1. What should be done when a woman who is 24 weeks pregnant has a positive antibody screen?

a. Perform an antibody identification panel; titer if necessary
b. No need to do anything until 30 weeks gestation
c. Administer RhIg (Rh immune globulin)
d. Adsorb the antibody onto antigen-positive cells

2. A donor bag is half filled during donation when the blood flow stops. Select the correct course of action

a. Closely observe the bag for at least 3 minutes; if blood flow does not resume, withdraw the needle
b. Remove the needle immediately and discontinue the donation
c. Check and reposition the needle if necessary; if blood flow does not resume, withdraw the needle
d. Withdraw the needle and perform a second venipuncture in the other arm

3. A major crossmatch and screening cells are 2+ at IS, 1+ at 37C, and negative at the IAT phase. Identify the most likely problem

a. Combination of antibodies
b. Cold antibody
c. Rouleaux
d. Test error

4. An EIA screening test for HTLV I/II was performed on a whole-blood donor. The results of the EIA were repeatedly reactive but the confirmatory test was negative. On the next donation, the screening test was negative by two different EIA tests. The donor should be:

a. Accepted
b. Deferred
c. Told that only plasma can be made from his donation
d. Told to comeback in 6 months

5. An iron containing heme protein responsible for the peroxidase activity characteristic of azurophilic granules, it accounts for the greenish color of pus.

a. Hemoglobin
b. Myoglobin
c. Lactoferrin
d. Myeloperoxidase

6. It binds iron which is an essential nutrients for microbes.

a. Defensins
b. Lysozymes
c. Lactoferrin
d. Myeloperoxidase

7. Phagocytosis can be divided into 6 stages - adherence, chemotaxis, engulfment, fusion, phagosome formation, digestion and destruction. arrange the following in order of accurence:

a. Chemotaxis, adherence, engulfment, phagosome formation, fusion, and digestion and destruction
b. Chemotaxis, adherence, engulfment, fusion, phagosome formation, and digestion and destruction
c. Adherence, chemotaxis, engulfment, fusion, phagosome formation, and digestion and destruction
d. Adherence, chemotaxis, digestion and destruction, fusion, engulfment, phagosome formation

8. Phagocytes, can interact with microorganisms directly via primitive pattern recognition receptors(PPRP) that recognize a wide array of molecules present on the surface of microorganisms. Phagocytes have also been shown to interact indirectly with microorganisms via opsonins that have been deposited on the microbial cell surface.

a. Both statements are correct

b. Both statements are incorrect
c. First statement correct, second incorrect
d. First statement incorrect, second correct

9. Most potent phagocytic cell and effective at antigen presentation:
a. Mast cell
b. Monocyte
c. Macrophage
d. Dendritic cell

10. Which cell is considered to be a bridge between the innate and adaptive immune system?
a. NK cell
b. Mast cell
c. Monocytes, macrophage
d. T cell

11. Large granular lymphocyte (LGL) is synonymous with:
a. B lymphocytes
b. Natural killer cells
c. Cytotoxic T cells
d. Helper T cells

12. Which statement about basophils is correct?
a. Have a high concentration of heparin in the granules
b. Have a high concentration of histamine in the granules
c. React with two adjacent IgA molecules on the most cells
d. Are associated with anaphylactic shock

13. One molecule of IgM complexed to antigen can bind C1 and trigger the activation of the complement. The efficiency of IgM as an activator of the complement resides in its:
a. Large size
b. Heavy chain regions
c. Pentameric structure
d. High molecular weight

14. A part of the T cell antigen receptor complex:
a. CD2
b. CD3
c. CD4
d. CD8

15. The cytotoxic ability of T cells can be determined by incubating activated CD8+ T cells by radiolabeled ____target cells. When the CD8+ cells deliver their "lethal hit" and the target cell is lysed, the radioactive labelis released and can be detected by a gamma counter.
a. Cesium ^{137}Cs
b. Cobalt ^{60}Co
c. ^{125}Iodine
d. Chromium ^{51}Cr

16. An antibody that can be obtained through immunization with an antigen which presents various epitopes
a. Polyclonal ab
b. Monoclonal ab
c. Monomeric ab
d. Pentameric ab

17. Uniform homogenous antibodies directed to epitopes, not to whole antigen molecules.
a. Polyclonal ab
b. Monoclonal ab

c. Monomeric ab
d. Pentameric ab

18. A unique amino acid sequence that is common to immunoglobulin molecules of a given class in a given species:
a. Isotype
b. Allotype
c. Idiotype
d. None of these

19. The variable portions of each chain are unique to a specific antibody molecule, and they constitute what is known as:
a. Isotype
b. Allotype
c. Idiotype
d. None of these

20. It is considered the gold standard in testing for contract dermatitis:
a. RIST
b. RAST
c. FAST
d. Patch test

21. It is referred to as congenital thymic hypoplasia which results from defective embryogenesis leading to a reduced (or absent) thymus.
a. DiGeorge's syndrome
b. Wiskott-Aldrich syndrome
c. X-linked agammaglobulinemia (XLA)
d. Bruton's agammaglobulinemia

22. Which of the following immunodeficiency disorders is associated with the presence of giant cytoplasmic granules that occur as a result of uncontrolled membrane fusion?
a. Wiskott-Aldrich syndrome
b. Chronic granulomatous disease
c. Chediak-Higashi syndrome
d. Leukocyte adhesion deficiency

