Low- and Medium-Risk Sterile Compounding Quiz
(Set B)

1. A 5 micron filter needle should be used when withdrawing solution from a(n)
    a. vial
    b. PVC bag
    c. ampule
    d. glass bottle

2. Personnel cleansing and gowning must be done in the following order:
    a. shoe covers, hair cover, face mask, cleansing, gown, gloves
    b. hair cover, face mask, shoe covers, cleansing, gown, gloves
    c. cleansing, gown, hair cover, face mask, shoe covers, gloves
    d. face mask, hair cover, shoe covers, gloves,cleansing, gown

3. The expiration date of opened multi-dose vials should not exceed
    a. 24 hours
    b. 28 days
    c. 1 week
    d. 30 days

4. A laminar airflow workbench should
    a. operate continuously 24 hours per day.
    b. not be turned off until the end of each day.
    c. be turned off between shifts for proper cleaning.
    d. be turned off when not in use to conserve the HEPA filter.

5. Once inside the buffer area and prior to donning sterile powder-free gloves, antiseptic hand-cleansing shall be performed using
    a. Dakin's solution
    b. a hydrogen peroxide based gel
    c. a waterless alcohol-based surgical hand scrub
    d. a chlorhexidene scrub

6. Select the syringe that is the most accurate for measuring a 3.1 ml amount of solution:
    a. 20 ml syringe
    b. 10 ml syringe
    c. 5 ml syringe
    d. 3 ml syringe

7. To maintain the sterility of a syringe, two parts cannot be touched:
    a. the tip and the barrel
    b. the plunger and the barrel
    c. the tip and the plunger
    d. none of the above

8. The rubber stopper on a vial may be sterilized by
    a. spraying the top of the vial with isopropyl alcohol and allowing it to dry before needle entry.
    b. spraying the top of the vial with isopropyl alcohol and do the needle entry before the alcohol dries.
    c. Swabbing/wiping the top of the vial once with an unused sterile alcohol swab
    d. Swabbing/wiping the top of the vial with several firm strokes in the same direction using a clean unused portion of an alcohol swab on each pass

9. Before compounding sterile preparations, all vials, ampules, and IV solution containers should be inspected for
    a. cloudiness
    b. particulate matter
    c. expiration date
    d. all of the above

10. The interior working surfaces of the laminar airflow workbench should be cleaned with sterile 70% isopropyl alcohol and
    a. clean, lint-free non-shedding cloth
    b. clean, unused paper towel
    c. sterile gauze pad
    d. sterile sponge

11. A critical area within the ISO Class 5 primary engineering control where critical sites are exposed to unidirectional HEPA-filtered air is called the
    a. buffer area.
    b. direct compounding area.
    c. pre-filter
    d. controlled area

12. The most common means of contaminating a compounded sterile preparation is
    a. coring the rubber stopper
    b. human touch
    c. lint from the alcohol swab
    d. using a needle more than one time

13. Before sterile compounding begins, the compounder should vigorously scrub the hands, nails, wrists, and forearms for at least 30 seconds with
    a. 70% isopropyl alcohol
    b. povidone-iodine
    c. brush, warm water, and soap
    d. warm water and soap

14. To prevent coring of a rubber stopper in vials, the compounder should insert the needle
    a. with the bevel tip and then applying lateral and downward pressure
    b. with the bevel tip and then applying vertical and downward pressure
    c. with the bevel tip and then applying downward pressure with the bevel side facing the stopper
    d. with the bevel tip and then applying downward pressure while twisting the needle

15. The overwrap of a sterile syringe should
    a. be removed prior to placing the syringe in the LAFW
    b. be wiped down with 70% IPA before placing in on the floor of the LAFW
    c. be opened in the LAFW
    d. be made of plastic only to maintain sterility

16. Once a sterile preparation has been compounded, it should be
    a. properly labeled
    b. inspected for cores and particulates
    c. checked by a pharmacist to verify that the compounder has added the correct drug and amount
    d. all of the above

17. To withdraw fluid from a vial, the volume of fluid should
    a. always be replaced with an equal volume of air
    b. be replaced with an equal volume of air except with hazardous drugs or gas-producing drugs
    c. never be replaced with an equal volume of air
    d. be replaced with an equal volume of air with hazardous drugs only

18. If the final sterile preparation is in a syringe, the needle should
    a. be removed and replaced with a clean, unused needle
    b. be removed and capped with a sterile tip or cap
    c. remain on the syringe and replaced just prior to administration
    d. remain on the syringe and used for administration

19. Air bubbles may be removed from a syringe by
    a. pulling air into the syringe, vigorously shaking it, and pushing out the excess air by depressing the plunger
    b. allowing the syringe to set for a few minutes and then depressing the plunger to push out the excess air
    c. pulling back the plunger slightly to remove fluid from the needle, tapping the syringe, and then depressing the plunger to push out the excess air
    d. pulling excess fluid into the syringe and depressing the plunger to push out the excess air and fluid into the LAFW

20. Prior to removal of a sterile admixture in a glass container from the LAFW,
    a. a protective seal should be placed over the stopper
    b. the stopper should be swabbed with 70% isopropyl alcohol and allowed to dry
    c. the container should be overwrapped in a sterile plastic bag
    d. none of the above

21. An opened single-dose ampul may
    a. not be stored over 1 hour after opening.
    b. not be stored over 6 hours after opening.
    c. not be stored for any time period.
    d. not be stored over 24 hours after opening.

22. CAIs and CACIs may be located in less that ISO Class 7 air quality if certain conditions are met.
    a. True
    b. False

23. Air sampling shall be performed at least _____ as part of the re-certification of the facilities and equipment.
    a. weekly
    b. monthly
    c. semi-annually
    d. annually

24. Work surfaces in the LAFWs, BSCs, and CAIs shall be cleaned and disinfected every _____ minutes during continuous compounding periods of individual CSPs.
    a. 15
    b. 30
    c. 60
    d. 120

25. Media-fill testing of aseptic work skills shall be performed at least _____ for low- and medium-risk compounding.
    a. weekly
    b. monthly
    c. semi-annually
    d. annually