

**IMMUNOLOGY, SEROLOGY AND BLOOD BANKING**

1. Other name for HCV RNA?
  - a. Viral clade
  - b. Surface antigen
  - c. Viral load
  - d. Core antigen
  
2. Anti-U
  - a. most common antibody in the MNSsu system
  - b. found only in black individuals
  - c. naturally occurring antibody
  - d. named "U" for Uruguay
  
3. Blood component given to patient with aplastic anemia?
  - a. FWB (fresh whole blood)
  - b. washed RBC, less than 7 days old
  - c. PRBC from WB
  - d. Irradiated blood
  
- *ito po yung gnatanong ko po sayo dati mam, nglabas talaga siya sa boards. Hehe. :)))*
  
4. Indication for neocyte transfusion?
  - a. ITP
  - b. HTR
  - c. Hyrdops fetalis
  - d. thalassemia
  
5. Famous cook whose reported to be a carrier of a febrile disease, and reported to killed 50 persons.
  - a. Felix
  - b. Widal
  - c. Mary
  - d. Moley
  
6. Which of the characteristics expressed as tumor and present normally in fetal cells?
  - a. Oncogenes
  - b. Oncofetal antigen
  - c. Sarcoma
  - d. Tumor Specific antigen
  
7. When testing for malaria, what method is most commoly used in the philippines?
  - a. Thin Smear Method
  - b. Thick Smear Method
  - c. Western blot
  - d. POCT

- nalito din po ako dito na tanong mam. Di ko talaga alam ang sagot dito. :)
  
8. When reading for a slide agglutination for salmonella, macroscopic agglutination is graded as 25%, what is the interpretation?
  - a. non-reactive
  - b. negative
  - c. 1+
  - d. reactive

- dito po na question, ng 1+ ako, sinunod ko lng po ung agglutination grading sa bloodbanking, ewan ko lng kung tama yun. :))))))
  
9. What phenotype produces least amount of H antigen?
  - a. A1
  - b. AB
  - c. O
  - d. B
  
10. Blood group associated with HLA antigen?
  - a. Yt
  - b. Bg
  - c. Di
  - d. Sd

11. HLA class wherein most of the autoimmune diseases occur?
  - a. I
  - b. II
  - c. III
  - d. IV
12. Which of the following is correct regarding Leukopoor RBC?
  - a. Filtration and Washing
  - b. Filtration, Washing, Centrifugation
  - c. Filtration and Centrifugation
  - d. Centrifugation and Washing

- Nalito din po ako dito na question mam, gusto ko din sana malaman ang tamang sagot dito. :)
13. How many percent of B-cells are present in the circulation?
  - a. 5-10
  - b. 2-5
  - c. 10-15
  - d. 75-85
14. MLR technique uses what method?
  - a. serologic
  - b. molecular
  - c. chemical
  - d. physical
15. What would stimulate the transformation of B cell into plasma cell?
  - a. Macrophage
  - b. Dendritic cells
  - c. T-Helper
  - d. Double-negative thymocyte

## MICROBIOLOGY AND PARASITOLOGY

1. Cytomegalovirus isolation is recommended using?
  - a. Embryonated Hen's Egg
  - b. Monkey Kidney cells
  - c. A549 cells
  - d. Human Embryonic Fibroblasts

NOTE: #14 in apollon (VIROLOGY)
2. What is the scientific name of the body of tapeworm?
  - a. Scolex
  - b. Strobila
  - c. Proglottid
  - d. Rostellum

NOTE: #87 in apollon (Parasitology)
3. Preferred medium for the isolation of Bordetella Pertussis?
  - a. Bordet-Gengou Medium
  - b. Chocolate Agar
  - c. Charcoal-Cephalexin Agar
  - d. Clotted Rabbit Blood
4. Most enterobacteriaceae gives what type of Methyl Red and Voges Proskauer reaction?
  - a. Similar
  - b. Identical
  - c. Opposite
  - d. NOTA

NOTE: # 161 in apollon (Bacteriology)
5. Which of the following are often mistaken for cyst of amoebae?
  - a. Blastocystic hominis
  - b. Ammonium Magnesium Phosphate Crystal
  - c. Ammonium Carbonate Crystal
  - d. Epithelial Cells

NOTE: #25 in apollon (Parasitology)
6. Which of the following is the vector of African Sleeping Sickness?
  - a. Reduviid Bug
  - b. Tsetse fly
  - c. Sandfly
  - d. Ticks

NOTE: #40 in apollon (Parasitology)
7. Definitive host(vector) for Plasmodium?
  - a. Tsetse fly
  - b. Female Anopheles Mosquito

b. Sandfly

d. Male Reduviid Bug

NOTE: #55 in apollon (Parasitology)

8. Which of the following migrates through the blood, liver, lungs, pharynx and then back to the small intestine?

1. *Necator americanus*
2. *Ancylostoma duodenale*
3. *Strongyloides stercoralis*

a. 1,2

b. 1 only

c. 2,3

d. 1,2,3

9. Venipuncture is not recommended for:

- a. Malaria, Babesia, Hemoflagellates
- b. Amebae, Babesia, Malaria

- c. Babesia, Cryptosporidium, Hemoflagellates
- d. Isospora, Amobae, Hemoflagellates

NOTE: #160 in apollon (Parasitology)

10. Not considered as strictly antibiotics.

- a. Vancomycin
- b. Bacitracin

- c. Tetracycline
- d. Sulfonamides

11. Nasopharyngeal swabs are recommended for the detection of:

1. Neisseria
2. *Haemophilus influenzae*
3. *Bordetella pertussis*
4. MRSA

a. 1,2,4

b. 2,3,4

c. 1,2,3,4

d. 3,4

- Nag 1,2,3,4 nalang ako dito mam kahit di ako sure sa MRSA. Wala kasing 1,2,3 na choices.:)))

12. Stain to demonstrate uterine arrangement of *T.saginata* proglottids?

- a. Iodine
- b. Hematoxylin

- c. Eosin
- d. India Ink

13. Flat, Serrated Edges with confluent growth on BAP.

Identify the organism.

