

23. Which of the following is the correct sampling interval used for this sample?

- a. 20
- b. 80
- c. 4
- d. 5

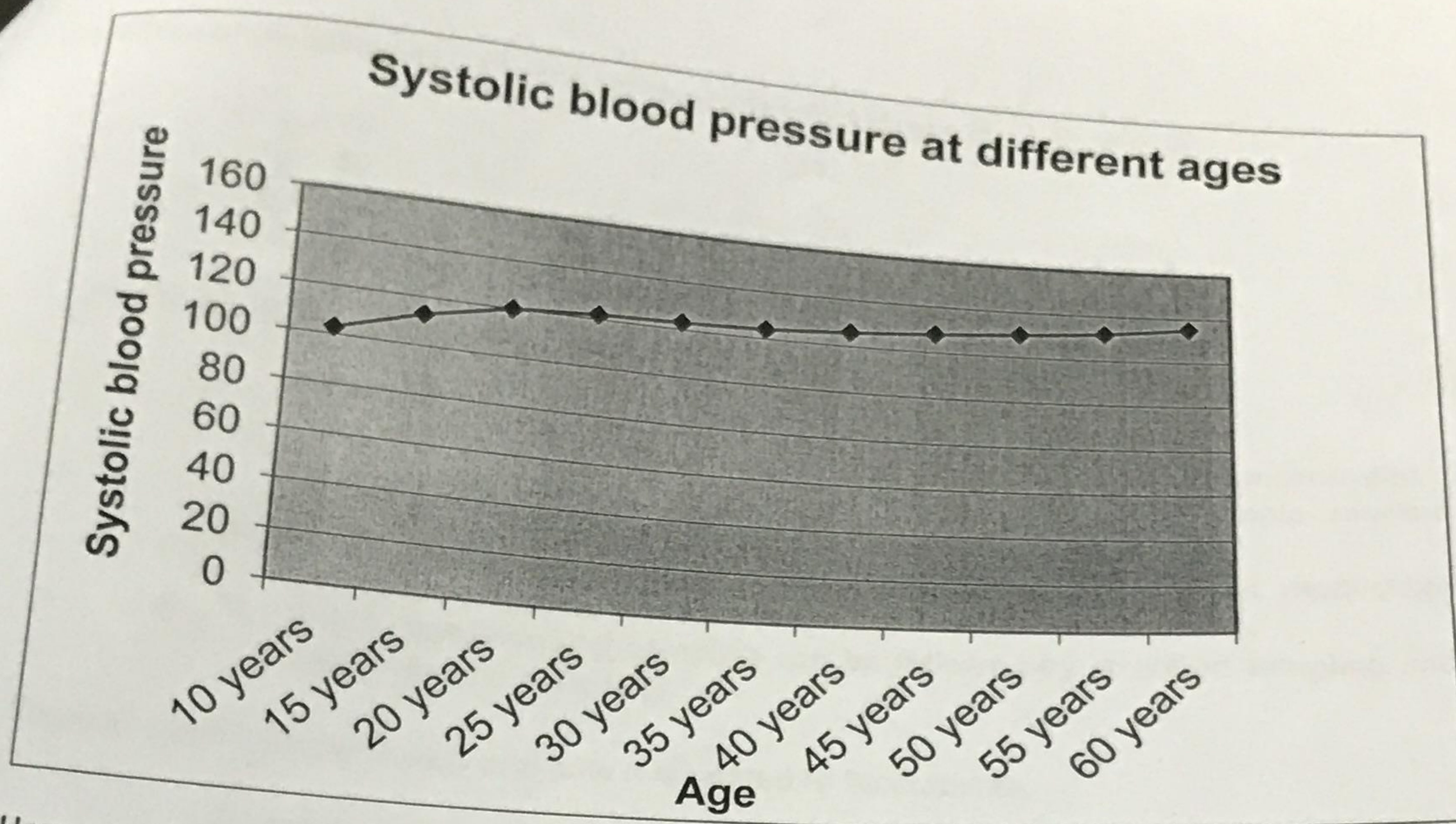
24. Which of the following statements is correct about multi-stage sampling?

- a. Multi-stage sampling is more suitable when the population is concentrated
- b. Multi-stage sampling sampling is more efficient than simple random sampling
- c. There is need for a full sampling frame before carrying out multi-stage sampling r sampling
- d. Multi-stage sampling sampling can be followed by stratified sampling and simple random sampling.

