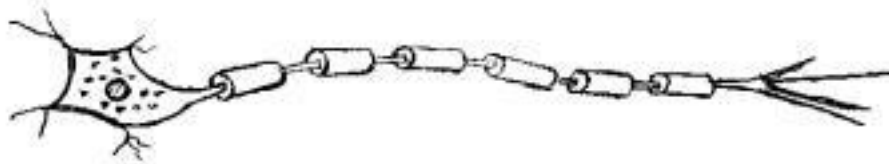


FORM 3 MID TERM 2 2020

BIOLOGY PAPER 2

Answer all the questions in the spaces provided.

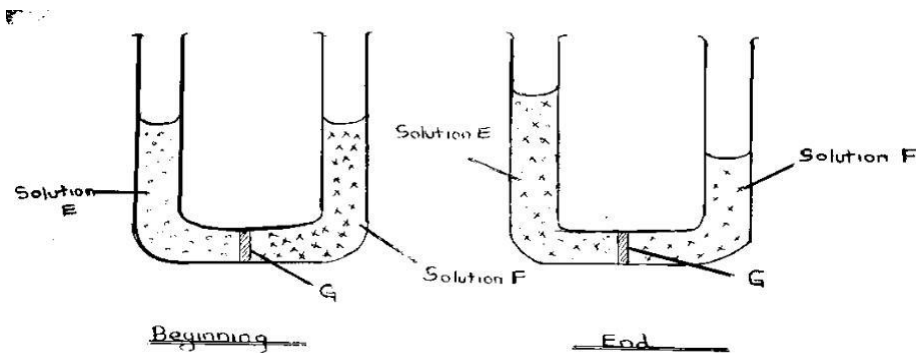
1. Name the characteristic of living organism illustrated by each of the activities described below:
 - a) Dressing heavily (1mrk)
 - b) Bursting of the sporangium in the *Rhizopus sp.*(1mrk)
2. The diagram below illustrate a specialized cell obtained from a certain tissue.



- a) Name the cell (1mk)

b) Name two ways in which the cell is structurally adopted to its function (2mks)

3. In investigating a certain physiological process, student set up the apparatus as shown below and made the observation after 30 minutes as illustrated.

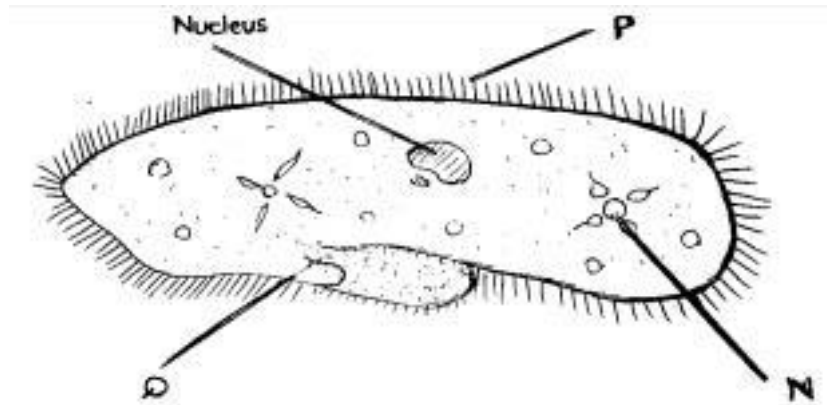


a) Name the physiological process being investigated (1mk)

b) Account for the observation made at the end of the experiment (3mks)

- c) State the likely identity of **G** (1MK)
4. Distinguish between chemical and mechanical digestion (1mk)
5. i) Name the respiratory structure in amoeba (1mk)
- ii) Give a reason for your answer in (i) above (1mk)
6. Explain the following physiological observation
A rabbit has higher oxygen demand than a camel (3mks)

7. A student placed a drop of pond water in a cavity slide and observed it under the light microscope. The student observed many fast moving organism , one of which is



represented in the diagram below

- a) i) Name the kingdom to which the organism belong (1mk)

ii) Give a reason for your answer in a (i) above (1mk)

- b) Name the structure labelled N, P and Q (3MKS)

N

P

Q

- c) State one observable features that enable the organism to move fast (1mk)

8. Below is a list of organisms which belong to classes Insecta, Diplopoda, Chilopoda and Archnida: Tick, Centipede, Praying mantis, Tsetse fly, Millipede and spider. Place the organism in their respective classes in the table below. Give a reason in each case (8mks)

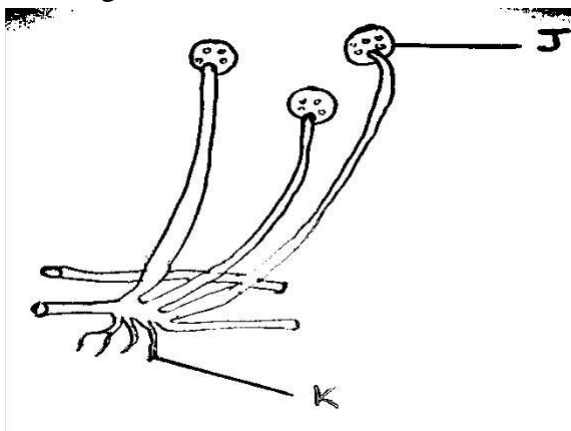
Classes	Organisms	Reasons
Insecta		
Diplopoda		
Chilopoda		
Archnida		

9. (i) What is meant by the term Binomial Nomenclature (1mk)

(ii) Give two reasons why classification is important (2mks)

(iii) State two guidelines that should be followed when typing scientific names (2mks)

10. The diagram below illustrate the structure of bread moulds.



(i) Name the part labeled **J** (1mk)

(ii) State the function of the structure labelled **K** (2mks)

11. The diagram below illustrate the organisms of some flowering plants



State the class of the plants to which each belong (2mks)

12. (i) State two external features found in the class mammalia only (2mks)

(ii) Name the taxonomic unit that comes immediately after a phylum in classification (1mk)

13. State four structural difference between millipede and centipede (4mks)

14. *Plasmodium vivax* and *Plasmodium ovale* are transmitted by a mosquito. State with a reason whether the two organisms can be inter-breed (2mks)
15. Beside venation, state one other external characteristics of leaves that can be used to classify plants (1mks)