- a. *S.aureus*
- b. *E.coli*

c. *Paeruginosa*

d. kalimutan ko dito na choice. :)

- di ko din alam ang sagot dito mam. Gi check ko po sa mahon na book, *Paeruginosa* po ang nkita ko pro di niya gi specify kung sa BAP basta Flat, Serrated edges lng po ang pgka describe niya. :)

14. Settings of rpm marked on the face of the Rheostat control on the centrifuge should be checked once:

a. Weekly

c. Monthly

b. Daily

d. Every other week

NOTE: #230 in apollon (Bacteriology)

15. Which of the following media stimulates the production of chlamydospores?

- a. Brain-Heart Infusion Blood Agar
- b. Czapek's Agar
- c. Cornmeal Agar
- d. Urease Test Medium

NOTE: #36 in apollon (Mycology)

16. Vector for *Ascaris lumbricoides*:

a. Cockroaches

c. Mosquito

b. Ticks

d. di ko na po marecall to na choice

- pinaka favorite ko na tanong sa lahat, nka handwritten pa talaga ang cockroach

17. First step in Viral Replication

- a. Attachment and penetration
- b. Assembly of Virion**
- NOTE: #5 in apollon (Virology)
- c. Release
- d. Uncoating

18. Acid-Fast Bacilli is killed using

- a. Dried Sputum
- b. 5 minutes in phenol
- c. 30 minutes in sunlight
- d. 10 minutes in moist heat

- ito din na question mam, di ko alam ang sagot. Kung mg phenol ako, sa removal of adherent sputum kasi sya. :))

- SOURCE: RITM

19. Which of the following is a RNA virus?

- a. Pseudomyxoviridae
- b. Papovaviridae**
- c. Herpesviridae
- d. Paramyxoviridae

NOTE: #9 in apollon (Virology)

20. The following is found in the intermediate host of E.granulosus?

- a. Hydatid Cyst
- b. Larvae
- c. Cyst
- d. di ko na marecall to na choice

21. Parasite most prevalent in Orphanage? Hymenelopsis nana (Saunders)

- a. Ascaris
- b. All of this item
- c. Whipworm
- d. Hookworm

22. Which of the following is the first intermediate host of the flukes?

- a. Snail
- b. Water plant**
- c. Fish
- d. Crab

NOTE: #90 in apollon (Parasitology)

23. Second Intermediate Host for P.westermani

- a. Freshwater
- b. Sea weeds
- c. Water cress
- d. Fish

- ito po talaga ang question mam. Vague masyado ang pgka gawa.

24. Oxidase positive and Urease Positive Bordetella

- a. Pertussis
- b. Parapertussis
- c. Bronchiseptica
- d. None of this item

NOTE: #138 in apollon (Bacteriology)

- sa apollon po mam, ang sagot nia po ky si Parapertussis, pero ang nasa De lost po ky si Bronchiseptica. Gusto ko lng po ma clarify to na question.

## CLINICAL CHEMISTRY

1. It is the difference between total protein and albumin

- a. Albumin-Globulin ratio**
- b. Globulin fraction
- c. Creatinine Clearance
- d. Osmolal Gap

2. Not included in the computation of Total Cholesterol

- a. LDL
- b. HDL
- c. VLDL**
- d. TAG

- pag I follow mo ung friedewald formula,  $LDL = TC - HDL - TAG/5$  (conventional);  $TAG/2.175$  (SI)

3. Blood alcohol level of 0.18-0.30%

- a. Mild euphoria, decreased inhibition and motor impairment
- b. Mental confusion, dizziness, strongly impaired motor skills

