

87%



A-18
B-25½
43½

THE COPPERBELT UNIVERSITY
SCHOOL OF MEDICINE

End of term test: December 2017
MBS 240

Term 1- Laboratory Sciences

Name: BERNARD CHAMA

Student ID Number: 16103656

Program: BACHELOR IN DENTAL SURGERY

Time: 1 hr.

Instructions:

Section A: Multiple choice Questions (20 marks).

Choose one correct answer and circle the letter in front of it.

There are 20 questions

Answer all questions

Section B: Short answers (30 marks).

Write short notes on 3 out of the 5 questions.

10 Marks are allocated to each question.

Write your Student ID number on top of each page of the answer book.

Section A. Multiple choice questions.

1. Plasma concentration does not rise with age for one of the following substances:

- a) Potassium
- b) Sodium
- c) Iron
- ☒ d) Albumin
- e) Copper

2. Which one of the following is an example of a transcellular fluid?

- ☒ a) Plasma
- b) Interstitial fluid
- ☒ c) Intestinal contents
- d) Intracellular fluid
- e) None of the above

3. Which symbiotic relationship is termed "to carry"?

- a) Parasitism
- ☒ b) Phoresis
- c) Commensalism
- d) Mutualism
- e) None of the above

4. A symbiotic relationship in which both the host and the other symbiont depend on each other physiologically is called?

- a) Parasitism
- ☒ b) Mutualism
- c) Phoresis
- d) All of the above
- e) None of the above

5. One of the following statements is TRUE about a reservoir host for a parasitic infection:

- a) The reservoir host doesn't tolerate the parasite.
- b) The reservoir host is the same as the human host
- c) The same stage of the parasite is found in both reservoir host and human host.
- ☒ d) The reservoir host is a source of parasites for reptiles
- ☒ e) None of the above

6. Parasitic Neglected Tropical Diseases (NTDs) may cause:

- a) Debilitation
- b) Deformation
- c) Blindness
- ☒ d) All of the above
- e) None of the above

7. Physiological level of an abnormality of function of an organ may be detected in which state of the patient:

- a) Abused state
- b) Admitted state
- ☒ c) Stressed state
- d) Comatose state
- e) Restless state

8. What information is obtained by a biochemical test that answers the question "what else is wrong" with the patient?

- a) The specific diagnosis of the disease
- b) Severity of the disease
- ☒ c) Complication of the disease
- d) All of the above
- e) None of the above

9. What is the total blood volume in a man weighing 70kg?

- a) 6.50l
- ☒ b) 5.25l
- c) 6.35l
- d) 5.9l
- e) 7.3l

10. The first site for hemopoiesis during fetal life is:

- a) Bone marrow
- b) Spleen
- c) Liver
- d) Brain
- ☒ e) Yolk sac

① Yolk → ② Liver → ③ Spleen

11. Which one of the following total white blood cell count is abnormal?

- ☒ a) 2,000 white blood cells/ μ l
- b) 4,000 white blood cells/ μ l
- c) 5,000 white blood cells/ μ l
- d) 6,000 white blood cells/ μ l
- e) 7,000 white blood cells/ μ l

platelets
~~2,00,00 - 5,00,000/ μ l~~
4,000 - 11,000 WBC/ μ l

12. One of the following types of white blood cells is not a phagocyte:

- a) Neutrophils
- b) Eosinophils
- ☒ c) Lymphocytes
- d) Basophils
- e) None of the above

13. Cilia on a microorganism may be used for the following:

- a) Defense
- b) Reproduction
- ☒ c) Sensation
- d) All of the above
- e) None of the above

14. The following are TRUE about Gram negative bacteria, Except.
- a) They have an outer membrane which is external to the peptidoglycan layer
 - b) They contain two layers external to the cytoplasmic membrane
 - c) their cell wall is more complex than gram positive cell wall
 - ☒ d) they have a peptidoglycan layer of 90%
 - e) None of the above

15. *Treponema pallidum* causes

- ☒ a) Syphilis
- b) Typhoid
- c) Pertussis
- d) Meningitis
- e) Duodenal ulcers

16. The following are TRUE about Innate immunity, Except,

- a) Its is also known a natural immunity
- b) It is made up of anatomical barriers
- c) Its is fast
- d) It is the first line of defense
- ☒ e) It uses antibodies as its soluble factors of defense

17. How many pathways does Complement system have?

- a) 5
- ☒ b) 3
- c) 2
- d) 1
- e) 4

18. The following are TRUE about T lymphocytes, Except,

- a) They are important in Cell Mediated Immunity
- b) They develop in the thymus
- c) CD4 helper cells are a subclass of these lymphocytes
- ☒ d) They are involved in extracellular elimination of pathogens
- e) They mature in the lymph nodes

it's intracellular elimination

19. The Baltimore system of Viral classification uses the following properties to classify viruses, Except,

- ☒ a) Antigenic properties
- b) Replication method
- c) Strandedness
- d) The genome type
- e) Sense +ve or -ve

18
20

20. The following are TRUE about B19 virus, Except,

- a) It causes 5th disease
- b) It causes exanthem in children
- c) It is a ssDNA virus
- ☒ d) It has a vaccine
- e) None of the above

B19 viruses Have No vaccine

Section B. Short answers.

1. The reference range for chemical 'X' in plasma is 30-50mg/dl. What does this mean? Which factors may affect this range?
- 2. Define the term 'Parasitism'. Describe the Tissue changes that may occur in the host as a result of parasitic infection.
- 3. What is a biosafety cabinet? Describe the different classes of biosafety cabinet and their use.
- 4. With the aid of a diagram, outline the process of inflammation.
5. With the aid of a diagram, outline the process of viral replication