Candidate Name	Centre Number	Candidate Number

ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Advanced Level

ANIMAL SCIENCE 6028/3

PAPER 3 Practical Test

SPECIMEN PAPER 2 hours 30 minutes

Additional materials:
Answer paper,
Graph paper,
As listed in Instructions to Supervisors,
Scientific Calculator.

TIME 2 hours 30 minutes + 10 minutes preparation time.

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page and on every page of your answer paper.

This paper consists of **three** questions. Answer **all** questions. Marks are given in brackets [ ] at the end of each question.

You are advised to spend the first **10** minutes carefully reading through the whole paper before answering any questions. Spend at least **40** minutes on each question. All writing must be in blue or black ink except for diagrams which must be drawn in pencil.

You are reminded of the need for good English and clear presentation in your answers.

FOR EXAMINER'S USE	
1	
2	
3	
TOTAL	

This question paper consists of 5 printed pages and 3 blank pages.

Copyright: Zimbabwe School Examinations Council, Specimen paper.

1 You are provided with a slide **AS1**. Use a bio viewer to observe the illustration on **AS1**.

(a) Name the specimen being viewed on **AS1.** [1]

(b) Identify and describe **one** function of each of the labelled components in **AS1.**

Component	**Function**
V	[2]
W	[2]
X	[2]
Y	[2]
Z	[2]

(c) Describe the activities that may take place in specimen **AS1.**

_____

_____

_____

_____

_____ [3]

(d) Relate the different parts of specimen **AS1** to their function.

Part of Specimen AS1	**Function**
(i)	
(ii)	
(iii)	
(iv)	
(v)	

[6]

2 You are required to carry out food test on **AS2, AS3** and **AS4** using reagents **R1, R2, R3** and **R4** respectively. Identify the types of food elements using the reagents.

(a) Record results in the table below:

Sample	Method	Observation	Class of Food
AS2			
AS3			
AS4			

[9]

(b) Explain the importance of carrying out the food tests.

(i) _____

(ii) _____

(iii) _____ [3]

(c) Explain the importance of mixing foods rich in carbohydrates and proteins before feeding livestock.

_____

_____

_____ [3]

(d) Suppose one of the food samples is a carbohydrate rich food with **10% CP** and the other one is protein rich with a **35% CP**. Using the Pearson Square method, calculate, the mixing ratio to produce a feed with **20% CP**. [3]

(e) Explain the disadvantages of feeding a solely carbohydrate rich feed to livestock.

_____

_____

_____ [2]

3 You are presented with the following materials which constitute the bulk of ruminant livestock feeds.

(a) **(i)** Identify the materials labelled **AS5 – AS10** by their common names:

AS5

AS6

AS7

AS8

AS9

AS10 [6]

(b) As an animal nutritionist suggest **three** broad classes of these plants.

(i) _____

(ii)_____

(iii)_____ [3]

(c) Why are these plants recommended to ruminant animals?

_____

_____

_____ [2]

(d) **(i)** Discuss the digestion process of feeds **AS5** to **AS10.**

_____

_____

_____

_____

_____

_____

_____

_____ [7]

(ii) Discuss the problems associated with feeding ruminant animals with **AS5** and **AS6** only.

_____

_____

_____ [2]

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