**NAME ……………………………………..…… DATE ………………ADM NO. ……..**

**INDEX NO. …………….………….……..….. SIGNATURE ….………..…..………..**

**231/3**

**BIOLOGY**

**PAPER THREE**

**FORM FOUR**

**TIME: 1 HOURS**

**OPENER EXAMINATION TERM 3, 2022**

***Kenya Certificate of Secondary Education***

**INSTRUCTIONS TO CANDIDATES: -**

* + *Write your name, Admission number and class in the spaces provided above.*
  + *Answer all the questions in the spaces provided*
  + *Candidates should answer the questions in English.*

Q1. You are provided with specimen Q

1. (i) Identify main part of the specimen (1mk)

(ii) State the functions of the part named in (a) (i) above (2mks)

(b)Using a surgical blade provided, cut a cube of 2cm x 2cm x 2cm; grind; add 3mls of distilled water, stir, then filter the paste. Using the filtrate test the foods present using the reagents provided. (8mks)

|  |  |  |  |
| --- | --- | --- | --- |
| Food | Procedure | Observation | conclusion |
|  |  |  |  |
|  |  |  |  |

(c) You are provided with specimen R and S

(i) Write down any two similarities between specimen R and S (2mks)

(ii) Tabulate any two differences between specimen R and S (2mks)

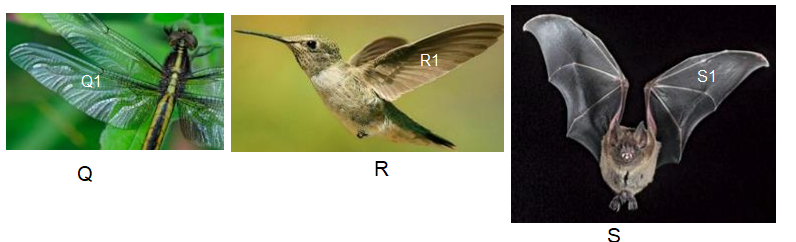
|  |  |
| --- | --- |
| R | S |
|  |  |
|  |  |

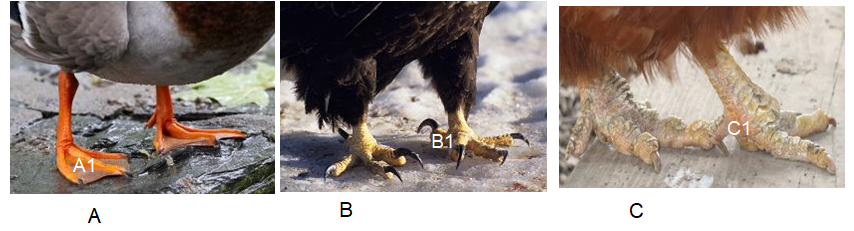
(ii) Using a blade provide; carefully make transverse section of specimen S.

Make a labelled diagram of the cut section. Label any three parts. (4mks)

(ii) Name the type of placentation (1mk)

**2.**Study photographs shown below then answer the questions.

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(a) State the type of evolution represented by structures **Q1**, **R1** and **S1**. (1mk)

b) Explain the type of evolution identified in (a) above. (1mk)

(c) Give the evolution term used to describe structures;

(i) **Q1, R1** and **S1.** (1mk)

(ii)**A1**, **B1** and **C1.** (1mk)

d). (i) Name classes for organisms labeled Q**, R** and **S.**

**Q** (1mk)

**R** (1mk)

**S** (1mk)

(ii) Give two reasons for placing **S** in the class above (2mks)

e) (i) Suggest the diet of animals **B** and **R**.

**B**

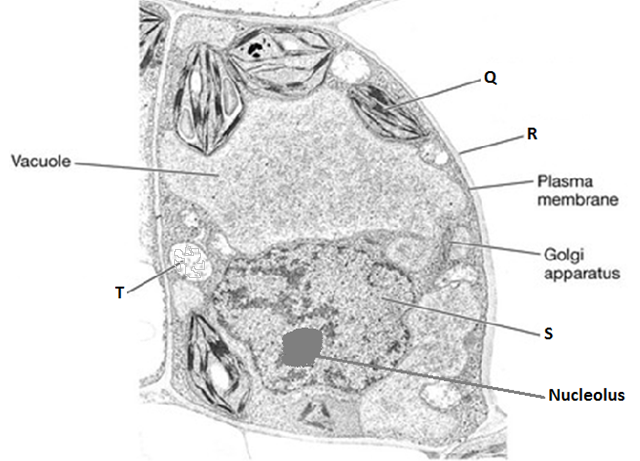
(1mk)

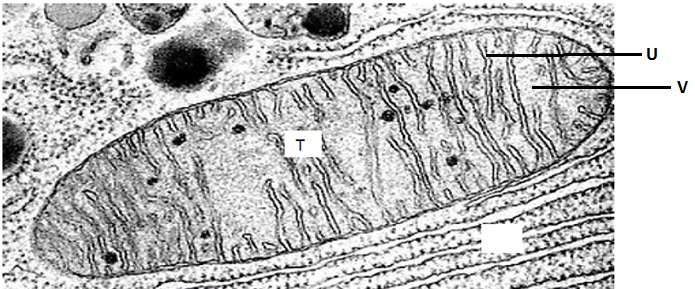
**R**

(1mk)

(ii) How is beak of animal **B** adapted to its function? (2mks)

3.Study the photomicrographs of cells below and answer the questions given.





1. Name the parts labeled. (3mks)

Q

R

U

1. What is the function of
2. Organelle Q. (1mk)
3. Golgi bodies. (2mks)
4. How is organelle T adapted to its function? (1mks)