GATITU MIXED SECONDARY SCHOOL

 END OF TERM 1 EXAMS-2013

 FORM 3 BIOLOGY

1. List down the main characteristic of a gaseous exchange surface (2mks)
2. What is blood transfusion? Why is it important to screen blood before transfusion (2mks)
3. a) Differentiate between photosynthesis and chemosynthesis (2mks)

b) Write a chemical equation for the process of photosynthesis (2mks)

 4. In which class do the following organisms belong (3mks)

 a) millipede

 b) Centipede

 c ) Spider

5. Distinguish between respiration and gaseous exchange (2mks)

6. An adult elephant flaps its ear twice as much as it calves in order to cool its body when it is hot. Explain (2mks)

7. Distinguish between turgor pressure and osmotic pressure (2mks)

8. How would you prove that, a species of weaver birds in Uganda belong to same species with weaver bird from Kenya (2mks)

9. After completing a vigorous exercise , the breathing rate and the heartbeat remains high for some time . Explain (3mks)

10. Differentiate between

 i) Autecology and synecology

 ii) Population and community (4mks)

b Define the following

 i) Ecological niche

 ii) Biomass

 iii) Predation

 iv) Parasitism

 v) Competition (5mks)

11. Name three structures that aid in movement in kingdom protoctista (3mks)

12. Highlight five general characteristics of class mammalia (5mks)

13. Classify honey bee as follows

 Kingdom

 Phylum

 Class (3mks)

14. Define the following terms

 a) Isotonic solution

 b) Hypotonic solution

 c) Hypertonic solution (3mks)

15. Name disease caused by lack of the following in the human diet

 i) Vitamin

 ii) Iodine (2mks)

16. What is the I importance of the following biological equipment (5mks)

 i) Pooter

 ii) Sweep net

 ii) Bait fall trap

 iv) Hand lens

 v) Pit fall trap

17. State the differences between subdivisions Gymnospermaphyta and Angiospermaphyta (3mks)

18. Define the following terms (6mks)

 i) Secretion

 ii)Excretion

 iii) Egestion

19. Describe how mineral salts are absorbed from the soil by plants ( 5mks)

20. Describe the mechanism of exhalation in mammals (4mks)

21. State 3 characteristics of the kingdom Monera (3mks)

22. Define the term transpiration (1mk)

23 State three advantages of transpiration (3mks)

24. Define the term dentition (1mk)

 Work out the dental formula for adult human beings (3mks)

26. State 5 ways that adapts carnivores to their mode of feeding (5mks)

27. The following equation represents a process in some organisms

 C2H2O6 2CO2 +2C2H50H

 a) What is the reaction above (1mk)

 b) Workout the RQ (2mks)

 c) Name the organism to which the organism belong (1mk)

28. Explain the role played by insulin in sugar regulation (4mks)

29. Explain the structure and function of the skin (6mks)

 HAPPY APRIL HOLIDAY

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