

Name _____ Index No. _____ / _____

2404/305
 ANIMAL AND PLANT HUSBANDRY
 PHARMACOLOGY, TOXICOLOGY
 ENTOMOLOGY AND PLANT PATHOLOGY
 Oct./Nov. 2014
 Time: 3 hours

Candidate's Signature _____

Date _____



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN APPLIED BIOLOGY

ANIMAL AND PLANT HUSBANDRY, PHARMACOLOGY, TOXICOLOGY,
 ENTOMOLOGY AND PLANT PATHOLOGY

3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.
 Sign and write the date of the examination in the spaces provided above.
 You should have scientific calculator(Non programmable) for this examination.
 This paper consists of TWO sections; A and B.
 Answer ALL questions in section A and THREE from section B in the spaces provided.
 Each question in section A carries 4 marks while each question in section B carries 20 marks.
 Maximum marks for each part of a question are indicated.
 Candidates should answer the questions in English.

For Examiner's Use Only

Section A

Question	1	2	3	4	5	6	7	8	9	10	TOTAL SCORE
Candidate's Score											

Section B

Question	11	12	13	14	15	TOTAL SCORE
Candidate's Score						

GRAND TOTAL

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This paper consists of 16 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A (40 marks)

Answer ALL the questions in this section in the spaces provided.

1. (a) Define the following terms:

(i) Apical dorminance (1 mark)

(ii) Abscission (1 mark)

(b) Distinguish between tropism and taxis movements. (2 marks)

2. (a) Define the term Euthanasia. (1 mark)

(b) Describe cervical dislocation in mice. (3 marks)

3. (a) Distinguish between first order and second order kinetics. (2 marks)

(b) Draw a graph to show First Order Kinetics. (2 marks)

4. (a) Name **four** endocrine centres in insects. (2 marks)

(b) State the secretions of **each** centre in 4(a) above. (2 marks)

5. (a) Distinguish between Gnotobiotics and specific pathogen free (SPF) animals. (2 marks)

(b) Give any **two** reasons for receiving animals in a quarantine area. (2 marks)

6. List **two** advantages and **two** disadvantages of using wood in the construction of animal houses. (4 marks)

7. State any **four** expressions of non-lethal foetal toxicity. (4 marks)

8. (a) Define the term plant breeding. (1 mark)

(b) Give any **six** purposes of plant breeding programme in horticulture (3 marks)

9. Draw a diagram to illustrate the relationship between the digestive tract and malpighian tubule of an orthoptera. (4 marks)

10. List any **four** factors that influence reabsorption of a drug. (4 marks)
