Annual Competency Quizzes to be put in MTS

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| Test | Problem Solving(quiz or other) |
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| Venipuncture/VPT Butterfly/Specimen Processing/Capillary/Heel stick  | 1. True or False: Patient’s ID should be verified by asking them their full name and date of birth?
2. What is the best vein to use because it is bigger, anchored better and bruises less?

 Median cubital vein1. What is the maximum time a tourniquet can be left on the patients arm?
2. Not more than 1 minute
3. Not more than 2 minutes
4. As long as it takes to draw the blood
5. An INR is ordered on a patient and you have to use a butterfly for the draw. What statement(s) are true:
6. Must use discard blue top tube as a primer before drawing the INR.
7. The primer tube must be completely filled before drawing the INR.
8. You can use a butterfly to collect specimens with evacuated tubes or syringe.
9. The primer tube can be discarded as soon as the tubing of the butterfly is primed with blood
10. A,C, D
11. True or False: All tubes must be labeled with the computer generated label in the presence of the patient.
12. True or False: For capillary/heel stick draws do not use excessive squeezing to obtain blood as this can cause contamination with tissue fluids causing erroneous test results.
13. When collecting samples in microtainer tubes, why is the EDTA always collected first? To prevent clotting
14. Blood cultures: Select all true statements
15. BACTE bottles have more vacuum than the volume needed so it’s possible to over fill the bottles which could cause false positive results.
16. Venipuncture site must be cleaned off using chloraprep applicator.
17. Culture vial tops must be sterilized with an alcohol wipe.
18. All of the above.
19. True or False: It’s okay to spin a serum separator tube more than once if blood does not separate well after the first spin.
20. True or False: When doing a capillary or heelstick, the first drop of blood should be wiped away.

**Coflex or Coban wraps are NEVER to be used for:**1. \_\_\_T\_Patients under the age of 3. The risk of impaired circulation is higher for children.
2. \_\_T\_\_Capillary specimen collections of any kind or on fingers/toes.
3. \_\_T\_\_Patients who are unable to remove the wrap themselves.
4. \_\_T\_\_Patients who are unable to communicate discomfort, pain, numbness or other changes in sensation themselves.
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| EKG | 1. T or F: Patient information can only be entered into the ECG cart by downloading the ECG order from EPIC.
2. T or F: Downloading orders from EPIC greatly reduces the chance of mistyped patient information. Always download if possible.
3. If “Poor Data Quality” or “Suspect Limb Lead Reversal” show up on the ECG printout, what should you do?
4. Check all electrodes and leads and avoid crossing lead wires.
5. The ECG must be redone
6. Accept and give to the provider to read.
7. A and B
8. T or F: Upon completion of the ECG, either close the screen or change screen so that patient information is no longer visible
9. T or F: If the ECG is needed emergently and patient information is unavailable, it is acceptable to run the ECG without patient information.
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| UA/Micro | True or False Statements:1. \_T\_\_ Urine held in the refrigerator for up to 24 hour can still be used.
2. \_F\_\_ Specimens can be left at room temp for 3 hours before needing to

 be refrigerated. 1. \_\_T\_ Urines with strong color due to medication or elevated bilirubin

 should not be read on the clinitek analyzers. Only the color and  clarity should be recorded.1. \_ T\_\_ Urines are centrifuged for 3 minutes at 2500 RPMs.
2. \_\_T\_\_ Place one drop of resuspended urine sediment on slide, coverslip

 and scan a minimum of 20 fields before reporting. |
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| Serum/UA HCG  | 1. True or False: For serum HCG, QC is run monthly and on new shipment/ new lot.
2. A red line appearing in the control region (C) is the internal procedural/positive control. It confirms sufficient specimen volume and correct procedural technique
3. A clear background is an internal negative background control.
4. Interpretation of results: a. Positive b. Negative c.Invalid

\_\_b\_\_One red line appears in the control region (C). No apparent red or pink line appears in the test region (T).\_\_a\_\_\_Two distinct red lines appear. One line should be in the control region (C) and another line should be in the test region (T).\_\_c\_\_\_Control line fails to appear1. True or False: QC for urine HCG is run each day of patient testing.
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| iFOBT Kit | 1. T or F: Any lot number of developer may be used with any lot number of slides as long as both are within expiration date.
2. T or F: It is important that the patient specimen area be tested BEFORE the QC test area as the Positive control might “bleed” into the patient specimen area.

