

CSLAP Quiz- Answer Key

Part 3: On Shore Procedures

1. You pull out the bottles from the next bag of bottles, and notice there is no calcium bottle. You should:
 - a. **Incorrect:** not every sample is supposed to be analyzed for the same indicators. You should always assume that if a bottle is missing, the corresponding test is not supposed to be run from that set of bottles. The correct answer is D- Proceed as before. If there is no calcium bottle in the bag, that means calcium should not be run in that sample
 - b. **Incorrect:** not every sample is supposed to be analyzed for the same indicators. You should always assume that if a bottle is missing, the corresponding test is not supposed to be run from that set of bottles. The correct answer is D- Proceed as before. If there is no calcium bottle in the bag, that means calcium should not be run in that sample
 - c. **Incorrect:** substituting a bottle from one of the other bags or changing a label will mess up the other tests, and should never be done. Not every sample is supposed to be analyzed for the same indicators, so the missing calcium bottle means that this test was not supposed to be run from that set of bottles. The correct answer is D- Proceed as before. If there is no calcium bottle in the bag, that means calcium should not be run in that sample
 - d. **Correct:** not every sample is supposed to be analyzed for the same indicators, so you should assume that the bottles and labels are correct. Substituting a missing bottle or changing a label should never be done.

2. You accidentally take the wrong bag of bottles (#4 instead of #3) and start to fill them. You should
 - a. **Incorrect:** you should never try to “correct” paperwork and labels. If any corrections need to be made, they will be made in the laboratory. The correct answer is D- finish the sample processing, don’t change any paperwork or labels, and include a separate note to the lab informing them of the error. Do the same with any other bag of bottles in error as needed.
 - b. **Incorrect:** you should never try to “correct” paperwork and labels. If any corrections need to be made, they will be made in the laboratory. The correct answer is D- finish the sample processing, don’t change any paperwork or labels, and include a separate note to the lab informing them of the error. Do the same with any other bag of bottles in error as needed.
 - c. **Incorrect:** you should never try to “correct” paperwork and labels. If any corrections need to be made, they will be made in the laboratory. The correct answer is D- finish the sample processing, don’t change any paperwork or labels, and include a separate note to the lab informing them of the error. Do the same with any other bag of bottles in error as needed.
 - d. **Correct:** if any mistakes are made with the paperwork, labels, or choice of bottles, you shouldn’t attempt to correct them by substituting bottles or changing labels or paperwork. These mistakes should be summarized in notes to the lab, allowing the mistakes to be corrected by lab, NYSFOLA, or DEC.

3. Which activities should be done using vinyl gloves?
 - a. **Incorrect:** vinyl gloves are not needed for collecting the regular water samples, either to protect the sampler or prevent contaminating the collected samples. The correct answers are B- collecting any shoreline scum (HABs) samples and D- rolling or folding the filter for the chlorophyll and HABs vials
 - b. **Correct:** vinyl gloves should be used for collecting any shoreline scum (HABs) samples- this will protect you from any potential exposure to blue green algae and the algal toxins found in some

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blooms. Answer D is also correct- vinyl gloves should be used for rolling or folding the filter for the chlorophyll and HABs vials.

