is effective.

d-Socio-economic level.

11-The ordinal variable is :

a-variable with a specific number of values.

b-variable takes on values within interval.

c-Qualitative variable that can be ordered.

d-Variable that has more than mode.