25. Explain what is Epidemiology and how it is related to Biostatistics

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Epidemiology concerns the study of where some health events are and their distribution and promotes and protects and restores our health and many other sides to achieve their goals they need to represent and study data and to do that they require the help of Biostatistics since it represents health related data that makes it easier to study and understand.



20. How would you describe the following?

"Ten students are taken at random from each year of the College of Applied Community Services (i.e from first year, second year, third year and fourth year)"

- a. Simple random sample
- b. Stratified sample
- c. Systematic sample
- d. Convenient sample

21. How would you describe the following?

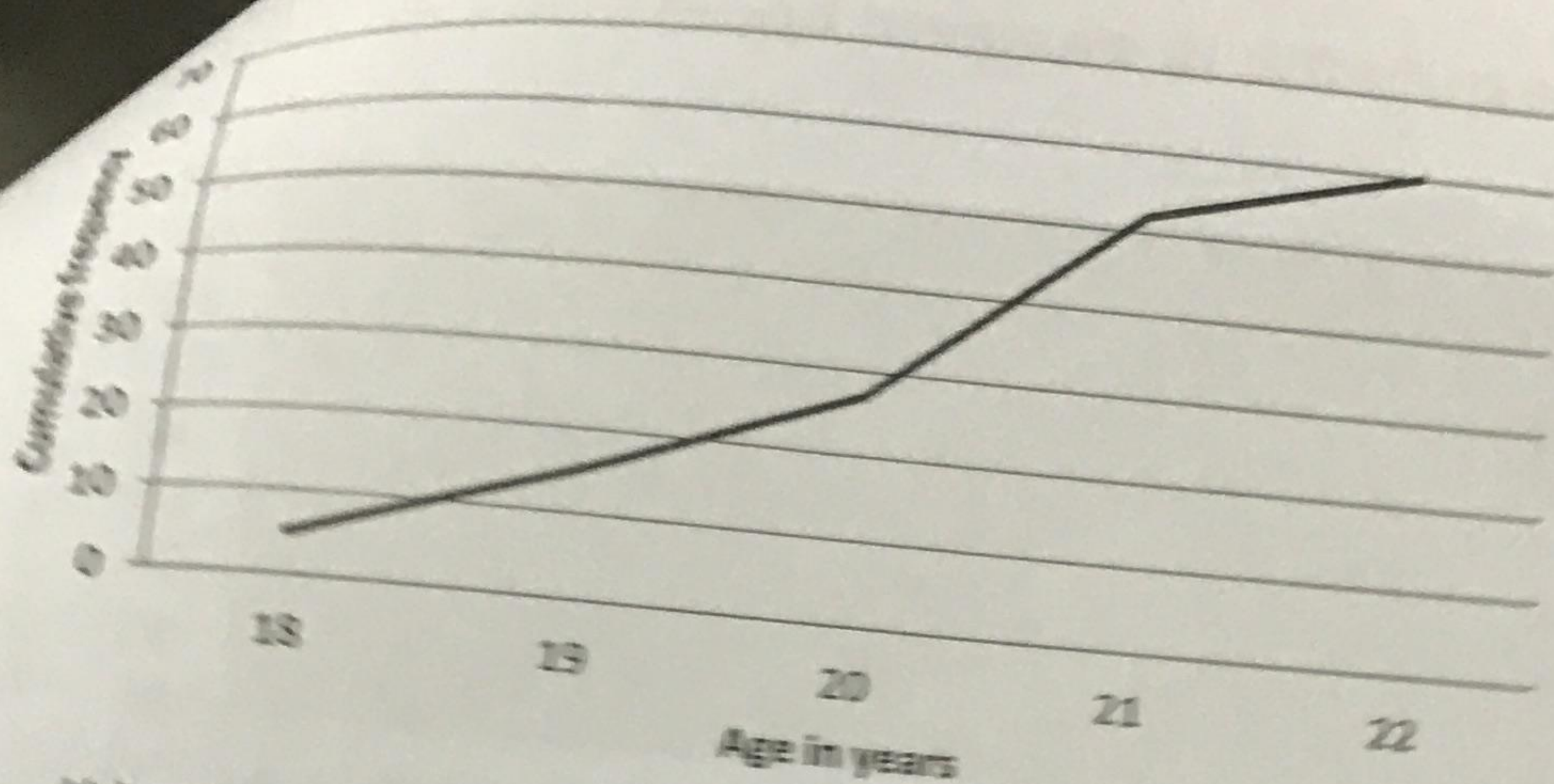
"A group of students are given numbers from 1 to 100. The computer is then used to produce 10 random numbers (between 1 and 100). All those students whose numbers are the same as the random number are selected to be in the sample"

