**Santa Rosa Chemistry Department**

**Chemistry Annual Competency Test – 2023**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. You are taking over from the previous shift in the Chemistry Department. You notice both Access2 analyzers

in “Pause” mode. According to the Access2 Routine Maintenance SOP this is unacceptable because:

1. Leaving the analyzers in Pause prevents the instrument from running the Utility assay process.

b. Leaving the analyzers in Pause may potentially damage the instrument.

c. It’s OK because the analyzers are constantly in use.

d. A and B

2. You have the CAP Chemistry Comprehensive Survey. A Supervisor has ordered the tests for you so you have

RILIS labels. What do you do next?

1. You read the instructions that accompany the samples.
2. You perform the testing within five days of receipt of the survey.
3. After testing is completed, you verify the results in RILIS.
4. After the results are verified, you print out a chart reprint from RILIS and use this to transcribe the

results to the CAP report form.

1. All of the above.

3. You are performing a Chem7 on an ED patient. The results for the sodium are 250 mEq/L, and the results

for the potassium are 43 mEq/L. The sample is not hemolyzed. What do you do next?

a. You have the patient redrawn as you suspect the sample is contaminated with IV solution.

b. You report out the results as “critical” and call the provider.

c. You check the tube type and notice that the RN has put the Chem7 label on a sodium fluoride/

potassium oxalate (lactic acid) tube. You find the serum and/or PST tube on the patient and

rerun the Chem7.

d. A and C

4. You are assigned the Chemistry Cardiac Marker survey. You notice that the person who checked in the survey

did not store the samples at the appropriate temperature. What do you do?

a. You run the samples anyway, but record on the chain of custody form that the samples may have

been compromised due to storage issues.

1. You let the Supervisor know that the samples were not stored at the appropriate temperature and

you wait for a new set to arrive.

c. You perform the testing as you normally would and don’t mention that the samples were not stored

appropriately.

5. You are running a Digoxin level on an ER patient. The result from 2 hours earlier was 2.5 ng/mL. Now the result

9.6 mg/mL. What are the next steps?

1. You notify the Provider of this critical result.
2. You look in the IFU for Digoxin to see if there are any drugs that might interfere with the results and advise the Provider of this interference.
3. Both a. and b. – and place a comment on the result regarding drug interference.

6. You notice that there are “\*” flags on some of the enzyme results that are being performed on the DXC700

analyzer. What do you do?

a. You don’t know what this means so you verify the results.

b. You immediately stop testing on this analyzer, retest the affected samples on the alternate

analyzer and notify a key operator or the Chemistry Technical Supervisor that the lamp might

need replacing.

c. You call the Beckman hotline for information on correcting this error and take the instrument

out of service until the situation is resolved.

1. B and C

7. You are loading reaction vessels (RVs) onto one of the Access2 analyzers. You notice one of the RVs in the pack

is missing. What do you do?

a. You load the RV pack onto the instrument – one missing RV will not affect the instrument.

b. You discard this RV pack and open a new one. The new pack is not missing any RVs so it is OK to load.

c. You notify the supervisor because it might be a defective batch.

d. B and C

8. You load the above RV pack that is missing an RV onto one of the analyzers. What is the potential consequences?

a. None – one missing RV will not affect the instrument.

b. The instrument is expecting an RV to be in the next position. When the RV is missing this will create

an RV jam, potentially damaging the analyzer.

c. The RV jam causes a chain reaction of problems leading to the analyzer being inoperable for days.

d. B and C

9. Which drug cannot be performed using a green top tube?

a. Phenytoin

b. Lithium

c. Acetaminophen

10. What are the 2 Access2 assays that can be manually diluted?

a. BNP

b. Troponin I

c. βhCG

d. B and C

11. What are the four DXC700 assays that CANNOT be diluted?

a. AST, ALT, Lipase, CK

b. Acetaminophen, Phenytoin, Gent, VPA

c. Na, K, Cl, CO2

d. Bilirubin, BUN, Glucose, Creatinine

12. You need to replace a reagent on the DXC700 in the middle of your shift. What are the next steps

after you replace the reagent?