- c. Inability to stand, walk and run  
**d. Coma and possible death**
4. Anti-convulsant drug that has absence (petit mal) seizure.  
 a. Carbamazepine c. Valproic acid  
 b. None of this item **d. Phenytoin**
5. What routine testing is best done in monitoring the course of Diabetes Mellitus?  
 a. Fasting Blood Glucose c. HBA1c  
 b. OGTT **d. Microalbumin'**  
 - nakakalito ito na question mam. Gusto ko po malaman ang best answer dito mam. :))
6. Which of the following is a/an Acute Phase Reactant. (1) Alpha1-antitrypsin (2) CRP (3) Orosomucoid  
 a. 1 c. 1,2,3  
 b. 1,2 **d. NOTA**
7. What protein migrate in the beta fraction of the protein electrophoresis. (1) alpha1-antitrypsin (2)haptoglobin (3)CRP (4)Immunoglobulin  
 a. 1,2,3 c. 2 only  
 b. 3 only **d. 1,2,3,4**
8. Beer's law  
 a. transmittance b. absorbance
9. What does basal state collection mean?  
 a. First morning specimen c. 2hour-post prandial specimen  
 b. **Fasting specimen** d. after meal, between 2-4pm
10. BUN-Creatinine ratio  
 a. 10:1 c. 20:1  
 b. **10-20:1** d. None of this item  
 - nalito din po ako dito na choice mam. Kay ang nka lagay po ksi ky mam rodriguez na chem ky 10-20:1, pro sa ibang books ky 10:1 po. Gusto ko po sana malaman ang best answer dto mam. :))))
11. Newborn screening specimen  
 a. Venipuncture c. Arterial puncture  
 b. **Blood spot collection** d. Capillary puncture
12. Cushing's disease  
 a. Hyposecretion of GH c. **Hypersecretion of ACTH**  
 b. Hyposecretion of ACTH d. **Hypersecretion of GH**
13. Overproduction of growth hormone in ADULTS  
 a. Dwarfism c. **Acromegaly**  
 b. Gigantism d. Addison's disease
14. Titer for Hashimoto's Thyroiditis  
 a. 1:12 c. 1:64  
 b. 1:32 d. 1:132  
 - di ko po mkita ang sagot nito mam. Gusto ko din sanang malaman ang tamang sagot nito. :)
15. Which enzyme has a high specificity for pancreas and salivary glands?  
 a. **amylase** c. lipase  
 b. ALT d. ALP
16. Counterbalance of sodium?  
 a. **potassium** c. chloride  
 b. magnesium d. Calcium

17. Counter-ion of sodium?  
 a. potassium  
 b. magnesium  
 c. chloride  
 d. calcium
18. Which of the following does TESTRADIOL produced?  
 a. Testes  
 b. placenta  
 c. Ovary  
 d. Pituitary
- #2 question sa board exam. Ito po ang pinaka nakakalitong tanong mam. Di ako sure kung typographic error o hindi. Chineck ko na po to sa iba't ibang books, wala talagang testradiol. :)))

### HISTOPATHOLOGY, MEDTECH LAWS and RELATED LAWS

1. Embedding medium used in Electron Microscope  
 a. Paraffin Wax  
 b. Celloidin  
 c. Gelatin  
 d. Epoxy
2. What does PDCA mean? PLAN-DO-CHECK-ACT  
 - di ko na po marecall ang mga choices nito mam. Sensya. :(
3. Hard Emboli  
 1. bacteria  
 2. Pus  
 3. Parasite  
 4. Thrombi
- a. 1,2,3  
 b. 1,2,3,4  
 c. 2,4  
 d. 1,3
- wala talaga akong idea dito mam. GG aq dito. :(((
4. Original fixative for Pap smear  
 a. 95% ethanol  
 b. 50% alcohol and ether in equal parts  
 c. saccamano fixative  
 d. di ko na marecall to na choice
- gusto ko po sanang malaman ang tamang sagot dito mam. :)))
5. Recommended fixative for Electron Microscopy  
 a. Formaldehyde  
 b. Glutaraldehyde  
 c. Zenker Fluid  
 d. Picric Acid
6. Term that corresponds with the meaning of 'Definite'?  
 a. suspect  
 b. impression  
 c. diagnosis  
 d. di ko na marecall dito na choice. :)
7. Stain for basement membrane  
 a. Verhoeff stain  
 b. Taenzer-Unna  
 - ito lng po na recall ko sa mga choices mam. Senxa. :(

### CLINICAL MICROSCOPY

1. CAROTENE produces what color in the urine?  
 a. Red  
 b. Brown  
 c. Yellow  
 d. Tea colored
- gusto ko din malaman ang tamang sagot dito mam. :DDDD

2. Sperm that is graded as “freely moving”
- |       |        |
|-------|--------|
| a. 10 | c. 100 |
| b. 4  | d. 0   |
- ganito po talaga ang pgka state sa question mam. Nakakatawa ngang mg analyze nto na question. XDDDD

3. Cloudy CSF
- |         |          |
|---------|----------|
| a. 1:10 | c. 1:100 |
| b. 1:20 | d. 1:200 |

4. Normal color and appearance of peritoneal fluid
- |           |                                     |
|-----------|-------------------------------------|
| a. clear  | c. colorless, pale yellow           |
| b. cloudy | d. nakalimutan ko na dito na choice |

5. Not normally found in the urine
- |                 |               |
|-----------------|---------------|
| a. Glucose      | c. Nitrite    |
| b. Urobilinogen | d. Creatinine |

6. How many fields should be viewed to assess sperm morphology?
- |       |        |
|-------|--------|
| a. 10 | c. 20  |
| b. 5  | d. 100 |

7. When reading fecal leukocytes, in which field/amount of field, indicates that there is invasive infection?
- |              |                    |
|--------------|--------------------|
| a. 40-50/HPF | c. at least 20/HPF |
| b. 20/HPF    | d. 3/HPF           |

8. how many links are there in the chain of infection?
- |      |       |
|------|-------|
| a. 6 | c. 8  |
| b. 5 | d. 12 |
- di ko tlagala alam ang sagot dito mam. Blanko ako dito. Hehe. :DDDDD

