

THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education

231/3 – BIOLOGY – Paper 3
(PRACTICAL)

SEPT 2018 - PAPER 3

Name Index Number

Candidate's Signature Date

Instructions to candidates

- (a) Write your name and index number in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) Answer **all** the questions in the spaces provided.
- (d) You are required to spend the first 15 minutes of the 1¼ hours allowed for this paper reading the whole paper carefully before commencing your work.
- (e) Additional pages must **not** be inserted.
- (f) **This paper consists of 7 printed pages.**
- (g) **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**
- (h) **Candidates should answer all the questions in English.**

For Examiner's Use Only

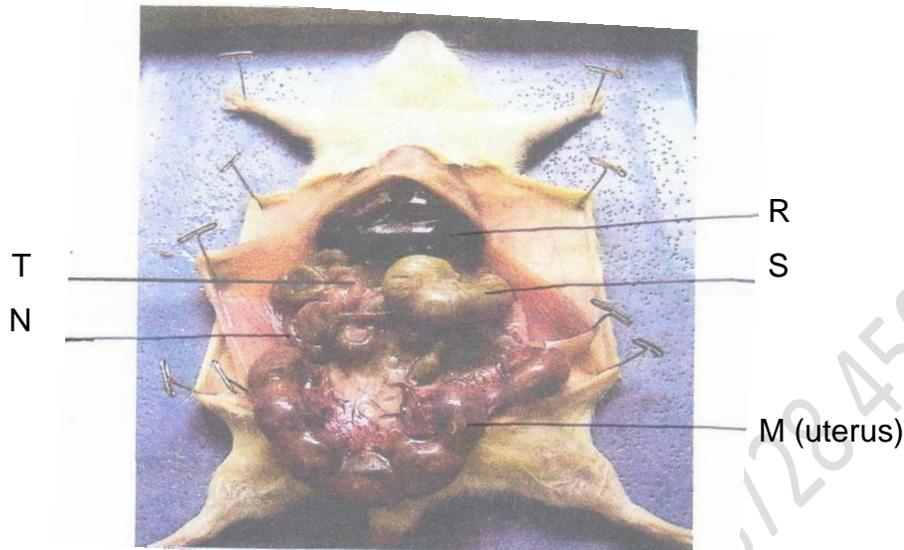
Question	Maximum Score	Candidate's Score
1	13	
2	14	
3	13	
Total Score	40	

BIOLOGY PAPER 3
REVISION KITS 2018

SECTION A (40 MARKS)

Answer all questions in this section in the spaces provided.

1. The following is a photograph of a dissected mammal. Study the photograph and answer the questions that follow.



- (a) Name the structures labeled R, S and T. (3mks)

R:.....

S:.....

T:.....

- (b) On the photograph, label and name the site of production of vitamin K. (1mk)

- (c) Identify and state **one** function of the following parts:- (6mks)

PART	FUNCTIONS
S	
T	
R	

- (d) (i) State the sex of the dissected mammal. (1mk)

.....

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

.....

.....

- (e) Identify the class to which the specimen belongs. (1mk)

.....

- (f) State the reason for your answer in (a) (i) above. (1mk)

2. Below is a diagram showing a type of a metamorphosis exhibited by a butterfly.



(a) Give the name of the type of metamorphosis in the diagram above. (1mk)

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(b) Write down **two** importance of metamorphosis. (2mks)

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.....

(c) Name the stages Q, R and S. (3mks)

Q:.....

R:.....

S:.....

(d) Differentiate the biological activities in the development stages R and S. (4mks)

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.....
.....

(e) Name the **two** major hormones that are associated with metamorphosis in insects. (2mks)

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.....

(f) (i) Name the class to which the organisms in the diagram above belongs.(1mk)

.....

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

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3. You are provided with solution Z. Divide it into three portions. Use one portion of Z, Benedict's solution, iodine and source of heat to carry out food tests. (8mks)

Test	Procedure	Observation	Conclusion

- (a) Measure 1ml of DCPIP and put it in a test tube. To it add drops of the second portion of Z and record how many drops decolourizes DCPIP. (1mk)

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- (b) Boil the third portion of solution Z for two minutes. Repeat the procedure in (b) above and record the number of drops that decolourizes DCPIP. (1mk)

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- (c) Account for the difference in number of drops used to decolourize DCPIP. (2mks)

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