

Data Science in Health and Biology

Data Science · Answer Key · 10 Questions

1. In a clinical data set measuring human health, what is the 'mean' value of a data series?

- A) The middle value of a sorted list
- B) The average of all values**
- C) The most frequent value
- D) The difference between the highest and lowest values

2. Which organ is most commonly monitored by wearable data devices to track heart rate variability?

- A) Lungs
- B) Liver
- C) Heart**
- D) Kidneys

3. What type of data is the human blood type (e.g., A, B, AB, or O)?

- A) Categorical data**
- B) Continuous numerical data
- C) Ratio data
- D) Ordinal data

4. When tracking a patient's body temperature over time, what kind of data is being collected?

- A) Time-series data**
- B) Binary data
- C) Spatial data
- D) Text data

5. In medical statistics, what does the term 'sample size' refer to?

- A) The total population of the earth
- B) The number of patients or observations included in a study**
- C) The age of the doctor
- D) The weight of the medical equipment

6. Which vital sign is typically represented as a continuous numerical value in health records?

- A) Gender
- B) Body mass index (BMI)**
- C) Blood type
- D) Presence of a fever

7. Data scientists often use charts to visualize health trends. Which chart is best for showing change over time?

- A) Pie chart
- B) Line graph**
- C) Scatter plot
- D) Venn diagram

8. What is the 'median' of the following set of human pulse rates: 60, 70, 80?

- A) 60
- B) 70**
- C) 80
- D) 210

9. Which of these is considered 'binary' data in a health database?

- A) Height in centimeters
- B) Weight in kilograms
- C) Yes/No response for an allergy**
- D) Body temperature

10. In a health database, what is an 'outlier'?

- A) A data point that differs significantly from other observations**
- B) The most common value
- C) The average of all patients
- D) The total number of male patients