RATIO: 6 COMPONENTS IN THE INFECTIOUS PROCESS (CHAIN OF INFECTION) -

1. SOURCE OF INFECTION(PATHOGEN)
  2. RESERVOIR
  3. PORTAL OF EXIT
  4. MODE OF TRANSMISSION
  5. PORTAL OF ENTRY
  6. SUSCEPTIBLE HOST
- REFERENCE: BURTON (MICROBIOLOGY)

9. Proper container for the measurement of urobilinogen
- |                              |                                     |
|------------------------------|-------------------------------------|
| a. amber bottle              | c. screw cap                        |
| b. plastic sterile container | d. di ko na marecall dito na choice |
- di ako sure sa sagot dito mam. Gina isip ko nalang na photosensitive na analyte ang urobilinogen, so ng amber bottle nlng ako. :DDD

10. 4+ in Hazard?
- |            |             |
|------------|-------------|
| a. serious | c. extreme  |
| b. slight  | d. moderate |
- di ko ma construct ng mabuti ang question mam, senxa. :(

## HEMATOLOGY

1. Which of the following is not an optical method?
- |                |               |
|----------------|---------------|
| a. Coag-A-mate | c. Fibrometer |
| b. Elektra     | d. Koagulab   |
2. PT: abnormal  
APTT: normal  
TT: normal

Platelet count: normal

Fibrinogen: normal

What is to be done next?

- a. Mixing  
b. Antithrombin  
c. Duckerts test  
d. Stypvens time
3. ISI value of 1 claims compared to WHO standard  
a. good  
b. equal  
c. better  
d. di ko na maalala. :)  
- ano po sagot dito mam? Hehehe. :DDDD
4. AML without maturation  
a. M1  
b. M4  
c. M6  
d. M7
5. Which of the following are automated methods?  
a. RBC, WBC, Platelet count  
b. ESR  
c. Reticulocytes  
d. All of this item
6. If the number of lymphocytes are greater than the number of PMNs present in the sample (adult), how many cells will you enumerate for a DIFFERENTIAL COUNT?  
a. 200  
b. 20  
c. 100  
d. 50
7. Most common cause of death in patient with sickle cell anemia?  
a. Aplastic crises  
b. autosplenectomy  
c. Infectious crises  
d. vaso occlusive crises
9. Hematopoietic stem cell marker  
a. CD3  
b. CD34  
c. CD33  
d. CD21
10. Which of the following test requires a fresh specimen?  
a. LAP  
b. PAS  
c. SBB  
d. Oil Red O
11. Part of platelet responsible for clot retraction?  
a. Microtubules  
b. thrombosthenin  
c. thrombomodulin  
d. none of this item
12. When transfused blood in patients with PNH, the rate of hemolysis is:  
a. Less  
b. Increased  
c. No effect  
D. Variable  
– di ko alam ang sagot dito mam. :DDDDD
13. platelet count of 401,000-599,000  
a. slightly increased  
b. markedly increased  
c. normal  
d. moderately increased
14. In what stage of platelet does “shedding of platelet” occur  
a. mature megakaryocyte  
b. promegakaryote  
c. immature megakaryocyte  
d. megakaryoblast
15. APTT: increased  
PT: increased  
Fibrinogen: decreased  
TT: increased  
Platelet count: decreased



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What would be the possible condition?

- a. DIC
- b. dysfibrinogenemia
- c. hypofibrinogenemia
- d. agammaglobulinemia

– my follow up question pa to mam pro di ko na marecall. :)

16. What stages of RBC maturation wherein there is no hemoglobin synthesis?
- a. Reticulocytes
  - b. Polychromatic normoblast
  - c. Orthochromic normoblast
  - d. Pronormoblast

17. Stage of WBC maturation wherein the nucleus is kidney shape
- a. Myelocytes
  - b. Metamyelocytes
  - c. Band
  - d. Promyelocytes

18. Functions of eosinophil
- a. Counteract histamine
  - b. releases histamine
  - c. against parasitic infection
  - d. phagocytosis

- nalito po ako dito mam, ky ang A and C po diba function yn ng eosinophil. Di ko alam kng sino dito ang best answer. :)))

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### MICROBIOLOGY AND PARASITOLOGY

1. Curschmann's spirals is seen in:
  - a. Bronchitis
  - b. Asthma
  
2. IL-6:
  - a. Bacterial infection
  - b. Hormonal process
  - c. Metabolic process
  - d. ???????
  
3. Infective stage of schistosome in human:
  - a. Cercariae
  - b. Schistosomule
  
4. Disease associated with *W.bancrofti*?
  - a. Elephantiasis
  - b. Blindness
  
5. Skin penetrating parasite:
  - a. *S.stercoralis*
  - b. *A. Duodenale*
  - c. *N. Americanus*
  - d. All
  
6. *E.coli* in MRVP reaction
  - a. Red
  - b. Yellow
  - c. green
  - d. -----
  
7. Salmonella-Shigella Agar contains
  - a. Milk
  - b. Bile salts

### OTHER RECALL QUESTIONS WITH NO CHOICES:

1. *Clonorchis sinensis*: Chinese Liver Fluke
2. 1<sup>st</sup> I.H. Of *F.buski*:
3. 1<sup>st</sup> I.H. Of *D.latum*:
4. Organ target in migrating amoebiasis:
5. Entamoeba with 8 nuclei: *E.COLI*
6. Compare spirometra and echinococcus:
7. Malaria that infects RBCs with ring form:
8. Karyosomal cytoplasm:
9. In trichomate stain color of chromatoidal bar:
10. Appearance of taenia eggs:
11. Appearance of *C.philippinensis*:
12. Appearance of *H.nana*:

