# 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.

- (b) Blood pressure level of a patient.
- (c) Weights of babies born in a hospital during a year.
- (d) Gender of babies born in a hospital during a year.
- (e) The distance between the hospital to the house .
- (f) Under-arm temperature of day-old infants born in a hospital.

# 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.

**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 .

#### 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.