

## Question 1

- 1.1 Very well answered.
- 1.2 Fairly well answered. Many candidates did not provide correct answers for "oval window" and "pits". Quite a few candidates confused the terms "homeostasis" with "homoeothermic".  
1.2.8 – Candidates mentioned the cells and not the structures
- 1.3 Poorly answered. Candidates still have problems with this type of question. However, candidates performed better than expected.
- 1.4 Sections 1.4.1 to 1.4.4 were fairly well answered, but many candidates had problems with Question 1.4.5, even though the memo was quite expansive.  
Terminology: Many 2<sup>nd</sup> language speakers were confused by "phenomenon" and "processes".  
Suggestion: Illustration – indicate a label "with roots intact" to give more clarity.  
The fact that diagram does not indicate leaves was confusing (leaves mentioned later)  
1.4.4 C – Candidates not specific, e.g. Temp in stead of **low** temp, **high** humidity, etc  
1.4.5 – Should be on same page as rest of question
- 1.5 Fairly well answered. In Question 1.5.3, the explanations for the adaptations provided were poor.  
Candidates could not relate two diagrams to each other – drawing on right unfamiliar  
Candidates wrote "villi" instead of "micro-villi"  
Cell B – "thin cell wall" **instead** of "cell membrane"  
Candidates gave adaptation, but had difficulty explaining adaptation.
- 1.6 Generally well answered, but it disadvantaged 2<sup>nd</sup> language speakers. But changing key would have changed the level of the question and therefore it was kept as is.

**GENERAL COMMENTS**

Candidates should apply principles of marking – e.g. Where letters asked, accept only the letters and not descriptions.

Principles of marking to be enforced from Grade 8.

## Question 2

**GENERAL:** Question poorly answered

- 2.1.1 Well answered, although some not sure  
Some candidates interpreted the question incorrectly
- 2.1.2 Poorly answered
- 2.1.3 Well answered
- 2.1.4 Candidates could not differentiate between reflex action and reflex arc.  
Confusion between "autonomic" and "automatic"  
Sudden / immediate response used a lot
- 2.1.5 Poorly answered
- Candidates referred to organs  
a) kidney  
b) heart

c) lungs

2.2.1a) Functions was mentioned and not what was asked.

2.2.2 Well answered, although some interpreted question incorrectly and described the way sound travels

2.2.3 Ampulla, utricle, saccule – misplaced on drawing  
Only one semi-circular canal drawn and not three  
No marks for caption  
Candidates made drawing in separate parts, not as a single unit.  
Drawing of unknown structure tends to be problematic.

### Question 3

3.1.1 Candidates put letters to the effects – they obviously did not understand the question

3.1.2 – (c) Confused with pupillary mechanism / eye accommodation

3.1.3 – Linked increase in mass to the growth hormone, e.g. a lot of energy was released that led to growth that was responsible for increase in mass.  
(c) Many candidates discussed negative feedback  
Confused pale colour with being ill, therefore tired/lazy

3.2 Could have been on one page

3.2.2 Many candidates swapped around A and C

3.2.3 Well answered – however, with shivering:  
wrote about hairs standing up  
muscles moving that caused friction that generated heat  
energy was released to generate heat

3.2.4 Left out by many candidates (especially Afrikaans speakers) – perhaps the layout of the paper caused candidates to miss this question. See AFR question paper specifically.

3.3.1 Good question – candidates tried to use their general knowledge, but not all got to explaining the reason for hypothermia under those conditions. Many used the same reason in all three questions. Many candidates thought that old people are resting more because they are lazy!

### General comments:

The language used in this question was very difficult to understand, especially that used by 2<sup>nd</sup> language speakers.

The markers felt that the candidates did not understand the questions and either did very well or very poorly. Some candidates did not know glands in general.

In this question the word **explain** appears at least 5 times. Many wrote long paragraphs and perhaps had little time left to complete Questions 4 and 5.

Candidates confused this question with thermoregulation

Candidates should check marks allocated – guideline on how much to write

ALL HIGHER LEVEL QUESTIONS SEEM TO BE PROBLEMATIC FOR 2<sup>ND</sup> LANGUAGE SPEAKERS.

### Question 4

4.1.1 Graphs well drawn – marks easily scored

4.2.1 The memorandum was a structural adaptation and not the answer to the question. (secondary thickening/lignin)

4.2.2 Many candidates wrote that the plant would rot and scored no marks.

- 4.3 Ventral and dorsal walls must **not** be used to describe guard cell walls.  
Stomata = whole structure  
Stoma = pore / opening

#### Question 5

- 5.1.1 Many candidates unable to calculate percentage.
- 5.1.2 Candidates wrote about sodium pump.
- 5.1.3 2<sup>nd</sup> language candidates disadvantaged – do not use the term “**account for**”
- 5.2 Candidates did not read instructions.

#### GENERAL COMMENTS

It is clear that candidates did not know how to write answers / did not get enough practice  
Teachers must teach candidates to condense their work and to write only essential information. Should be stated in instructions:

Write as an essay – not in bullet- or point form.  
5.2 should have been started on a new page

**Note:** In general, many candidates have problems when explanations are required.