

## Module 19 Quiz:

# Genomics Data Analysis

1. RNA strands are longer than DNA strands.

- A. True
- B. False

Answer: B

Explanation: See lecture 19.1 slides

2. Single-cell RNA sequencing (scRNA-Seq) provides the expression profiles of individual cells.

- A. True
- B. False

Answer: A

Explanation: See lecture 19.1 slides

3. Which of following steps will be employed for data analysis on genomics data?

- A. Data Collection and Quality check.
- B. Data Processing.
- C. Data Exploratory Analysis and Modeling.
- D. Data Visualization.

Answer: ABCD

Explanation: See lecture 19.1 slides

4. Which method can be used for data processing?

- A. Mean Centered
- B. Z-score
- C. Median Centered
- D. Log2 Transformation

Answer: ABCD

Explanation: See lecture 19.2 slides

5. For the median centered processing, if there is an even number of observations, the median is the average of the two middle values.

- A. True
- B. False

Answer: A

Explanation: See lecture 19.2 slides

6. Which method can be used to measure clustering performance?

- A. Entropy
- B. Sum of Squared Error
- C. Mean Square Error
- D. Accuracy

Answer: AB

Explanation: See lecture 19.3 slides

7. Confidence interval can be used for measuring how accurately the sample mean estimates the population mean.

- A. True
- B. False

Answer: A

Explanation: See lecture 19.4 slides