

NAME.....CLASS.....HOUSE..... INDEX No.....

Candidates signature.....

231/3

## Biology

### Paper 3

(Practical)

Time:  $1\frac{3}{4}$  HOURS

#### SUKELLEMMO JOINT MOCK 2020

##### *Instructions to Candidates*

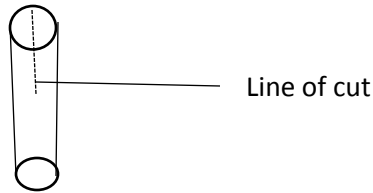
- Answer ALL the three questions in the spaces provided.
- Spend the first 15 minutes of the 1 hour & 45 minutes to read through the paper carefully before commencing your work.
- One may be penalized for recording irrelevant information and for incorrect spelling, particularly of *technical* terms.
- **Additional pages must not be inserted.**

##### For Examiner's Use Only

QUESTION	Maximum Score	Candidate's Score
1	12	
2	15	
3	13	

- **This paper consists of 7 printed pages.**
- **Candidates should check the question paper to ensure that all the pages are printed as indicated and no question is missing.**

1. You are provided with two pieces of plant material labelled specimen D. using a scalpel cut a longitudinal section half way through the middle of each piece as shown in the diagram below.



Place one piece in solution labelled  $L_1$  and the other piece in the solution labelled  $L_2$ . Allow the set up to stand for 30 minutes.

(i) Record your observation (2 marks)

$L_1$ .....

$L_2$ .....

(b) Examine the pieces.

(i) Record other observations besides those made in (a) (i) above. (3marks)

$L_1$ .....

$L_2$ .....

(ii) Account for the observation in (a) (i) above. (5 marks)

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.....  
.....

(ii) Account for the observation in (b) (i) above. (3marks)

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.....  
.....

2. You are provided with photographs of specimen M and N. Examine them.



a) Identify the bones. (2marks)

M .....

N.....

b) Name the parts labeled X and Y. (2marks)

X.....

Y.....

c) State **three** significance of the part labelled Y. (3 marks)

Y

(i).....

(ii).....

(iii) .....

d) Calculate the actual size of specimen labelled M. (Show your working). (3marks)

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.....  
.....

e) Name the part of the mammalian body from where the specimens were obtained. (1mark)

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f) State with reasons the type of joint formed at the proximal and distal end of M (4marks)

Proximal end .....

Reason.....

Distal end.....

Reason.....

3. a) The photographs below are for specimen labelled P,Q and R.

P



Q



U



R

V

(i) State with a reason the class to which specimens P belongs. (3 marks)

P .....

Reason .....

(ii) What type of germination is exhibited by Q? (2marks)

Q .....

Give a reason for your answer.

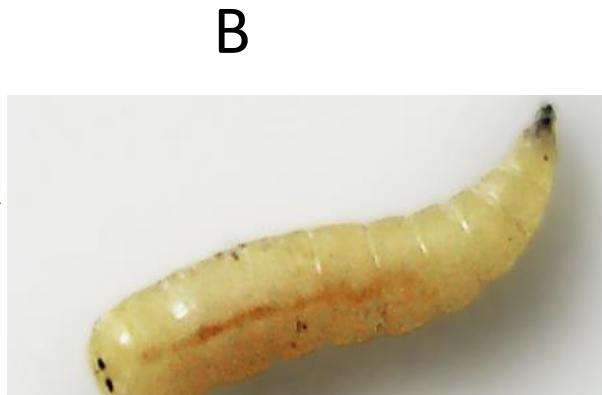
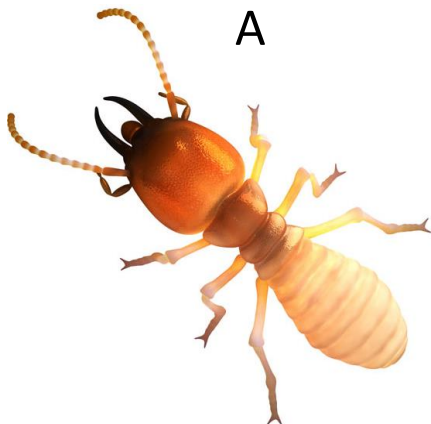
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(iii) Name the parts labelled U and V on the photographs above. (2marks)

U .....

V .....

3. (b) The diagrams below shows the photographs of specimens A and B



(b) (i) Using observable features only, state the class to which the specimen in photographs A belongs. (1mark)

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(ii) Give a reason for your answer. (1mark)

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b) (iii) State the habitat in which the specimen in photograph B is found. (1mark)

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b) (IV) Identify the stage of development of the specimen in photograph B. (1mark)

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(v) Give a reason for your answer in (b) (iv) above. (1mark)

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