### APOLLON:

MYCOLOGY: 26,30,76

VIROLOGY: 1,5,12

PARASITOLOGY: 4,5,24,56,94,97,99,100,108,108,114,123,128,135,144,154

BACTERIOLOGY: 48,54,58,62,86,97,114,196,220

### HISTOPATHOLOGY, MEDTECH LAWS and OTHER RELATED LAWS

1. Allowed to collect blood in blood banking:
  - a. Nurse and Physician
  - b. Doctor and Medtech
  - c. Medtech
  - d. All
2. Which is objective?
  - a. Grainy
  - b. 2-5cm
3. Cost of labor
 

<ol style="list-style-type: none"> <li>I. Pre-analytical</li> <li>II. Analytical</li> </ol>	<ol style="list-style-type: none"> <li>III. Post-analytical</li> <li>IV. Budget meal</li> </ol>
<ol style="list-style-type: none"> <li>a. 1,2</li> <li>b. 1,2,3</li> </ol>	<ol style="list-style-type: none"> <li>c. 1,2,3,4</li> <li>d. 4</li> </ol>
4. Method for fresh preparation of sputum, mucus secretions?
  - a. Spreading
  - b. Streaking
  - c. Touch preparation
  - d. Squashing
5. In microtomy automation, which is automated?
  - a. Blade
  - b. Cassette
  - c. handle
  - d. -----
6. Orientation method is found in:
  - a. Embedding
  - b. Fixation
7. Fixative used in kidney biopsy:
  - a. 10% formalin
  - b. Bouin's solution
  - c. Zenker's fluid
8. Ribbon cutting in block that has been fished out in water bath. What to do next?
  - a. Dry in paraffin microwave
  - b. Stain
9. A medtech who had a friend diagnose with HIV, where does the result should be given?
  - a. Physician
  - b. Patient
10. Rape victim:
  - a. Acid phosphatase
  - b. Fructose
11. Cell that works together to perform their function:
  - a. Tissue
  - b. Organ
12. Specific word:
  - a. Approximate
  - b. Indicative
  - c. suggestive

OTHER RECALL QUESTIONS WITH NO CHOICES:

1. RA 7719: National Voluntary Blood Services Act
2. Prosecutor: One who perform autopsy
3. Rokitansky:
4. Destroys mitochondria: Glacial  $\text{CH}_3\text{COOH}$
5. Mostly used metallic fixative: Zenker Fluid????
6. Revocation: 1 legal officer + 2 members of the board

7. Who investigate the case if a medtech does not follow the code of ethics: Ethics Committee (PAMET Committee)
8. Specimen in bronchial washing culture: Bronchial Lavage
9. Intradepartmental:
10. Size of HEPA filter: 0.4 micra
11. What is used instead of nanometer: micrometer
12. Tissue size for paraffin: 2X2X4
13. Double embedding:
14. Histopathologic technique:
15. Cheapest embedding medium: paper boat
16. Microtome used in enzyme immunohistochemistry: Frozen Microtome
17. Mesothelial:
18. Monoclonal antibody: mice
19. Breast: CA 15-3

### CLINICAL MICROSCOPY:

1. Infectious container:
  - a. Black
  - b. Yellow
  - c. Red
  - d. Green
2. Leukocyte esterase endpoint color:
  - a. Purple
  - b. Pink
  - c. Green
  - d. Blue
3. Type 3 fire extinguisher:
  - a. Water
  - b. CO2
  - c. halon
  - d. Sand
4. Preferred sample in urine culture:
  - a. Suprapubic aspiration
  - b. Catheterized sample
  - c. Midstream clean-catch
  - d. All
5. Kidney failure:
  - a. Reversible
  - b. Irreversible
6. Type 1 fire extinguisher:
  - a. Water
  - b. CO2
  - c. halon
  - d. Sand

### OTHER RECALL QUESTIONS WITH NO CHOICES:

1. Yellow hazard: Reactivity
2. White Hazard: Specific hazard
3. Traumatic tap:
4. Appearance of triple phosphate:
5. Endpoint color of nitrite: purple
6. Define polyuria:
7. Cytogenetic studies storage:
8. Rotting fish odor of urine: Trimethylaminuria
9. Cloudy red urine:
10. Reporting of crystal: rare,few,moderate,many/LPF
11. Reporting of yeasts: rare,few,moderate,many/HPF
12. Formation of casts from most significant to least significant:
13. Brown semen:
14. Gastric fluid:

## IMMUNOLOGY, SEROLOGY AND BLOOD BANKING

1. According to CDC, what is the most common contaminants in blood bag?
  - a. E.coli
  - b. Paeruginosa
  - c. Y.enterocolitica
  - d. All
2. Single bloodbag over time, what component will be not used
  - a. Cryoprecipitate (should be separated within 15 minutes)
  - b. PRBC
3. T-cell secretes
  - a. Chemokines
  - b. MPO
4. Where does CRP come from?
  - a. Pancreas
  - b. Liver
  - c. lungs
  - d. Heart
5. Macroglobulin deficiency:
  - a. Nephrotic syndrome
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  - b. Heparin
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  - d. -----

