

NAME INDEX NUMBER

CANDIDATE SIGNATURE.....

DATE

231/3/

BIOLOGY

PAPER 3

(PRACTICAL)

JULY/AUGUST 2018

1³/₄ HOURS

INSTRUCTIONS TO CANDIDATES.

(a) Write your name and index number in the spaces provided above.

(b) Answer all the questions in the spaces provided .

FOR EXAMINERS' USE ONLY

Questions	Maximum score	Candidate 's score
1-3	40	

1. You are provided with specimen labeled **K** make transverse section of the specimen using the scalpel provided.

a) Draw a well labeled diagram of the section. (3mks)

b) i) What type of placentation is displayed by the above specimen. (1mk)

ii) Identify the method of dispersal of the above specimen. (1mk)

iii) Give a reasons for your answer in b(ii) above. (1mk)

c) Squeeze the juice out of the specimen provided and carryout food test using the reagent provided. (12mks)

Food substance	procedure	observation	conclusion
Starch			
Proteins			
Reducing sugars			
Vitamin C			

2. You are provided with specimens **Q** and **S**.

a) With reasons state the class to which each at the specimen belong.

Q

Class(1mk)

Reason (1mk)

S (1mk)

Class (1mk)

Reason (1mk)

b) State the type of germination exhibited by specimen. (2mks)

Q

S

c) Cut a transverse section of the stem of specimen **Q**. Using a hand lens draw a plan diagram of the section. (4mks)

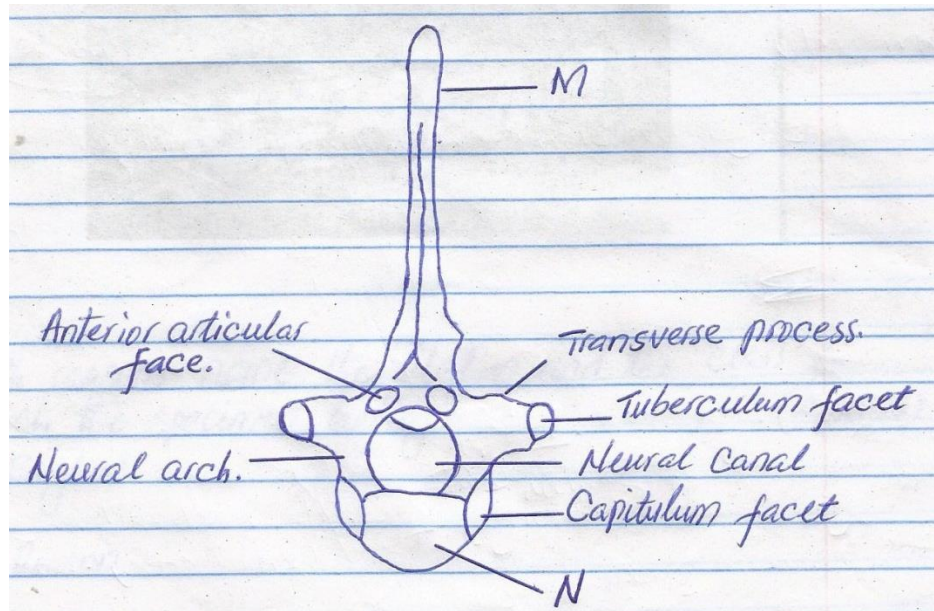
d) i) Which of the seedlings may form swellings on the roots later in their life? (1mk)

ii) Name the organism that are found in the swelling and give their roles. (2mks)

Organism

Role

3. i) The diagram below shows a mammalian vertebra.



a. Name the parts labelled : (2mks)

M

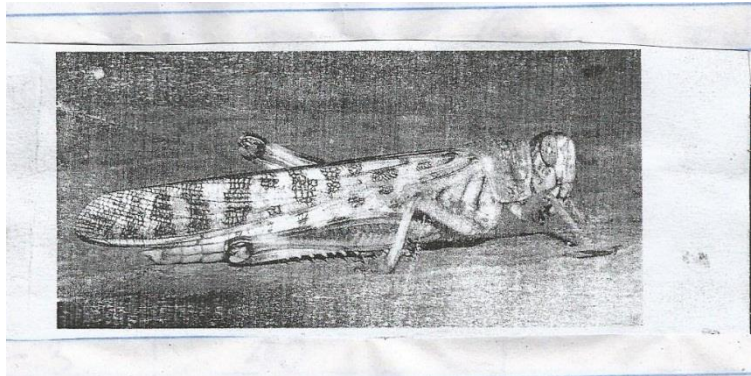
N

b. State one function of the neural canal. (1mk)

c. Name the region of the body from which the bone was obtain. (1mk)

d. Which bone articulates (is fused) at the capitulum and tuberculum facets. (1mk)

ii) Below is a photograph of specimen L.



With reasons name the phylum and the class to which the specimen belongs. (4mks)

Phylum

Reason

Class

Reason

<<<**E N D**>>>