

(These items were developed by teachers for the Technical Skills Assessment. Below is a sample item for each program standard.)

Question 1 of 13

Which item is MOST important to wear when heating liquids in an electric water bath?

- A) Gloves
- B) Lab coat
- C) Goggles
- D) Hair band

Question 2 of 13

What does the term SOP mean?

- A) Simplified Occupational Practice
- B) Standard Occupational Protocol
- C) Structured Operations Protocol
- D) Standard Operating Procedure

Question 3 of 13

What is the term for evaluating variation in data with the objective of forecasting future events?

- A) Quality control
- B) Trend analysis
- C) Quality assurance
- D) Ethical management

Question 4 of 13

A scientist is designing an experiment. What resource is the BEST to consult for detailed, current research about the subject?

- A) Articles in popular science magazines, such as Discover or Popular Science
- B) Peer-review articles in journals, such as Nature or Science
- C) Scientific articles published by news organizations, such as CNN, ABC, or CNBC
- D) Summary articles from online publications, such as Wikipedia

Question 5 of 13

To whom should all accidents be reported IMMEDIATELY?

- A) Quality auditor
- B) Safety manager
- C) Supervisor
- D) Public Health Administration

Question 6 of 13

Which characteristic would NOT be necessary in a model organism?

- A) Short generation time
- B) Close resemblance to other organisms or systems
- C) Relatively easy to grow
- D) Long lifespan

Question 7 of 13

How is air vented in a laminar flow hood?

- A) Through the floor
- B) Through the back
- C) To the top
- D) To the front

Question 8 of 13

What medium is used MOST OFTEN for culturing a wide variety of bacteria, including E. coli?

- A) Tris buffer
- B) Bovine serum albumin
- C) Molecular agar
- D) Nutrient agar

Question 9 of 13

Which indicator solution is used to test for the presence of proteins?

- A) Benedict
- B) Congo red
- C) Biuret
- D) DPA

Question 10 of 13

Which mass of calcium chloride (CaCl_2) is needed to make 100mL solution into a 1.5M solution? ($\text{CaCl}_2 = 110.98 \text{ g/mol}$)

- A) 11098g
- B) 16.6g
- C) 166.5g
- D) 150g

Question 11 of 13

Which resource is NOT an online database used to analyze DNA sequences?

- A) DNA Subway
- B) GenBank
- C) PubMed
- D) NCBI

Question 12 of 13

How many cycles are COMMONLY programmed into a thermal cycler?

- A) 30,000
- B) 300
- C) 30
- D) 3

Question 13 of 13

How many microliters are in 1.21 milliliters?

- A) 1210uL
- B) 0.00121uL
- C) 121uL
- D) 12.1uL

Bioscience Sample Test Answer Key

Question	Answer
1.	C
2.	D
3.	B
4.	B
5.	C
6.	D
7.	D
8.	D
9.	C
10.	B
11.	C
12.	C
13.	A