**Fill in the blanks:** 1. Apply 2 drops of developer to each patient test specimen window on the back side of the slide. Read results within 60 seconds. Report as positive (any trace of blue color development on or at the edge of the stool smear) or negative (no blue color development).
2. After developing and interpreting the patient test, apply ONE drop of Developer in the middle of the control area and read within 10 seconds.
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| Mono Kit | 1. External Positive and Negative Controls provided in the OSOM Mono Test kit should be run how often?
2. Each day of patient testing
3. First of the month
4. Whenever a new box is opened
5. Interpretation of Results: a) Positive b) Negative c) Invalid

    B A C1. T or F: Read result at 5 minutes. Positive can be read sooner.
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| Amnisure | 1. Once AmniSure Test Strip is removed from foil pouch, it must be used within \_\_\_6\_\_hours.
2. T or F: QC will be performed EACH DAY of patient testing.
3. Select all true statements:
4. 1 Line Present (Control) in Test Area: Negative for Ruptured Membranes
5. Positive results can be reported as soon as two lines appear in

the test region but the full ten minute incubation is required to report a negative1. Do not read or interpret results after 15 minutes have passed since placing test strip into vial.
2. All of the above.
3. A sample comes down very bloody, should the sample be run?
4. No the test can malfunction and is not recommended.
5. Yes the test still functions properly
6. T or F: If external or Internal controls are invalid, the test cannot be reported and must be repeated
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| Rapid Strep | 1. You must start the test within \_\_\_\_\_ minutes of adding the sample to the cartridge
2. 10 min
3. 20 min
4. 30 min
5. When running the External Quality Controls Samples:
6. Run the negative before the positive.
7. It doesn’t matter what QC you run first.
8. Corrective action when a control fails to perform as expected
9. Verify use of correct control and kit, correct lot number, expiration dates acceptable
10. Open a new control, mix and test and if acceptable – document corrective action, record results and proceed with patient testing.
11. If repeat fails – document corrective action and open a new kit
12. If acceptable on new kit– document corrective action, record results and proceed with patient testing
13. All of the above
14. If the result is NO RESULT- REPEAT TEST and the retest is NO RESULT- REPEAT TEST, Result in Beaker as Invalid.
15. T or F: Any time you get an instrument error or No Result, a new cartridge has to be set up.
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| BD Affirm | 1. The Affirm VPIII test kit is stable how long with stored at room temperature?

