

Memorandum Grade 9

SECTION A

QUESTION 1

1.1.1. A ✓

1.1.2. C ✓

1.1.3. B ✓

1.1.4. D ✓

1.1.5. C ✓

1.1.6. B ✓

1.1.7. A ✓

1.1.8. C ✓

1.1.9. A ✓

1.1.10 D ✓

(10)

1.2.1. Microscope ✓

1.2.2. Stroke ✓

1.2.3. Gamete(s) ✓

1.2.4. Menstruation ✓

1.2.5. Chemical digestion ✓

1.2.6. Indicator ✓

1.2.7. Clear lime water ✓

1.2.8. Molecule

1.2.9. Noble gases ✓

1.2.10 Element ✓

(10)

1.3.1 C ✓

1.3.2 A ✓

1.3.3 C ✓

1.3.4 G ✓

(4)

[24]

SECTION B

QUESTION 2

- 2.1.1 2 – Cell wall ✓
5 – Nucleus ✓
6 – Cytoplasm ✓ (3)

2.1.2

Naam van Organelle	Plants cell	Animal cell
1 - Vacuole ✓	One huge vacuole ✓	None OR a lot of small vacuoles. ✓
7 - Chloroplast ✓	Present in plant cell ✓	No Chloroplast. ✓

(6)

- 2.1.3.1 4 – Mitochondrion/Mitochondria ✓ (1)

- 2.1.3.2 A large number of mitochondria is needed for sufficient energy production. ✓ / **OR** for sufficient or effective respiration ✓ (1)

- 2.1.3.3 Carbon dioxide ✓ It is exhaled. ✓ (2)

[13]

- 2.2.1 C. Urethra ✓

D. Sperm duct / Vas deferens ✓

E. Penis ✓ (3)

- 2.2.2 G. ✓ Testes ✓ (2)

- 2.2.3 Oxygen ✓ (1)

- 2.2.4 Carbon dioxide ✓ (1)

- 2.2.5 Gaseous exchange: ✓ Oxygen moves through the cell membrane from the capillary into the cell ✓ through diffusion. ✓ Carbon dioxide moves through the cell membrane to the capillary by means of diffusion. (3)

[10]

- 2.3.1 Mechanical digestion involves the physical break down of food particles ✓ (1)

- 2.3.2 1. - Mouth ✓

3. - Stomach ✓

4. – Small intestines ✓

Number and name must be correct ✓

(3)

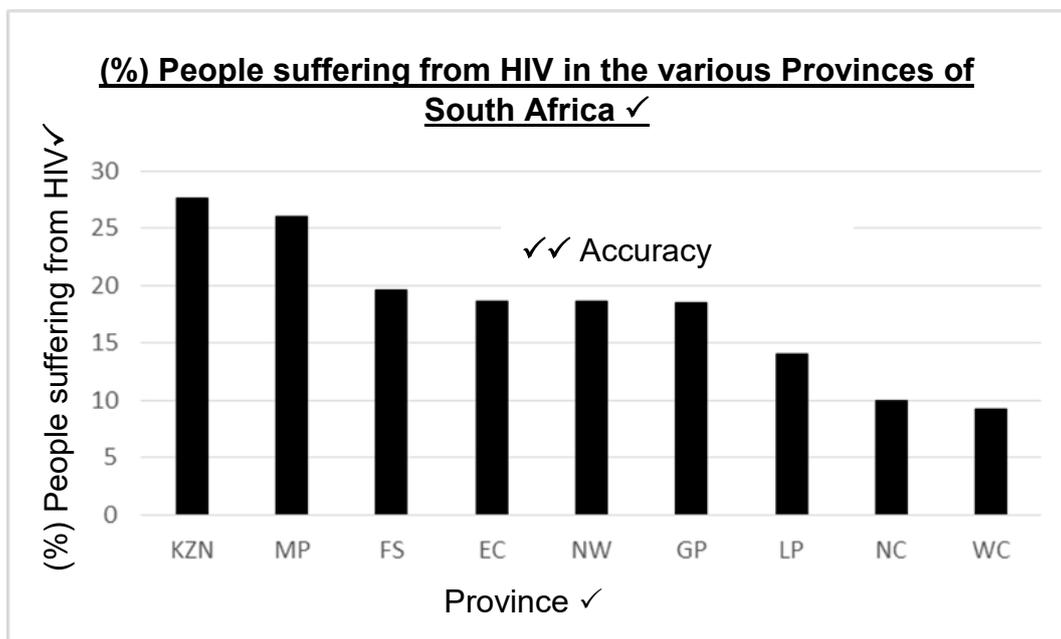
- 2.3.3 Rectum (1)

- 2.4.1 No. ✓ A balanced diet also includes carbohydrates / there is no carbohydrates in her diet. ✓ (2)

[7]

QUESTION 3

3.1.1



(5)

3.1.2 % of People suffering from HIV ✓

(1)

3.1.3 People become ill and are therefore not able to work and earn money to take care of families.

(OR any other relevant / correct answer) ✓

(1)

3.1.4 Circulatory system ✓

Reproductive system ✓

(2)

3.1.5 Condoms ✓

(1)

[10]

QUESTION 4

4.1. Reaction with oxygen. ✓

(1)

4.2.1. Mg ✓

(1)

4.2.2. Carbon ✓

(1)

4.2.3. Magnesium oxide ✓

(1)

4.3. $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ ✓ balance ✓

(2)

[6]

QUESTION 5

- 5.1. Rust ✓ (1)
5.2. Rusting/Corrosion/Oxidation (any one) ✓ (1)
5.3.1. $4\text{Fe} \checkmark + 3\text{O}_2 \checkmark \rightarrow 2\text{Fe}_2\text{O}_3 \checkmark$ balance ✓ (4)
[6]

QUESTION 6

- 6.1. S ✓ (1)
6.2. acidic ✓ oxides (1)
6.3. $\text{SO}_2 \checkmark$ (1)
6.4. Acid rain is produced which damages statues and buildings made from sandstone.
Acid rain also causes iron and steel structures to corrode.
Cultivation of crops are negatively affected.
Acid rains acidifies soil, lakes and rivers which kills plants/animals.
(any two)✓✓ (2)
[5]

QUESTION 7

- 7.1. Iron reacts faster with a decrease in the pH of the solution.
OR Iron reacts slower with an increase in the pH of the solution ✓✓ (2)
7.2. The mass of iron that reacted ✓ (1)
7.3. pH-value ✓ (1)
7.4. 1 ✓ (1)
7.5. G ✓ (1)
7.6. Fe ✓ (1)
7.7. Acid + Metal ✓ \rightarrow Salt/metal salt + hydrogen gas ✓ (2)
7.8. Taste sour, pH 1-6, Corrosive, Bromothymol blue turns yellow in acid or universal indicator turns red. (any correct applicable answer) ✓✓ (2)
[11]

VRAAG 8

- 8.1.1. Carbon dioxide ✓ Water ✓ (2)
8.1.2. $\text{CO}_2 \checkmark$ Test for CO_2 : Clear lime water turns milky✓ (2)
8.1.3. $2\text{HCl} + \text{Na}_2\text{CO}_3 \rightarrow 2\text{NaCl} \checkmark + \text{H}_2\text{O} \checkmark + \text{CO}_2 \checkmark$ (balance✓) (4)
[8]

SECTION B: 76
GRAND TOTAL:100