QUIZ TIME

Bio-statistics lec2

Done by:

Layan Al-Muhaisen

لجنـة
طـب الأسـنـان

1. What is the primary reason for using a line graph in data presentation?
A. To compare frequencies between different categories
B. To visualize proportions of a total dataset
C. To display observations that vary with time
D. To represent continuous variables without intervals

Answer: C

2. Given a dataset showing population by blood type, what graph type is most appropriate if we also want to distinguish between males and females within each blood group?
A. Simple bar chart
B. Pie chart
C. Clustered bar chart
D. Frequency polygon

Answer: C

_____

3. Which of the following distinguishes a histogram from a bar chart most accurately?
A. Histograms use circular shapes while bar charts use rectangles
B. Bar charts have no X-axis
C. Histogram bars touch to show continuity; bar chart bars are separated
D. Histograms cannot represent frequencies

Answer: C

_____

4. A frequency polygon is most effectively used when:
A. The variable is discrete and categorical
B. You need to compare means across groups
C. The variable is continuous and intervals are equal
D. The data has fewer than three categories

Answer: C

_____

5. Which technique ensures a pie chart's accuracy in representing different categories?
A. Scaling Y-axis properly
B. Calculating precise sector angles using category frequencies
C. Using consistent bar widths
D. Starting all categories from the center of the chart

Answer: B

6. When is it acceptable to use a scale break in a histogram?
A. Only when the frequency values are extremely high
B. Only on the horizontal axis, not the vertical axis
C. When there are gaps in the data values
D. To emphasize the highest frequency category

Answer: B

7. In a histogram constructed from height intervals (e.g., 100–105, 105–110...), how are the columns arranged along the X-axis?
A. Each column starts at the upper limit of the interval
B. There is space between columns to separate intervals
C. Columns touch each other and span from lower to upper class limits
D. The width of each column depends on frequency

Answer: C

8. You are given a pie chart showing four types of parasites. If Bilharzia accounts for 40% of cases, what is the corresponding angle in degrees?
A. 120°
B. 144°
C. 108°
D. 160°

Answer: B

$$\text{Angle} = 0.40 \times 360 = 144^\circ$$

_____

9. When constructing a bar chart for qualitative data, what principle must always be followed?
A. Use logarithmic scale
B. Use midpoints for the X-axis
C. Keep bars equally wide with spaces in between
D. Ensure bars touch each other

Answer: C

10. In constructing a frequency polygon, what value is plotted on the X-axis for each category?
A. The mode of each interval
B. The average of all class frequencies
C. The midpoint of the class interval
D. The cumulative frequency

Answer: C