23. Which one of the following immunodeficiency disorders is associated with a defect in the NADPH oxidase system
a. Severe combined immunodeficiency
b. Chronic granulomatous disease
c. Chediak-Higashi syndrome
d. Leukocyte adhesion deficiency

24. It is a chronic progressive inflammatory disease autoimmune disease marked by progressive DRYNESS OF THE EYES AND THE MOUTH.
a. Sjogren's syndrome
b. Rheumatoid arthritis
c. Scleroderma
d. SLE

25. The human anti-neutrophil cytoplasmic antibodies (ANCAs), described for the first time in 1982, directed against antigenic components mainly present in:
a. Primary granules of neutrophils
b. Secondary granules of neutrophils
c. Chromatin of neutrophils
d. Nucleus of neutrophils

1. **True for Orth's fluid except:**
   a. it contains picric acid, strong formaldehyde and glacial acetic acid
   b. it demonstrates rickettsiae and other bacteria

c. for study of degenerative process of necrosis
d. preserves myelin better than buffered formalin

2. **This method is preferred when whole eye sections is required**.
   a. Dry celloidin method
   b. Wet celloidin method
   c. Gelatin impregnation
   d. Nitrocellulose method
3. **These are cervico-vaginal cells that mimics the appearance of honeycomb.**
   a. Parabasal cells
   b. Endometrial cells
   c. Endocervical glandular cells
   d. Pregnancy cells
4. **This is considered as the most widely used autopsy technique.**
   a. Ghon
   b. Virchow
   c. Rokitansky
   d. Letulle
5. **This animal is primarily used for the preparation of polyclonal antibody.**
   a. Rabbit
   b. Horse
   c. Pig
   d. Mice
6. **Prolonged exposure to benzene may lead to which of the following?**
   a. Leukemia
   b. Aplastic anemia
   c. Cancer
   d. Abortion
7. **Silver impregnation technique is useful for the demonstration of which of the following?**
   a. Spirochete
   b. Acid Fast Bacilli
   c. Glycogen
   d. Hemosiderin granules
8. **Deparaffinization process is achieved through which of the following solutions?**
   a. Alcohol
   b. Xylene
   c. Ammonia water
   d. Acetone
9. **While cutting sections, you have noticed that tissues are cut alternatively thick and thin. Which of the following may cause this?**
   a. Tilt of knife is too great
   b. Wax is too hard
   c. Knife is dirty
   d. All of the choices
10. **When stained with Masson Fontana, melanin will yield what color if positive?**
    a. Blue
    b. Red
    c. Brown
    d. Black
11. **All of the following statements are true for Carnoy's Fluid, EXCEPT:**
    a. it is considered to be the most rapid fixative
    b. it contains chromic acid and osmium tetroxide
    c. recommended for chromosome, lymph glands and urgent biopsies
    d. it fixes and dehydrates at the same time

90. The Philippine Medical Technology Act, RA 5527, was approved on:

a. June 21, 1979
b. June 21,1969
c. June 21, 1959
d, June 11, 1969

91. A medical technologist is a person who engages in the work of medical technology under the supervision of a:
a. pathologist
b. Licensed physician authorized by DOH in places where there is no pathologist
c. either of these
d. neither of these

92. A medical technologist is not allowed by law to:
a. head a clinical laboratory
b. own a laboratory
c. supervise a laboratory technician
d. all of these

93. *MEDICAL TECHNICIAN'S* rating in the MT board exam:
a. 60 to 74.9%
b. 65 to 74.9%
c. 68 to 74.9%
d. 70 to 74.9%

94. Any member of the Medical technology Board, if after due hearing, if found guilty of neglect of duty or incompetence can be removed by:
a. President of the Philippines
b. CHED commissioner
c. PRC chairman
d. Civil service Commissioner

95. All successful examinees will be required to take their personal oath:
a. before the president of the Philippines
b. before a judge
c. before the president of PAMET
d. before the board of MT or any person authorized to administer oath

96. Administrative investigations shall be conducted by:
a. at least one member of the Board
b. three members of the Board
c. at least one member of board with one legal officer
d. at least two members of board with one legal officer

97. Any person presenting or attempting to use as his own, the certificate of registration of another medical technologist is violating:
a. section 15 or RA 5527
b. section 20 of RA 5527
c. section 28 of RA 5527
d. section 29 of RA 5527

1. **Hematoxylin and Eosin staining is an example of what type of staining technique?**
    a. Progressive
    b. Regressive
    c. Negative
    d. Silver Impregnation
2. **The most widely used embedding medium has a melting point of _ at a laboratory with a temperature that ranges at 15-18C.**
    a. 50-54C
    b. 54-58C
    c. 50-52C

d. 54-56C

3. **What is the clearance angle for a rotary microtome?**
   a. 25-30
   b. 5-10
   c. 15-20
   d. 30-35
4. **All of the following are stain for amyloid except**
   a. Congo red
   b. Alcian blue
   c. Iodine
   d. None of the choices
5. **Which of the following is/are microanatomical fixatives?**
   a. Helly's
   b. Orth's
   c. Newcomers
   d. All of the choices
6. **A good characteristic of a good mounting media is that it should have a refractive index as close to that of the slide's which is _____.**
   a. 1.518
   b. 1.158
   c. 1.185
   d. 1.815