a. You perform a “Reagent Check” to check “changed positions”.

b. If necessary, you calibrate the new reagent (the instrument will determine this). If you are required to

calibrate, you “uncheck” all of the highlighted assays on the Calibration page EXCEPT the assay that you

just changed.

c. You perform QC on the new reagent.

d. If you calibrated the assay, you record this on the Calibration Log.

e. All of the above

13. You wrote your initials on the wrong date when you are recording that you performed the maintenance on

the Access2 Maintenance Log. What do you do?

a. You find the white out, white out your initials and record your initials on the correct date.

b. You print out a new maintenance log and record your initials on the correct date.

c. You put a single line through your initials that are recorded erroneously, date and initial this correction,

then record your initials on the correct date.

14. What does a positive Fetal Fibronectin mean to the patient?

1. It means that the baby is full-term and OK to deliver.
2. In patients between 24 and 34 completed weeks gestation a positive fFN is associated with preterm

delivery.

1. It means the sample stability may have been compromised and should be re-collected.

15. You’re testing a pleural fluid for pH. The result is 6.9. What does this mean?

a. This means the sample was not at room temperature when it was tested.

b. This means the sample has been exposed to air and the result may be compromised.

c. This suggests that the patient is having an inflammatory or infiltrative process such as empyema,

esophageal rupture or hemothorax.

16. Rapid HIV testing is performed on which of the following patient types?

a. Employees exposed through a needle-stick injury or biological exposure situations.

b. Labor and delivery patients who have no record of a previous HIV test.

c. Sheriff’s Department employees that have been biologically exposed to inmates of unknown HIV status.

d. All of the above

17. The GWT Water filtration system delivers Type I Reagent Grade water to the DXC700 analyzer on

demand with no operator intervention required. What processes require operator intervention?

a. Never – the system does not require any operator intervention.

b. When the system requires a filter change.

c. When the system requires bacterial testing.

d. B and C

18. The clearing of the background in the results area of the SureVue STAT serum pregnancy test device indicates:

a. That the appropriate amount of sample was added to the device.

b. This indicates a negative procedural control.

c. This indicates that the test is invalid and should be repeated.

d. A and B

19. There is a parathyroidectomy being performed in OR4. An RN brings the sample to be tested and hands it to

you. You are covering the break of the CLS assigned to chemistry. What are the next steps?

1. You give it to the CLA on the desk so that they can order the test.
2. You immediately begin centrifuging the sample.
3. While the sample is centrifuging, you order the PTH IO in RILIS – priority STAT.

d. After centrifugation, you load the sample onto either of the Access2 analyzers and wait to make sure

the test has sampled and is being performed. After the result is completed you immediately call the

the results to OR4 and document who was notified.

1. B, C and D

20. You receive a fFN from San Rafael. The sample was collected at 9:00 am. It is now 6:00 pm. What do you do?

1. Reject the sample because it was sent at room temperature and the sample integrity may be

compromised.

1. Perform the test after warming up to room temperature. The sample was sent at refrigerated temperature, so it is OK.
2. Reject the sample because we do not perform this test for other Kaiser facilities.

21. You receive an EDTA tube for HIV Rapid. You have performed the test and now the provider wants to add a CBC

to the sample. What do you do?

a. You tell the provider that the sample must be re-collected. The tube for HIV Rapid cannot be used

for any other test.

b. You add the CBC onto the HIV Rapid sample. You have already performed the Rapid HIV so it is OK to

use for other tests.

22. To avoid crossing CLIA Boundaries when verifying results:

a. Make sure you have Service Resource Display on

b. You un-check any test performed by Regional before verifying results

c. Verifying results performed on other Kaiser facilities is acceptable

c. A and B

Date:

Reviewed By:

Pass / Fail