- c. **Incorrect:** vinyl gloves are not needed for processing all of the sample bottles, either to protect the sampler or prevent contaminating the collected samples. The correct answers are B- collecting any shoreline scum (HABs) samples and D- rolling or folding the filter for the chlorophyll and HABs vials
 - d. **Correct:** vinyl gloves should be used for rolling or folding the filter for the chlorophyll and HABs vials- this will prevent spread or contamination of the filter. Answer B is also correct- vinyl gloves should be used for collecting any shoreline scum (HABs) samples
4. The labeled sample bottles should be filled...
- a. **Correct:** all filled sample bottles should have some airspace to prevent the bottle from breaking when it is placed in the freezer. Filling the bottle to the shoulder rather than to the very top will prevent bottle breaking.
 - b. **Incorrect:** filling bottles only halfway will not provide enough volume to run the tests. Some airspace is needed, however, to prevent the bottles from breaking when they are frozen. The correct answer is A- to the shoulder.
 - c. **Incorrect:** filling bottles to the very top will now allow any airspace, but the airspace is needed to prevent the bottle from breaking when it is placed in the freezer. The correct answer is A- to the shoulder.
 - d. **Incorrect:** while the actual volume does not need to be measured when filling most of the bottles (you do need to accurately measure samples to be filtered), you will need both enough volume to provide the lab with enough sample and avoid filling the bottle without the airspace needed to prevent bottle breakage when it is frozen. The correct answer is A- to the shoulder
5. The chlorophyll vial (labeled "Chlorophyll a") should be filled with the following:
- a. **Correct:** the chlorophyll vial should be filled with only the filter (paper) after passing 100ml of sample through the filter. The vial should NOT have any water in it.
 - b. **Incorrect:** the chlorophyll vial should NOT have any water in it. The lab does not conduct the chlorophyll filtering- you do that. The correct answer is A- the filter paper after passing through 100ml of water
 - c. **Incorrect:** the chlorophyll vial should NOT have any water in it; it should ONLY have the filter. The correct answer is A- the filter paper after passing through 100ml of water
 - d. **Incorrect:** the chlorophyll filter must be submitted to run the chlorophyll test. The HAB filter is used ONLY by SUNY ESF to conduct the algal toxin sampling, and that filter is submitted in the small "HAB filter" vial. The correct answer is A- the filter paper after passing through 100ml of water
6. What should be done with the color filter?
- a. **Incorrect:** this filter is needed for analyzing the sample for harmful algae blooms (HABs). The correct answer is C- Fold and send it in the HAB vial
 - b. **Incorrect:** although it may be instructive to see visually how the lake changes from week to week, this filter is needed for analyzing the sample for harmful algae blooms (HABs). The correct answer is C- Fold and send it in the HAB vial
 - c. **Correct:** this filter should be folded and placed in the small HAB vial

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- d. **Incorrect:** a separate filtration (with a new filter) is used for the chlorophyll test, and that filter should be placed in the chlorophyll vial. The correct answer is C- Fold and send it in the HAB vial
7. How much water should be filtered for the color and HAB test?
- a. **Incorrect:** more water is needed for the HAB test. The correct answer is D- Exactly 200ml- the exact volume is important
- b. **Incorrect:** more water is needed for the HAB test, although you correctly noted that the exact volume must be measured. The correct answer is D- Exactly 200ml- the exact volume is important
- c. **Incorrect:** although this answer correctly notes the filtration volume, this measurement must be precise, since the lab cannot measure how much water passed through the filter. The correct answer is D- Exactly 200ml- the exact volume is important
- d. **Correct:** 200ml is needed for the HAB test, and this volume must be measured precisely using the graduated cylinder.
8. The raw water sample vial should be filled with...?
- a. **Incorrect:** the raw water sample is used by the lab for measuring the presence of blue green algae. This vial should not be returned empty. The correct answer is B: Surface water from the collapsible container
- b. **Correct:** fill it with water from the collapsible container (the shallow sample collected from the regular CSLAP site) and place it directly in the cooler- do not freeze it.
- c. **Incorrect:** the raw water sample vial should not be filled with bloom water- the algae bloom bottle (with the pink label) is used for that sample. The correct answer is B: Surface water from the collapsible container
- d. **Incorrect:** the color filter should be placed in the small HAB vial (and the chlorophyll filter should be placed in the chlorophyll vial). The correct answer is B: Surface water from the collapsible container
9. After filling the raw sample vial with surface water from the collapsible container, the raw sample vial should be placed:
- a. **Incorrect:** the raw water sample vial should NOT be frozen- this will ruin the results. The correct answers are B- In the refrigerator, rubber-banded to the HAB vial, C- in the cooler, rubber-banded to the HAB vial
- b. **Correct:** the raw water sample vial can be placed in the refrigerator, AS LONG AS it is not forgotten when the other sample bottles are shipped to UFI. Answer C is also correct- the vial can be placed directly in the cooler, rubber-banded to the HAB vial
- c. **Correct:** the raw water sample can be placed directly in the cooler with the HAB vial- this will help to avoid leaving it in the refrigerator (since all other bottles will be in the freezer). Answer B is also correct- the vial can be placed in the refrigerator, rubber-banded to the HAB vial
- d. **Incorrect:** the raw water sample vial cannot be frozen. The correct answers are B- In the refrigerator, rubber-banded to the HAB vial, C- in the cooler, rubber-banded to the HAB vial.