

# MOCK EXAM FOUR

## BIOLOGY

1. Which hormone will you expect to be higher than normal in the blood of a cholera patient?
  - a) Anti diuretic hormone
  - b) Progesterone
  - c) Adrenaline
  - d) Thyroxin
2. If you were to eat two chocolate bars and drink a liter of coca cola, which hormone would you expect to be secreted at higher levels in your blood stream
  - a) Insulin b) Glucagon
  - c) Cortisol
  - d) Thyroxine
3. Which of the following statement concerning the major blood group (ABO) and rhesus system is false?
  - a) The type refers to the type of antigen found on the surface of the erythrocytes (RBC)
  - b) When different types of blood are mixed, antibodies against the erythrocytes antigen cause the erythrocytes to agglitinate
  - c) A blood group B donor can donate blood to a recipient belonging to blood group AB
  - d) A rhesus negative mother married to a rhesus positive man shall always give birth to rhesus positive children
4. What will happen if the acetylcholine receptor sites on glands are blocked b a poison such as curare?
  - a) increased stimulation of the glands to secrete its products
  - b) inability of the gland to respond to motor nerve stimulation
  - c) contraction of the gland
  - d) excessive contraction of the gland occur
5. The conduction of an action potential in a mylinated axon is
  - a) salutatory
  - b) without decrement
  - c) faster than in an unmylinated cell
  - d) all of the above
6. Which blood vessel returns lymph fluid into the general circulation system?

- a) superior vena cava
  - b) subclavian vein
  - c) pulmonary artery
  - d) jugular vein
7. Which statement regarding blood cells is correct?
- a) all blood cells originate from bone marrow
  - b) red bone marrow is the primary source of all blood cells except mast cells macrophages
  - c) most types of leucocytes appear in equal amount in the blood
  - d) erythrocytes are produced in red bone marrow while leucocytes are produced primarily in the lymph nodes
8. Which of the following is not a stage of urine formation?
- a) glomerular filtration b) glomerular secretion c) tubular secretion d) tubular reabsorption
9. Which of the following is not a net product of glycolysis or the kreb cycle?
- a) pyruvate b) NADH c) ATP d) NAD<sup>+</sup>
10. Control of breathing and heart beat are located in the
- a) Occipital lobe b) Cerebellum c) Medullar d) Frontal lobe of cerebrum
11. The chemoreceptor cells in the medullar oblongata sensitive to changes in blood gases and PH are stimulated directly by
- a) Increase blood partial pressure of CO<sub>2</sub>
  - b) Decrease PH that is (P<sup>+</sup>) from the blood
  - c) Decreases H<sup>+</sup> in the cerebrospinal fluid that is derived from blood CO<sub>2</sub>
  - d) Decreased partial pressure of oxygen (PO<sub>2</sub>)
12. The emulsifier of fats is
- a) Amylase b) Pepsin c) Lipase d) Bile salt e) Bile
13. Fats absorption is differ from other food substances because its break down products are
- a) Formed in the large intestine
  - b) Formed in the large intestine absorbed into the lacteal
  - c) Absorbed directly into the blood
  - d) Absorbed only when glucose is not present
14. The finger-like projections along the surface of the small intestine are called
- a) Muquences b) Veinschyliferes c) Villas d) Cilia
15. The liver function in digestion by way of its
- a) Conversion of hemoglobin to bilirubin and biliverdin
  - b) Destruction of old red blood cells
  - c) Production of urea
  - d) Production of bile
16. The reaction of the electron transport system leading to production of ATP occurs in

- a) The cristae of mitochondria
- b) The matrix of mitochondria
- c) The external membranes of mitochondrion
- d) The inter membranal space of mitochondrion

What do enzymes do?

- a) Change the final equilibrium of chemical reaction
- b) Lower the activation of chemical reactions
- c) Lose a little but of their energy each time they participate in a chemical reaction
- d) All of the above

17. The testes of mammals have two specific types of structures

- 1) Intestinal islets 2) Seminiferous tubules

Associate these structures to the following functions

- a) Secretion of spermatozooids Secretion of testosterone
- b) Endocrine function
- c) Exocrine function

18. A couple with normal phenotype has two children (a boy and girl) affected by enylketonuria.

The couple also has two boys and two girls who are normal. The enylketonuria allele is thus

- a) Dominant   b) Recessive   c) Co-dominant   d) Carried by the x-chromosome

19. Counterpart chromosomes

- a) Can only be possess at a given tie, alleles of the same gene
- b) Come together during the first division of the anaphase
- c) Belong to different pairs
- d) Reduction two by two in the haploid homozygote individual