Analyze the following for alignment between the SLO, measurement tool, and assignment. Answer the questions at the bottom of the page. Swap with a neighbor, review each other’s comments and discuss.

SLO

Graduating students are able to evaluate written material in a specific content area.

Measurement tool: Rubric that includes the following traits:

Purpose, body, conclusion, audience, grammar, citations

Assignment:

Summarize three of the articles about X that we have read this semester. Follow these directions to write a good summary, demonstrating your comprehension of information and ideas. The purpose is to restate the main points of the article in your own words, focusing on the main point and the relationship between ideas.

1. Read the assigned passage(s) carefully.
2. Reread, but this time divide the passage into sections or stages of thought and label each section. Underline key ideas, terms.
3. Write one-sentence summaries on a separate sheet of paper, one for each stage of thought.
4. Write a one-sentence summary of the entire passage. Here you want to express the central idea of the passage as determined from the steps above.
5. Write the first draft of your summary by combining the topic sentence from step 4 with the information from step 3. Eliminate any repetition.
6. Revise. Make sure transitional words are provided (you can find these in a grammar and style handbook under “transitions”; they include words like: therefore, however, furthermore, and so on. Avoid series of short, choppy sentences. Check for grammar and punctuation.

Adapted from Behrens and Rosen, Writing and Reading Across the Curriculum Little Brown, 1982.
Adapted from : http://www.hws.edu/academics/ctl/writes_assignments.aspx

QUESTIONS:
1. Is the measurement tool appropriate for the SLO? Why or why not?
2. Is the assignment aligned with the measurement tool? Why or why not?
3. Is the assignment aligned with the SLO? Why or why not?
Analyze the following multiple choice questions.

SLO: Recall the structure and function of eukaryotic cellular organelles, who discovered the structure and function of DNA, and the meaning of the term hypothesis in science.

Measurement tool: Test analysis

Assignment: Students complete a series of multiple choice questions.

Sample questions:

1. Which of the following is a true statement?
   a. Mitochondrial genomes are relatively constant in content (i.e., types of genes present)
   b. Mitochondrial genomes are relatively constant in organization.
   c. Mitochondrial genomes are relatively constant in size.

2. What characteristic is relatively constant in mitochondrial genomes across species?
   a. Content (i.e., types of genes)
   b. Organization
   c. Size

Which of the above is the most appropriate to measure the SLO? Why?

1. Mitochondria evolved from free-living bacteria that could carry out oxidative phosphorylation. For this reason, they have circular genomes that reproduce independently of the nuclear genome. What characteristic is relatively constant in mitochondrial genomes across species?
   a. Content (i.e., types of genes)
   b. Organization
   c. Size

2. What characteristic is relatively constant in mitochondrial genomes across species?
   a. Content (i.e., types of genes)
   b. Organization
   c. Size

Which of the above is the most appropriate to measure the SLO? Why?

1. Who gathered the data that helped reveal the structure of DNA?
   a. Francis Crick
   b. George Washington
   c. James Watson
   d. Rosalind Franklin
   e. Snoopy

2. Who gathered the data that helped reveal the structure of DNA?
   a. Francis Crick
   b. Craig Venter
   c. James Watson
   d. Rosalind Franklin
   e. Gregor Mendel

Which of the above is the most appropriate to measure the SLO? Why?

1. The term hypothesis, as used in research, is defined as
a. A conception or proposition formed by speculation or deduction or by abstraction and generalization from facts, explaining or relating an observed set of facts, given probability by experimental evidence or by factual or conceptual analysis but not conclusively established or accepted.

b. A statement of an order or relation of phenomena that so far as is known is invariable under the given conditions, formulated on the basis of conclusive evidence or tests and universally accepted, that has been tested and proven to conform to facts.

c. A proposition tentatively assumed in order draw out its logical or empirical consequences and so test its accord with facts that are known or may be determined, of such a nature as to be either proved or disproved by comparison with observed facts.

Does this question test the SLO? Why or why not?

Higher order thinking example:

A nurse is making a home visit to a 75 yo male patient who has had Parkinson’s disease for the last 5 years. Which finding has the greatest implication for this patient’s care?

a. The client’s wife tells the nurse that the grandchildren have not been to visit in over a month

b. The nurse notes that there are numerous throw rugs throughout the patient’s home.

c. The patient has a towel wrapped around his neck that his wife uses to wipe her husband’s face.

d. The patient is sitting in an armchair, and the nurse notes that he is gripping the arms of the chair.

Here, students must apply multilogical thinking and a high level of discrimination to choose the best answer.

SOURCE:
https://cft.vanderbilt.edu/guides-sub-pages/writing-good-multiple-choice-test-questions/