

Candidate Name _____

Centre Number				Candidate Number										

EXAMINATIONS COUNCIL OF ZAMBIA

Examination for General Certificate of Education Ordinary Level

Biology

5090/3

Paper 3 Practical Test

Wednesday

12 JULY 2017

Additional materials:

As listed in Instructions to Supervisors

Time 1 hour 15 minutes

Instructions to Candidates

Write your **name**, **centre number** and **candidate number** in the spaces provided at the top of this page.

There are **two** questions in this paper.

Answer **both** questions.

Write your answers in the spaces provided on the question paper.

Information for candidates

The number of marks is given in brackets [] at the end of each question or part question.

Cell phones are not allowed in the examination room.

For Examiner's Use	
1	
2	
Total	

Answer both questions

1 You have been provided with solution **A**, **B** and **C**.

(a) Carry out a reducing sugar test on each of the solutions provided.

(i)

Solution	Method	Observation	Conclusion
A			
B			
C			

[9]

(ii) State the blood vessel leading to the liver from which the solution in **A** could have been extracted.

..... [1]

(iii) State the blood vessel leading to the liver from which the solution in **B** could have been extracted.

..... [1]

(iv) State the function of the nutrient found in solution **A**.

..... [1]

(v) State the hormone related to regulation of the nutrient in solution **A**.

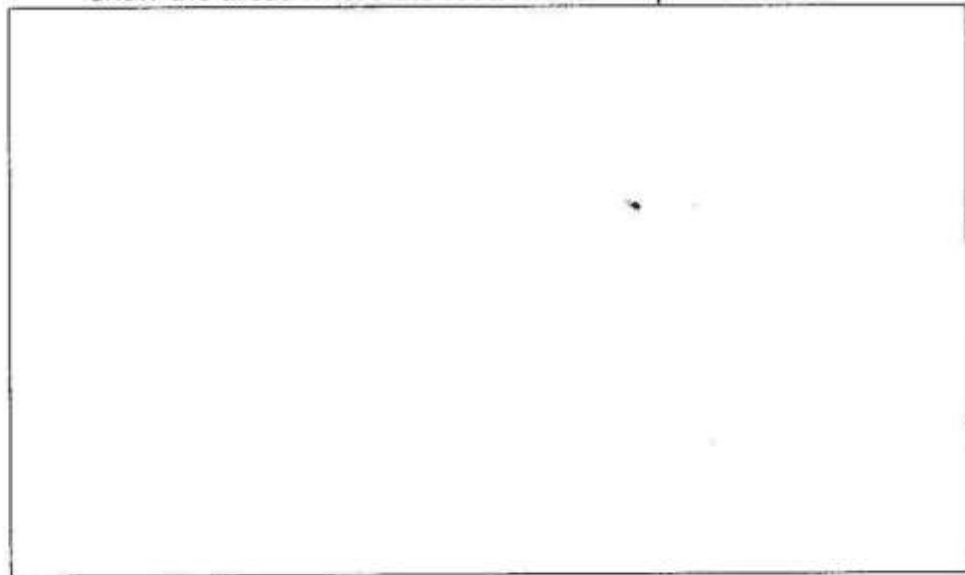
..... [1]

(b) You are provided with specimen **W29**.
Put a few drops of iodine solution to cover the cut surface of the specimen.

(i) State the food nutrient found in specimen **W29** as shown by the test.

..... [1]

(ii) Draw an outline of the cross section of specimen **W29** and show the areas where the food nutrient is present.



[3]

(iii) Explain how the food nutrient in specimen **W29** is used as a source of energy in plants.

.....
.....
.....
.....
..... [3]

[Total: 20 marks]

2 You are provided with specimen **W30** and **W31**, which are fruits from dicotyledonous plants.

(a) (i) Describe how specimen **W30** disperses its seeds.

.....
.....
.....
.....

[4]

(ii) State the type of dispersal found in specimen **W30** and **W31**.

W30

[1]

W31

[1]

(iii) Give a reason for your answer in (a)(ii) above.

W30

[1]

W31

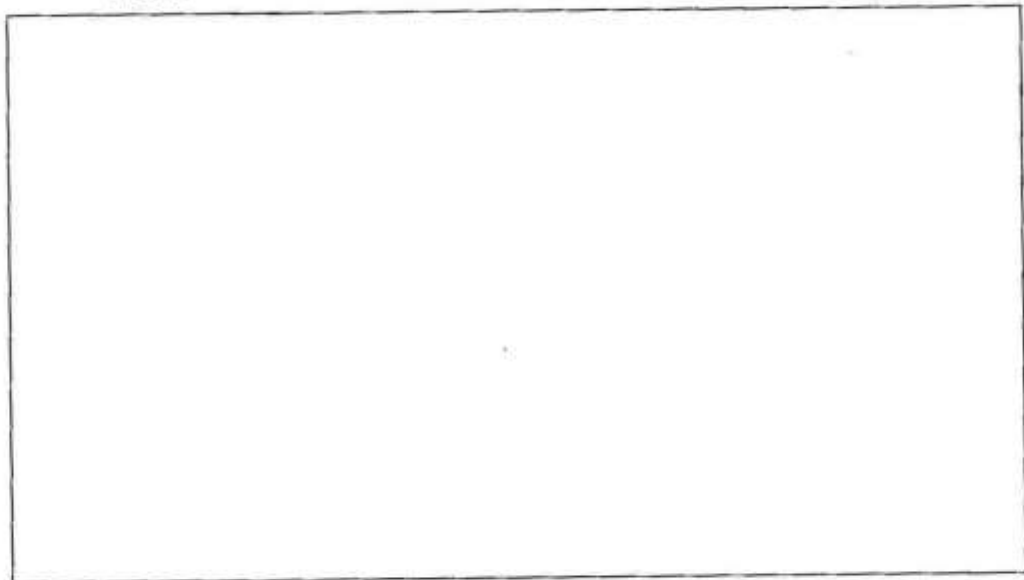
[1]

(b) (i) Measure and record the diameter of the longitudinal section of specimen **W31**.

.....

[1]

(ii) Make a large labelled diagram of the longitudinal section of specimen **W31**.



[7]

(iii) Measure and record the diameter of the drawing.

.....

[1]

- (iv)** Calculate the magnification of your drawing using the measurements obtained above.

.....
.....
.....
.....

[3]

- (c)** Explain why specimen **W31** is referred to as a false fruit.

.....
.....

[1]

[Total: 20 marks]