

BIOLOGY PAPER 1

KAGONDO SECONDARY SCHOOL

INTER CLASS CONTEST QUESTIONS

TERM 1 2016

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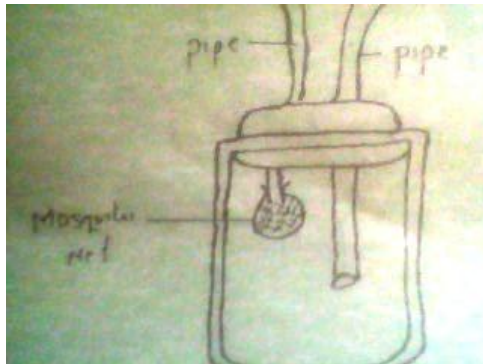
1. The diagram of a grasshopper is one and a half of the real size of the grasshopper as drawn by a student. If the diagram is 3 cm long

- a) Write down the formula of magnification (1mk)
- b) Calculate the actual size of the grasshopper (2mks)

2 a) Which taxon has the largest number of members (1mk)

b) Outline two physical features that make man and apes very different (2mks)

3. Study the apparatus illustrated below



a) Identify the apparatus (1mk)

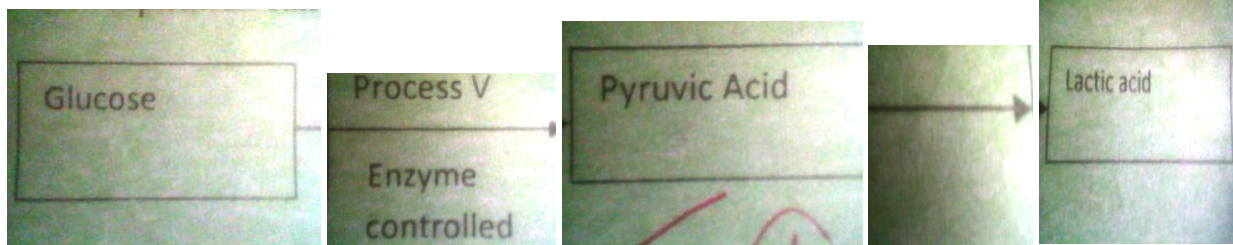
b) What is the use of the mosquito net in the apparatus (1mk)

4. Give two disadvantages of sexual reproduction in mammals (2mks)

5 a) State what happens during the light stage of photosynthesis (2mks)

b) State the aspect of photosynthesis that is tested using a variegated leaf (1mk)

6. Anaerobic respiration can be summarized diagrammatically as shown



i) Identify process V (1mk)

ii) What would be the end product for the same process in plants (1mk)

7. State three adaptations of small intestine to their functions (3mks)

8. Explain how the following prevents self-pollination

i) Dioecism (1mk)

ii) Self sterility (1mk)

9.a) Name the type skeleton found in an anthill (1mk)

b) Explain briefly why the skeleton named in (a) above is disadvantageous to the organism (2mks)

c) What is the role of intervertebral Discs in mammalian skeleton (1mk)

10. A piece of potato which is three centimeters long was placed in an Isotonic solution and did not change.

a) What is an Isotonic solution (1mk)

b) Explain what would happen if the same piece of potato was placed in a hypotonic solution (2mks)

11. Below is an illustration of growth and developmental stages of a certain insect



a) Give a name to the developmental cycle represented above (1mk)

b) Explain what takes place in stage w (1mk)

12. A group of Biology students picked an organism picked from the shores of the school dam. They observed and classified the organism as follows

KINGDOM.....Animal

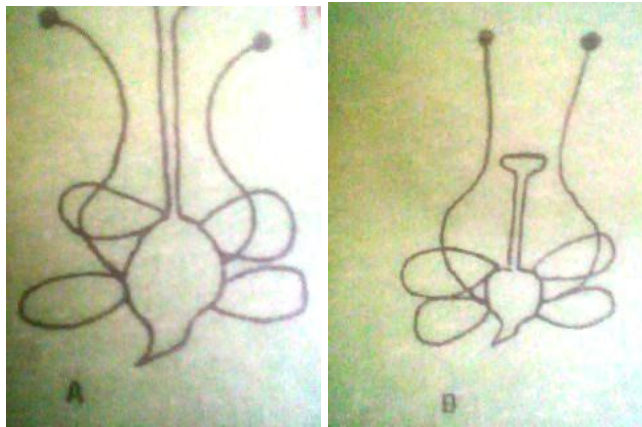
DIVISION.....Arthropoda

CLASS.....Chilopoda

i) State two mistakes the students made in their effort to classify (2mks)

ii) State a characteristic that makes millipedes different from centipede (1mk)

13. Heterostyly, is a condition where sometime the style may be longer or shorter than the filaments as illustrated



a) Of what benefit is each arrangement to a plant (2mks)

b) Define seed viability (1mk)

14. State two other gaseous exchange structures in plants besides stomata (2mks)

15. Most bones in mammals have process or broad surfaces. Suggest the importance of those features (3mks)

16 A plant was observed to have venation and fibrous root system Name

i) Subdivision of this plant (1mk)

ii) Class to which the plant belongs (1mk)

17. Explain why Darwin's theory of Natural selection is accepted as a theory in which evolution occurs (2mks)