3 months1. External QC is run:
2. Monthly and with each lot change
3. Weekly
4. Each day of patient testing
5. If the internal controls on patient samples do not result as expected:
6. A repeat on that specimen is possible. You can carefully retrieve all of the patient sample from Well 1 (liquid from patient swab) with a disposable pipette and place into well 1 of a new reagent cassette add substrate to Well 7 of the new cassette and run.
7. A repeat on that specimen is **not** possible and a new sample must be collected.
8. T or F: Prepared specimens may be stored at room temperature for up to 72 h.
9. Tor F: Specimens should be collected using the Ambient Temperature Transport System. Sample is stable for 72 hours at ambient temperature.
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| Glucose | 1. Once the test Strip is removed from the vial it must be used within how many minutes?
2. 10
3. 15
4. 5
5. T or F: Critical values of <54 mg/dl or >450 mg/dL should be reported to the physician immediately and documented with in Epic Beaker via the Comm Log process.
6. T or F: QC must be run once every 24 hours or every day of patient testing
7. Open expiration date for glucose QC is:
8. 1 month or manufacturer’s expiration date, whichever comes first.
9. 2 months or manufacturer’s expiration date, whichever comes first.
10. 3 months or manufacturer’s expiration date, whichever comes first.
11. Lab gets a stat call to perform a glucose on a patient but there are no orders placed. What should the lab do?
12. Lab will have to wait until an order is placed in order to do the test
13. Lab can still do the test by using the emergency barcode provided in the Accuchek carrier tote.
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| Hematology-Analyzer MDIFF/WAM | 1. When you see SMEAR1 in WAM under the manual column, what do you do?
2. Make a blood slide.
3. Scan slides for abnormalities to determine if manual diff needs to be done if indicated in op Alert.
4. Must always report out RBCM and PLTE anytime looking at a slide even if a manual diff not performed.
5. All of the above
6. Where do you go in WAM to enter the RBCM and PLTE?
7. Manual Diff Tab
8. Validation Tab
9. Morphology Tab
10. Rerun Tab
11. Anytime you do any modifications to the results in WAM, what tab do you click on before validating results?
12. Click on Accept.
13. Click on Store
14. Click on Validate All.
15. Specimens that are unregistered and will have a  next to sample ID and no patient demographics will be seen.
16. T or F: Do not place CBC and Diff samples on a mechanical rocker. Constant rocking may cause PLT clumping and alter white cell membranes, resulting in false interpretive messages.
17. Specimens stored at 2-8°C are stable for up to 24 hours.
18. All three levels of QC are performed at the following times:
19. Daily before sample analysis
20. After replacement/replenishment of reagents
21. After instrument maintenance
22. When there is a concern about the accuracy of analysis values
23. All of the above

**True or False Statements**:1. \_\_T\_\_ Check all microtainer samples for clots with wooden sticks before running.
2. \_\_F\_\_ Don’t leave QC out more than 45 minutes.
3. \_\_T\_\_ If running a microtainer, remove the cap and select-Cap Open (Manual mode)
4. \_\_F\_\_ Routine Cleaning with CELLCLEAN needs to be performed monthly.
5. \_\_T\_\_ Parameters that exceed Sysmex Reportable Range limits (linearity) are flagged with @ beside the result. These samples will be sent to Regions to be diluted.
6. \_\_T\_\_While performing a manual differential, if any immature or unidentifiable cells are seen, and you don't feel confident in identifying these cells, send sample and slides to Regions.
7. \_T\_\_\_ The term anisocytosis (determined by RDW), microcytosis and macrocytosis (determined by MCV) will not be reported out in the morphology.
8. \_\_T\_\_RBC morphology and platelet estimates should always be done using the 100X objective.
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| ESR  | **True or False Statements**:1. T Assay linearity is 0 - 68. Values greater than 68 should be reported as >68.
2. T The ESR test is sensitive to temperature, tube angle and vibration. It is important to place the stand on a level surface where there is no draft.
3. F One the tube is in the rack, allow the sample to settle in an undisturbed, vertical position for 20 minutes
4. T Opened QC vials are stable 95 days post open when stored at 2-30 degree C.
5. T Both levels of controls should be run monthly and with lot# changes of ESR

 tubes |
| INR | 1. If using a butterfly for collection, use a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to clear the line of air before collecting the sodium citrate tube.
2. Red top tube
3. Blue top tube
4. Lavender top tube
5. Specimens are stable unspun and capped for \_\_\_\_\_\_\_at room temperature.
6. 12 hours
7. 4 hours
8. 1 hour
9. 24 hours
10. If HCT result is >55%:
11. Collection in a special tube adjusted for volume is required
12. If patient has a standing order for high hematocrit and a special tube was collected, perform testing on the special tube.
13. Special draw tubes can be obtained from St. Paul Clinic
14. All of the above.
15. T or F: Normal and abnormal quality control testing is performed every 8 hours each day of patient testing.
16. Microtainer tubes must be loaded in \_\_\_\_\_\_MODE?
17. Auto
18. Manual
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| Wet Prep | Identify each picture: a) Yeast b) Clue c) Trichomonas   1. B-Clue cell 2. A-Yeast 3. C-Trichomonas
2. T or F: More than 20% of the epithelial cells should have the “clue” appearance to report the presence of clue cells.
3. Examine at least ­­­\_\_\_\_\_\_\_\_\_ high power fields for fungal elements and clue cells before reporting a negative result.
4. 5
5. 10
6. 20
7. 25

