

NAME:..... Index Number:.....
School Candidate's Signature:.....
231/3 Date:.....
BIOLOGY PAPER 3

MUSLIM SCHOOL JOINT EVALUATION TEST

July 2024

PRE- KCSE EVALUATION EXAM

1 $\frac{3}{4}$ hours

KENYA CERTIFICATE OF SECONDARY EDUCATION

BIOLOGY

Paper 3

(PRACTICAL)

1 $\frac{3}{4}$ hours.

Instruction to candidates.

- (a) Write your name and index number in the spaces provided above.
- (b) Sign carefully 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 1 $\frac{3}{4}$ hours allowed for this paper reading the whole paper 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 write all the answers in English.

For Examiner's use only.

Question	Maximum Score	Candidate's Score
1	15	
2	13	
3	12	
Total Score	40	

1) (a) You are provided with substances labeled **N, P, Q, V** and **W**. **N** is Benedict's solution, **P** is dilute hydrochloric acid, **Q** is sodium hydrogen carbonate solution, suspensions **V** and **W** are test solutions.

i) Using the reagents provided, test for the food substances in the suspension. In the table below, record the food tested, Procedures, observations conclusions. (10mks).

Substance	Food substance being tested for	Procedure	Observations	Conclusion
V				
W				

ii) Name one enzyme that may be required to digest suspension **W** in the alimentary canal in human beings. State the organ from which the enzyme is produced. (2 marks)

Enzyme	Organ Producing the enzyme
.....

(iii) State the role of the following in the experiment:

(a) Substance Q (2marks)

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.....

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(b) Substance P (1mark)

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2.(a) You are provided with specimens labeled **W, X, Y** and **Z** which are of plant origin. Using the features in the order below, construct a dichotomous key to identify the specimens.

Simple or compound leaves;

Leaf venation;

Leaf margin; (6marks)

[illegible]

b)(i) Open the flower of specimen X. Draw the pistil and on it label the structure that receives pollen grains. (2marks)

(ii) How is the structure labeled in (b)(i) above adapted to perform its function. (1marks)

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(c) Using your fingers, strongly squeeze the stem of specimen W.

(i) Record your observations (1mark)

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(ii) From the observations, explain how the specimen is adapted to its habitat. (1mark)

.....

.....

e) (i) Give one observable feature that adapt specimen **Z** to its habitat. (1mark)

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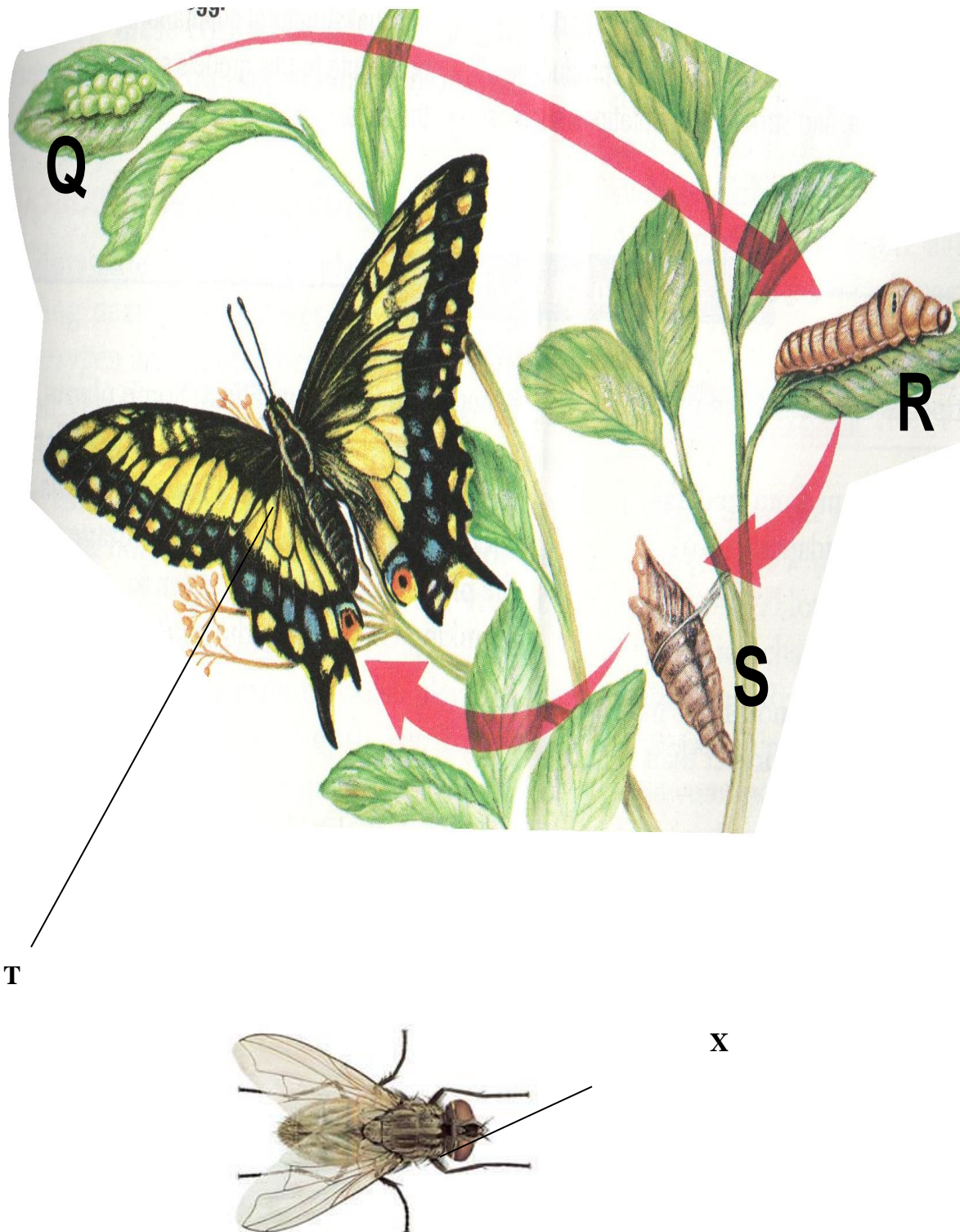
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(ii) State how the feature adapt the specimen for survival in its habitat. (1mark)

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Q3 Study the photograph below and answer the questions that follows.



3 (a) With three reasons, state the class to which specimen **T and X** belong. (4marks)

Class.....
.....
Reasons.....
.....

b) How are the external features of specimen **X** adapted for locomotion. (2marks)

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.....
.....

c) At what stage of development is specimen **R** in the life cycle of specimen **T**? (1mark)

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.....

d) Give two reasons for your answer. (2marks)

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.....

e) State two biological advantages of the above stage of development in the life cycle of specimen **T**. (2marks)

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f) Name the stage of development represented by letter **S**. (1mark)

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