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3. SLE: anti-Sm (anti-Smith)
4. FNHTR:
5. Antibody screening:
6. Anti-I: M.pneumoniae
7. Open system in blood: 24 hours
8. Platelet in transport:
9. T-cell maturation: thymus
10. Mature B cell contains what surface immunoglobulin: IgM and IgD
11. Immunoglobulin that reacts most with C': IgM
12. Monomeric immunoglobulin: IgG, IgE, IgD
13. Immunoglobulin dominant in tears: IgA
14. Anaphylactic shock: IgA
15. Anaphylactic blood component: washed RBC
16. In HIV px, what blood component is used: PRBC
17. Qualitative syphilis testing:
18. Sodium citrate functions as:
19. ACD is discovered in: 1943
20. Common problem in transplant:
21. Phenotype, genotype:
22. Primary biliary cirrhosis: Anti-mitochondrial antibodies
23. HPV: warts
24. Donation: 50 kg

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1. Cloudy urine:
  - a. Hematuria
  - c. myoglobinuria

b. Hemoglobinuria

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- 10. Philadelphia chromosome: CML
- 11. Size of ESR micro tube: 13x100

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- 4. Nephelometry:

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b. B  
c. O  
d. AB
3. Leach phenotype (Page 201 of harming)  
a. Spherocytes  
b. Microcytes  
c. Elliptocytosis  
d. Anisocytes
4. HLA gene found in patient with SLE?  
a. HLA-DR3  
b. HLA-DR4  
c. HLA-A5  
d. HLA-DR2
5. What is Anti-M?  
a. Naturally occurring cold reacting antibody  
b. Usually IgM antibody  
c. Usually bind complement  
d. Causes hemolytic transfusion reaction
6. Microscope used to observed reaction in microlymphotoxicity?  
a. Brightfield  
b. Phase-Contrast  
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  - b. Apo-A1**
  - c. Apo-B48
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Onset of elevation of CK-MB: 4-6 HOURS

Test for CK non specific: COLORIMETRIC ENDPOINT

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  - b. Autohemolysis test**
  - c. Ham's test
  - d. Osmotic Fragility Test

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  - b. Poxvirus**
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  - b. ALP
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  - d. **ALT**
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13. Alpha 2 band
14. Acid base stereotypical for AMI
15. Relative concentration (3 timesti
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28. T-test
29. 99.99% negative result
  - A. Clinical specificity
  - B. Clinical sensitivity
30. Negative risk in CHF
31. Reliability
32. I foil ang sample
33. The best usage of serum electrophoresis (2 timesti
34. Glycated hgb
35. Drives off bicarbonate system
  - A. CO<sub>2</sub>
  - B. Carbonic acid (handwrittenti
  - C. Bicarbdate
36. Normality
37. Ectopic pregnancy dec hcg
  - A. 10 days
  - B. 3-5
  - C. 7 days
  - D.
38. Heat lamp laser
39. Azotemia **Level of urea in blood if there is azotemia: increased**
40. Cv tag
41. Gluconeogenesis
42. Trend
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44. Site for capillary blood collection in newborn
45. O-toluidine
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7. Ginaproduce sa s. Aures na maka cause ug clot sa coat test: clumping factor?
8. Smears of csf are prepared from: CSF sediment
9. Purpose of potassium tellurite in tellurite medium: inhibit normal flora
10. Mycoplasma are not true bacteria because: they have no cell wall
11. Aspergillus: czapeck medium
12. Acridine orange stains what?: nucleic acid?

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8. After activation of factor X, what will happen?

a. **CONVERSION OF PROTHROMBIN INTO THROMBIN**

b.

9. Differentiate AML from ALL

a. PAS

b. Peroxidase

10. Numerous cytoplasmic granules, >2 nuclei

11. Group not consumed during coagulation

a. Contact, prothrombin

b. Contact

c. Contact, prothrombin, Thrombin

d. Contact, thrombin

12. Cofactor of fibrin clot : Source of alpha granules

a. VIII: VWF

b. V

c. HMWK

13. Poormans Aggregation

a. Platelet aggregometry

b.

c.

d. Blood film

14. Coagulation test sample should be centrifuged

a. 120

b. 240

c. 60

d. 90

15. Laboratory test for for fibrinolysis

a. Euglobin lysis time

b. PT

 72

 0

## IMMUNOLOGY, SEROLOGY AND BLOOD BANKING

1. According to CDC, what is the most common contaminants in blood bag?
  - a. E.coli
  - b. P.aeruginosa
  - c. Y.enterocolitica
  - d. All
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- c. Contact, prothrombin, Thrombin
- d. Contact, thrombin

12. Cofactor of fibrin clot : Source of alpha granules

- a. VIII: VWF
- b. V
- c. HMWK

13. Poormans Aggregation

- a. Platelet aggregometry
- b.
- c.
- d. Blood film

14. Coagulation test sample should be centrifuged

- a. 120
- b. 240
- c. 60
- d. 90

15. Laboratory test for for fibrinolysis

- a. Euglobin lysis time
- b. PT

c. APTT  
d.

