Name ..... **Index Number** .....

School ..... **Candidate's Signature** .....

231/3 **Date** .....

BIOLOGY

Paper 3 (PRACTICAL)

2015

1¾ hours

MAKUENI COUNTY KCSE 2015 PREPARATORY EXAMINATION

Kenya Certificate of Secondary Education

BIOLOGY

Paper 3 (PRACTICAL)

1¾ hours

Instructions to candidates

(a) Write your name and index number in the spaces 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 1¾ 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 6 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.

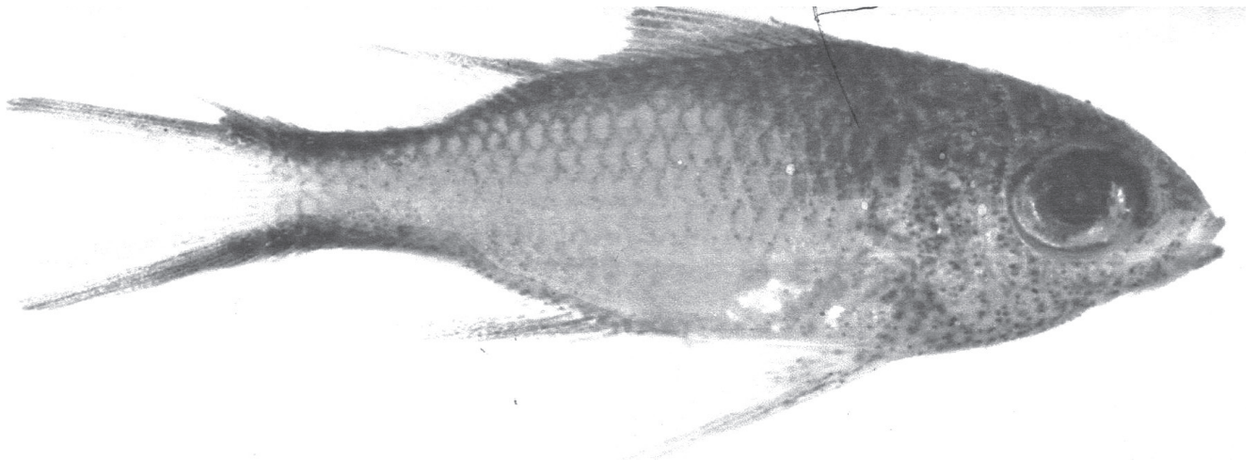
(h) Candidates should answer all the questions in English.

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1	13	
2	16	
3	11	
Total Score	**40**	

Sponsored by H.E. Prof. Kivutha Kibwana, Governor, Makueni County.

1. The photograph below is of an animal.



(a) (i) Name the class to which the specimen belongs. (1 mark)

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(ii) Give **two** reasons for your answer. (2 marks)

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(b) State the term to describe the shape of the specimen. (1 mark)

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(c) Label on the photograph **one** structure used for locomotion by the organism. (1 mark)

(d) Using observable features only, give **three** ways the organism is adapted to aquatic life. (3 marks)

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(e) A similar specimen was measured from the tip of the mouth to the tip of the tail. The length was 309 mm. The length of the tail was found to be 141 mm. Calculate the tail power of the specimen. (3 marks)

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(f) Give **two** reasons for bright colouration in some members of the class to which the specimen belongs. (2 marks)

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2. (a) You are provided with leaves of specimens **A, B, C, D, E** and **F**. Use the following features in the order in which they are listed, to prepare a dichotomous key: (10 marks)

- Venation
- Colour of leaf
- Type of leaf
- Succulent or non-succulent
- Ovate or lanceolate

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(b) (i) Name the likely habitat of specimen **A**. (1 mark)

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(ii) Give a reason for your answer in (b) (i) above. (1 mark)

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(c) State the significance of the shiny upper surface of specimen **D**. (1 mark)

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(d) Observe the floral parts of specimen **C** (Bougainvillea flower). What is the significance of the brightly coloured structure onto which the flowers are attached? (1 mark)

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(e) Using observable features only, state one feature that makes specimen **A** adapted to its environment. (1 mark)

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(f) Name an observable feature that can be used to classify specimen **F** as a monocotyledon. (1 mark)

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3. (a) You are provided with the following:

- Substance **K**
- DCPIP reagent
- Benedict's solution
- Droppers
- Boiling tube
- Means of heating

Carry out the appropriate tests and complete the table below. (9 marks)

Food substance	Procedure	Observation	Conclusion

(b) Name the deficiency disease in humans that would result from lack of fruits. (1 mark)

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(c) State one symptom of the disease named in 3 (b) above. (1 mark)

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