- a. Non-probability sample
- b. Probability sample
- c. Student sample
- d. Big sample

A student wants to do a survey on five (5) students out of a group of 20 students. From the list of students, he selects only one student at random and then selects the others after every fixed interval. Answer the two (2) questions which follow:

22. Which kind of sample is this?

- a. Simple random sample
- b. Stratified sample
- c. Systematic sample
- d. Convenient sample



Using the stem and leaf diagram below, answer the two questions that follow:

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1|0
2|34
3|3566678
4|56
5|78
X|0

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17. What is the range of values in the data?

- a. From 33 to 38
- b. From 38 to 58
- c. From 10 to 58
- d. From 10 to 78

18. Where can we find the modal frequency?

- a. In the twenties (20s)
- b. In the thirties (30s)
- c. In the forties (40s)
- d. In the fifties (50s)

19. Which of the following statements is correct about the graph below on systolic blood pressure and age?

- a. It is a frequency polygon and shows that systolic blood pressure increases with age
- b. It is a frequency polygon and shows that systolic blood pressure decreases with age
- c. It is a line graph and shows that systolic blood pressure increases with age
- d. It is a line graph and shows that systolic blood pressure decreases with age

13. Which of the following statement is correct about the histogram?

- a. The bars are separated from each other
- b. It is only applicable to discrete data
- c. The length of the bar is proportional to the frequency
- d. The area of the bar is proportional to the frequency

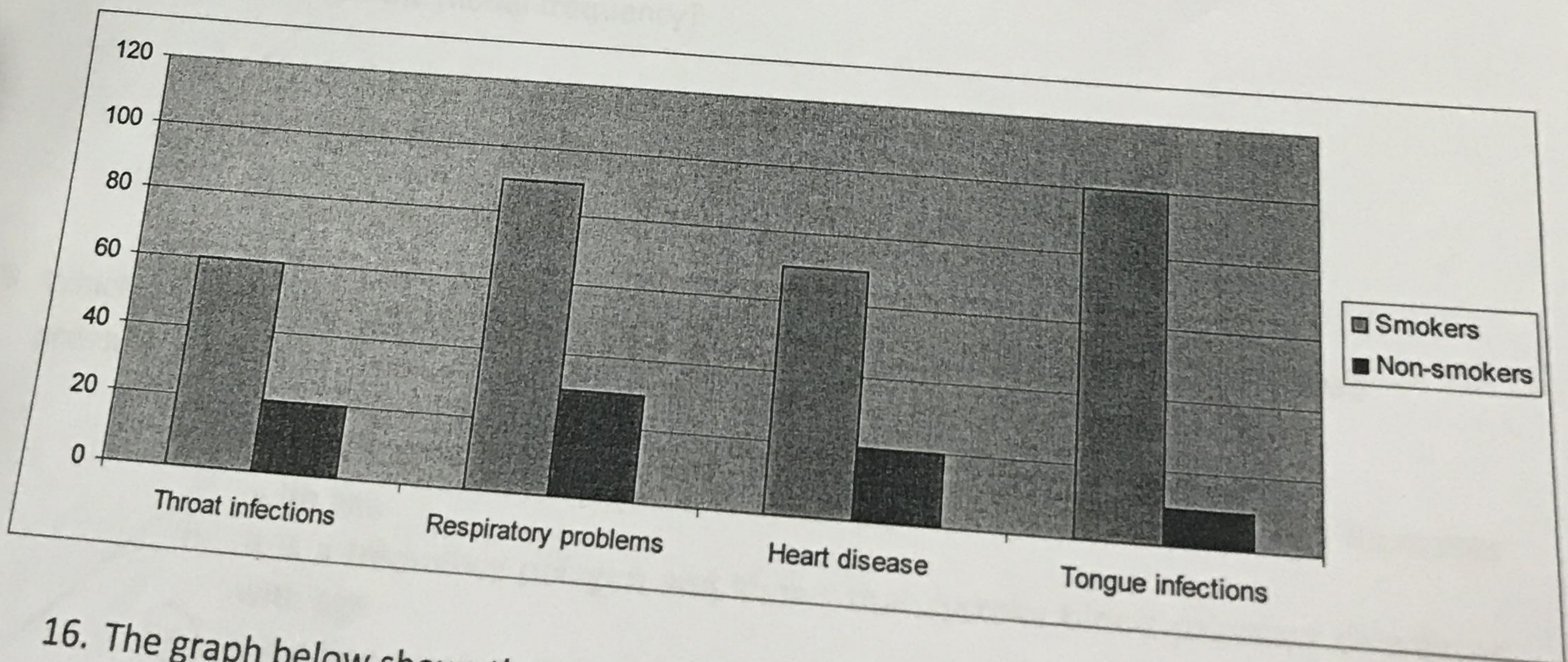
Questions 13 and 14.