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| KOH | 1. T or F: Specimen is placed on a glass slide and placed in a covered petri dish, and brought to the lab. Only the petri dish needs to be labeled.
2. How many drops of KOH is added to the specimen and then coversliped.
3. 3
4. 2
5. 1

**True or False**: 1. \_\_T\_\_pass slide gently through flame 2-3 times and let slide sit for 3 minutes.
2. \_\_F\_\_Scan a minimum of 10 fields for fungal elements under low power
3. \_\_T\_\_Care must be taken not to confuse so-called "mosaic" fungus (epithelial cell lines appearing as hyphae) and other artifacts with true fungal elements. True fungi hyphae will run over epithelial cells, not just along their edges.
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| Riverway: Hematology-Analyzer MDIFF/WAM | 1. Specimens that are unregistered and will have a  next to sample ID and no patient demographics will be seen.
2. T or F: Do not place CBC and Diff samples on a mechanical rocker. Constant rocking may cause PLT clumping and alter white cell membranes, resulting in false interpretive messages.
3. Specimens stored at 2-8°C are stable for up to 24 hours.
4. All three levels of QC are performed at the following times:
5. Daily before sample analysis
6. After replacement/replenishment of reagents
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3. \_\_T\_\_ If running a microtainer, remove the cap and select-Cap Open (Manual mode)
4. \_\_F\_\_ Routine Cleaning with CELLCLEAN needs to be performed monthly.
5. \_\_T\_\_ Parameters that exceed Sysmex Reportable Range limits (linearity) are flagged with @ beside the result. These samples will be sent to Regions to be diluted.
6. \_\_F\_\_Riverway staff can report out specimens with op alerts stating Moderate sites send to Regions.
7. \_\_T\_\_Riverway sites are considered Moderately complex sites.
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Coaguchek competency Questions

1. How soon must a strip be used after being removed from the original container?
	1. Within 5 minutes
	2. Within 1 hour
	3. Within 10 minutes
	4. Within 8 hours
2. What steps should you take if the Coaguchek control does not perform as expected?
	1. Call your supervisor to let them know you are having trouble.
	2. Cancel the test and ask the patient to return another day.
	3. Verify, remix and rerun, open new control, open new strips, contact your supervisor.
	4. Run your patients anyway. It’s a waived test.
3. If you stick the patient and the finger does not bleed well, you should:
	1. Wipe the drop off and squeeze harder.
	2. Stick the patient again.
	3. Squeeze as hard as you can and keep adding specimen until you have enough.
	4. Draw the patient from the arm.
4. How often should the outside of the meter be cleaned?
	1. After every patient
	2. Once a day
	3. Monthly
	4. When visibly dirty.
5. What should you do if you get an Error 7?
	1. Draw the patient for a protime.
	2. Repeat the test. If you get another Error 7, draw the patient for a protime.
	3. Turn the meter off and on and repeat the test.
	4. Call your supervisor immediately.

HemoCue: HGB & WBC

1. What temperature do you store the microcuvettes?

 Room Temperature

1. How long are controls good for after opening?

 1 month

1. What is the most appropriate anticoagulant for specimen collection?

 EDTA

1. What are the values that need to be repeated to verify HGB results?

 <7.0g.dl or >19.0g/dl

1. What are the values that need to be repeated to verify WBC results?

 <2.0k.ul or >25.0u/kl

1. What would you do if the errors (ERR30, ERR62) appear on the WBC HemoCue?

 Clean the optical area.