16. Heparin  
17. Nonheparin  
18. Stem cell marker  
19. Last stage of mitosis but capable of division  
20. Last stage of Hgb synthesis  
21. Maintain the disc shape of platelet

a. Thrombosthenin  
b.

c. None of these  
d. Tubulin

22. Screening test for sickle cell  
23. 3 or more stippled cell

a. Heavy Marked  
b. Marked  
c. Slight  
d. Moderate

24. Rouleaux 2+  
25. Abnormal chemotactic and phagocytic function

a. Hurler  
b. Alder Reilly  
c. CGD  
d. May heglin

26.  
a.  
b.  
c.  
d. Inclusion

27.  
Barr bodies

28. Px with MM, expected in blood smear

a.  
b.  
c. Rouleux  
d.

29. Acquired Cytosomal defect

a. dohle  
b. vaculation  
c. All of these  
d. Toxic granules

30. Derived in RBC histogram

a. MPV. RDW



- a. MCV, RDW
- b. MCV, RDW
- c.
- D.

- 31. Anticoagulant for Sucrose hemolysis test
- 32. Microhematocrit
- 33. Layer of spun hematocrit
- 34. Dilution for  $3.1 - 30 \text{ WBC} \times 10^9$
- 35. Effect on platelet in diluting fluid when delayed testing



- a. Fragmentation
  - b. Aggregation
  - c. Proliferation
  - d. Disintegrate
36. Presence of retics in circulation detects / test the \_\_\_\_\_ phase
- a. Maturation
  - b. Circulation
  - c.
  - d.
37. Severe anemia result in ESR
38. Ref ESR
39. Reagent in automated machine for WBC counting
- A. Lysing
  - B. Cleaning
  - C.
40. Rule of three
41. Hypochromia grading
42. Increased MPV due to decreased platelet count
- A. Increased destruction
  - B. Incompetent thrombopoiesis
  - C. Autoimmune
  - D.
1. Not from a myeloid.... : lymphocyte
  2. Responsible for platelet adhesion and aggregation: peripheral zone
  3. Contains alpha, dense granules, lysozymes: organelle zone
  4. Rouleaux grading 2+: 5-10 rbcs
  5. About electrical impedance (2xti)
  6. Effect of vibration of ref in ESR: increased
  7. Variation in size: anisocytosis
  8. Directly measured by electrical impedance: RBC, WBC, Hgb
  9. Pag magcount saw ug wbc sa automated something unsa na reagent gamiton: lysing agent
  10. Test for HB S: dithionate na? Di ko sure
  11. Stem cell marker: CD34
  12. Large granular lymphocyte: NK cell (do ko sure if sa hema pa Jud to GI askti)
  13. APC: macropage and monocyte
  14. Sex identification: Barr bodies
  15. Azurophilic granules: primary granules?
  16. Basic something sa vascular.... : platelets?
  17. Basic something sa intravascular.....: platelets ug coag factors/ Proteins?
  18. Term called in plug formation: aggregation?
  19. Screening test for fibrinolysis: euglobulin test?

ISBB

1. Temperature sa warmer na mutingog siya
2. Number of wrong blood tube collection
  - A. Occurrence
3. Pila ka percent sa blood ang allowable if short draw sa bleeding
  - A. 20
  - B. 10
  - C. 15
  - D. 30
4. Dilution
5. Prozone
6. Blood group ass. With *M. pneumoniae*: Anti-I
7. Mongolian ancestry: Diego
8. Anti-smooth muscle antibody: diff. Chronic active HEPA from ale(2x)
9. IgG, IgD, IgE- monomeric
10. Columbus: syphilis
11. Common cause of ihtr
12. Rh phenotype of Asian: D<sup>+</sup>Ce
13. Target cell by HIV
14. ankylosing spondylitis
15. Granulocyte shelf-life:

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## Histopathology

1. Which is a cytoplasmic stain without glacial acetic acid? Flemmings with acetic acid, newcomers, or-ths, carnoys
2. ASAP means: **as soon as possible**
3. "ITIS" :inflammation
4. The plasma was spilled. The MT diluted the sample with NSS. What is being violated?
5. Proper attire when performing autopsy?
6. FNAC obtained thru?
7. Blood banks are classified according to?
8. Ideal Comfort room in the laboratory

