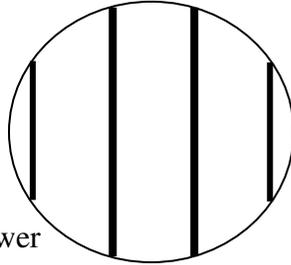


**F1 BIOLOGY ASSIGNMENT  
MAY 2020**

1. A form one student trying to estimate the size of onion cells observed the following on the microscope's field of view.



(a) Define the term resolving power (1 mark)

(b) If the student counted 20 cells across the field of view calculate the size of one cell in micrometers. (2 marks)

2. Identify what is used for illumination of specimen under observation in an electron microscope.

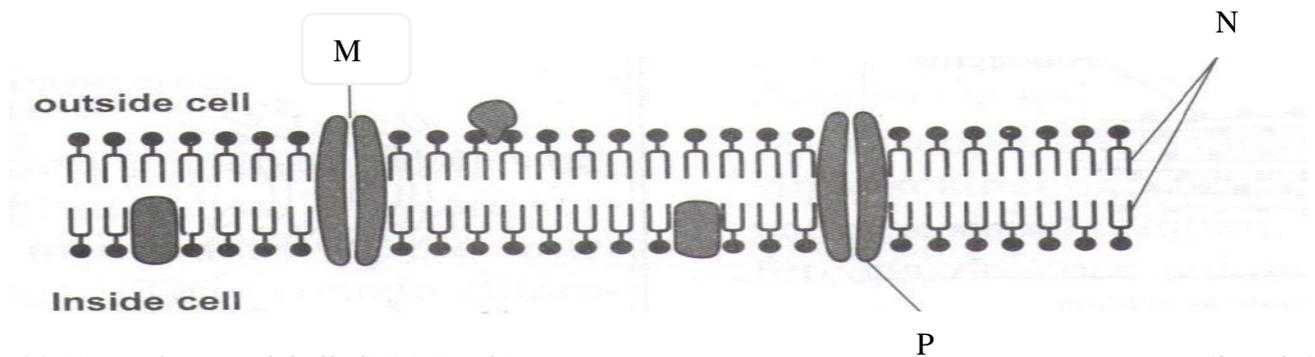
Name the organelle that perform the functions listed below; (2 mark)

- (a) Packages synthesized proteins.  
(b) Breakdown of worn out or damaged cell organelles and foreign particles.

3. Give three reasons for classifying organisms. (3 marks)

4. What is meant by the term binomial nomenclature? (2 marks)

5. Below is a cell organelle, study it and answer the questions that follow.



(a) Name the parts labelled N, M and P. (2marks)

N.....

M .....

(b) Identify the organelle. (1 mark)

(c) Name the functions of the organelle identified in 5 (a) above. (2 marks)

(d) State any two functions of Golgi bodies (2 marks)

6. The scientific name of human beings is HOMO Sapiens.

(a) State the mistakes in the scientific name. (2 marks)

(b) Write the name in the correct manner following the principals of binomial nomenclature. (1mark)

(c) Identify the genus and the species of human beings. (2 marks)

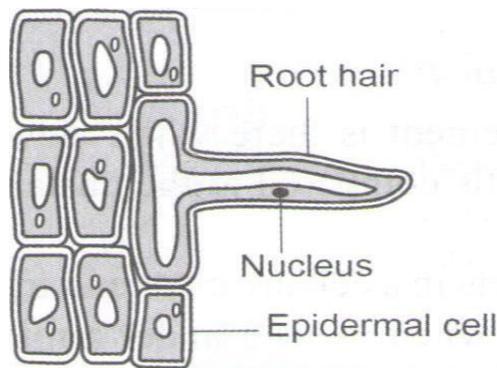
Specific name .....

Genus name .....

7. (a) What is a cell? (1 mark)

(b) What name is given to an animal made of many cells? (1 mark)

(c) Below is a specialized study it and answer the questions that follow.



(i). Identify the cell. (1 mark)

(ii).How is the cell identified in c(i) above **modified** to its functions. (1 mark)

(iii). State the **function** of the cell identified in c(i) above. (1 mark)

8. Explain why it's necessary to do the following procedures during preparation of temporary slides.

a. Cover the specimen with a cover slip. (1 mark)

b. Stain the specimen (1 mark)

c. Cut thin sections of the specimen (1 mark)

9. What is an organ system? (1 mark)

10. Give a reason why scientific name are given in Latin. (1 mark)