The table below shows cumulative frequency distribution for ages x or more. Complete the two empty spaces on the table.

Age x	Frequency	Cumulative frequency (age x or more)
✓ 15	5	
16	8	<u>23</u>
17	4	18
✓ 18	6	<u>10</u>

15. The chart below shows the distribution of different diseases among smokers and non-smokers. Which kind of graph is this?

- a. Clustered bar graph
- b. Stacked bar graph
- c. Histogram
- d. Pie chart



16. The graph below shows the cumulative frequency for different ages. From the graph, which of the following statements is correct?

- a. There are 60 individuals aged 22 years.
- b. There are 60 individuals ages 22 years or more
- c. There are 60 individuals ages 22 years or less
- d. There are 60 individuals aged between 21 and 22 years

in a study, the aim is to find out if the 'type of training' (categorised as either class-based or lab-based) received by CAMS students affects their 'level of competence' (measured as 'low,' medium,' and 'high'). Answer the two questions that follow

6. What would you say about the variable, 'type of training' in this context?

- a. It is the independent variable and is ordinal
- b. It is the dependent variable and is ordinal
- c. It is the independent variable and is nominal
- d. It is the dependent variable and is nominal

7. What would you say about the variable, 'level of competence' in this context?

- a. It is the independent variable and is ordinal
- b. It is the dependent variable and is ordinal
- c. It is the independent variable and is nominal
- d. It is the dependent variable and is nominal

8. The variable 'level of hypertension' is coded in some data as follows:

1-No hypertension 2 -Mild hypertension  
3- High hypertension 4-Very high hypertension

Which kind of variable is this?

- a. Continuous variable
- b. Dichotomous variable
- c. Ordinal variable
- d. Discrete variable

9. Which of the following statements about the dependent variable is true?

- a. It has to be a continuous variable
- b. It has to be quantitative variable
- c. It can either be quantitative or qualitative variable
- d. It cannot be a dichotomous variable

10. Which of the following statements is **not** correct about some of the areas of the concerns of epidemiology?

- a. Epidemiology deals with the study of the distribution of health-related events
- b. Epidemiology deals with the determinants of health-related events
- c. Epidemiology deals with the promotion, protection and restoration of health
- d. Epidemiology deals with the treatment of sick individuals

18  
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Quiz 1- theory (Lessons 1 to 4) (10% of the total grade)

Time allowed: 1 hour

Name: Linah Al Homidan ID number: 2160004210

Answer all questions. For MCQs, selected the single best answer

1. Which of the following is true about a 'nominal variable'?  
 a. It is a quantitative variable  
 b. It is a continuous variable  
 c. It is a discrete variable  
 d. It is a qualitative variable
2. Which of the following is true about a 'discrete variable'?  
 a. It is a quantitative variable  
 b. It is a continuous variable  
 c. It is a nominal variable  
 d. It is a qualitative variable
3. The "number of cases of malnutrition seen in week at a hospital" is an example of which variable?  
 a. Continuous variable  
 b. Dichotomous variable  
 c. Nominal variable  
 d. Discrete variable
4. The "level of cholesterol in mg/100ml" is an example of which variable?  
 a. Continuous variable  
 b. Dichotomous variable  
 c. Nominal variable  
 d. Discrete variable
5. When weight (in kilograms) is regrouped into two categories, ' $< 100$  kgs' and ' $\geq 100$  kgs', what can you say about this?  
 a. An original continuous variable is regrouped into a discrete variable  
 b. An original continuous variable is regrouped into a dichotomous variable  
 c. An original nominal variable is regrouped into a continuous variable  
 d. An original nominal variable is regrouped into a dichotomous variable