## CLINICAL CHEMISTRY

1. Measure pH in blood gas: Potentiometry [difference of potential voltage; ISE (specific)]
  - K<sup>+</sup> - Valinomycin gel
  - Na<sup>+</sup> - Glass aluminium silicate
  - Ca<sup>2+</sup> and Lithium - Organic liquid membrane
  - pH, pCO<sub>2</sub> - Glass
2. Conversion factor for bilirubin: 17.1(umol/L)
3. Reduction method of glucose that uses arsenomolybdate- Nelson Somogyi  
Hagedorn – Jensen Ferric reduction method (inverse colorimetry)  
 $H_2O_2 \rightarrow O_2 + H_2O$  [oxygen is measured through Polarography- measure O<sub>2</sub> depletion and through Trinder's Reaction; both Polarography and Trinder's reaction tests for O<sub>2</sub> concentration]
4. Hypothyroidism effect on TAG and Cholesterol level- INCREASE
5. Acute Phase Reactants - "CHACA"
  - α-1-acid glycoprotein, α-1-antitrypsin, C-Reactive Protein, Cerruloplasmin, Haptoglobin
6. APR migrates at β region- C-Reactive Protein  
Only α2 migrating APR- Haptoglobin, Cerruloplasmin, and α2 macroglobulin
7. Reaction rate is directly proportional to substrate concentration: FIRST ORDER  
NOTE: zEro Order- reaction rate is directly proportional to the Enzyme concentration  
Michaelis-Menten Kinetics  $E+S \rightarrow ES \rightarrow$  Enzyme Product –
8. Anticonvulsant drug used for treatment of petitmal and absence seizure and grand mal- Valproic Acid
9. Normal BUN:Creatinine Ratio - 10-20:1
10. Bilirubin value 28mg/dL: Report Immediately  
NOTE: -Serum measured 2-3 hours  
-Visible icterisias occurs: BILIRUBIN >25mg/L
11. over secretion of Growth Hormone in adult: Acromegaly  
In children, gigantism
12. Hazard level 4: Extreme Danger
13. High risk for coronary heart disease (CHD): ≥ 240 mg/dL
14. X axis: Horizontal and Independent variable  
Note: DOY- Y axis, Ordinate, Dependent variable  
AXI- X axis, Abscissa, Independent variable
15. Estradiol:ovary
16. VLDL cholesterol in mg/dL: FORMULA FOR VLDL  
Friedewald Method (Indirect Method)  
VLDL (mmol/L) = Plasma TAG/2.175  
VLDL (mg/dL) = Plasma TAG/5.0  
De Long Method (Indirect Method)  
VLDL (mmol/L) = Plasma TAG/2.825  
VLDL (mg/dL)= Plasma TAG/6.5
17. Counter ion of Na<sup>+</sup> :Chloride
18. Counter balance of Na<sup>2</sup> : Potassium

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## MICROBIOLOGY

- a. 1,2  
b. 2,3
- c. 1,2,3  
d. All are true
6. If the medtech student graduated at 20 years old:  
a. He/She is not allowed to take the board examination  
b. He/She is allowed to take the board examination  
c. Give COR immediately  
d. It must be 21 years old and above for him/her to take the board examination
7. What is being detected in Immunohistochemistry?  
a. Antigen  
b. Antibody  
c. Both  
d. Neither
8. Source of monoclonal antibody:  
a. Rabbit  
b. Mice  
c. Sheep  
d. Human
9. TAT starts when:  
a. Upon requisition of test by the doctor  
b. Specimen arrived at the laboratory  
c. If the specimen is received in OPD  
d. After extraction
10. "Nasira daw yung ilaw sa laboratory. Ano gawin mo para mapalitan?"  
a. Magrequest agad para mapalitan  
b. Susulat daw muna ng accidental report kung bakit nasira
11. Other name of rotary microtome: **MINOT**
12. Revocation of certificate: **3/3 VOTES**
13. If the medtech is being issued a case, who is the personnel responsible to investigate: **2 MEMBERS OF THE BOARD AND @ LEAST 1 LEGAL OFFICER**
14. Clearance angle of microtome: **27-32 DEGREE**
15. Prosector: **PATHOLOGISTS**
16. Used in autopsy:  
a. Camera  
b. Threads and needle  
c. All are true  
d. Blade for cutting tissues
17. Best fixative: **10% BUFFERED NEUTRAL FORMALIN**
18. Consists of policies, standards and guidelines for medical technology education: **CMO no. 14s s. 2006**
19. Who approved the board of examiners: **PRESIDENT OF THE PHILIPPINES**
20. Who performed autopsy?  
a. Forensics  
b. Pathologists  
c. Surgical autopsy  
d. Coroner
21. Clinical impression is a:  
a. Presumptive diagnosis  
b. Clinical diagnosis  
c. Differential diagnosis  
d. Etiologic diagnosis
22. Oxygen supply to one part of the heart is out.  
a. Liquefactive necrosis  
b. Coagulative necrosis  
c. Caseous necrosis  
d. Fibrinogenous necrosis

23. Medtech disregards protocol of laboratory regarding release of results

- a. Gross negligence
- b. Ignorance of rules and responsibilities
- c. Careless
- d. Unprofessional manner

24. Medtech refers to another medtech with cursing words, violation of:

- a. Uphold the rights against dignity and respect of my profession
- b. Spirit of fairness to all in a spirit of brotherhood towards other members of the profession
- c. Restrict my praises, criticisms, views and opinions within constructive limits
- d. Share my knowledge, and expertise with my colleagues

25. MOARSE TYPE: Major classification of etiologic cause

- 1. Inherited or genetic
- 2. Acquired
- 3. Infectious
- 4. Physical or chemical

- a. 1,2
- b. 1,3
- c. 1,2,3
- d. 1,2,3,4

26. MOARSE TYPE: type of urine specimen

- 1. Voided
- 2. Washing of renal pelvis
- 3. Catheterized
- 4. Supra-public (dapad Supra-pubicti)

- a. 1 and 3
- b. 1,2,3
- c. 2,3 and 4
- d. 1,2,3 and 4

27. MOARSE TYPE: found in chronic inflammation

- 1. Lymphocytes
- 2. Macrophages
- 3. Collagen
- 4. Plasma cells

- a. 1,2
- b. 1,2,3
- c. 2,4
- d. 1,2,3,4

28. MOARSE TYPE: STAT in medicine means

- 1. Immediately
- 2. Statim
- 3. As soon as possible
- 4. Now

- a. 1,2
- b. 1,2,3
- c. 2,4
- d. 1,2,3,4

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