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**GENERAL
EDUCATION AND TRAINING**

GRADE 8

NATURAL SCIENCES MEMO

TERM 1 2024

MARKS: 50

TIME: 60 Minutes

MARKING GUIDELINE

SECTION A**QUESTION 1****1.1 MULTIPLE CHOICE**

- 1.1.1 B ✓
 1.1.2 C ✓
 1.1.3 C ✓
 1.1.4 D ✓
 1.1.5 A ✓ [5]

1.2

- 1.2.1 Interdependence ✓
 1.2.2 Producers ✓
 1.2.3 Radiant Energy ✓
 1.2.4 Food web ✓
 1.2.5 Malaria ✓ [5]

TOTAL SECTION A: [10]

SECTION B**QUESTION 2**

2.1 Plants (green/contain chlorophyll) use carbon dioxide (from the air), water (from the soil) and energy from the Sun ✓ (in a series of chemical reactions) to produce glucose (food). ✓
 (2)

2.2 glucose + oxygen ✓ → energy + carbon dioxide + water ✓ (2)

2.3

2.3.1 Respiration ✓ (1)



2.3.2 Both ✓ (1)

2.4 Plants change glucose into starch. ✓ OR starch is more complex form of glucose. ✓ OR Many glucose molecules form a starch molecule. ✓ (1)

[7]

QUESTION 3

3.1 Locust ✓ (1)

3.2 Mushrooms ✓ (1)

3.3 grass → locust → small bird → eagle → mushroom ✓

Grass first ✓

Mushroom last ✓ (3)

All the others in the correct order.

3.4 Plants/grass. ✓ Plants are in lower trophic level than animals. Energy comes directly from the sun and is absorbed by plants. ✓ This energy is then consumed by animals and the biggest part of the energy is used for life processes. Therefore, if you can consume animals, you will get access to less energy than if you consume the same amount of plants. ✓ (3)

[8]

TOTAL SECTION B

[15]

SECTION C

QUESTION 4

4.1 HIV positive means that the person has been infected with the HI virus. ✓ (1)

4.2 Thandi can only be infected with HIV through sexual contact, ✓ sharing hypodermic needles, ✓ contact with infected blood and by transfer of the virus from mother to baby during pregnancy and breastfeeding. ✓ this means that there is very little chance that she may be infected with HIV through normal contact at school. ✓ (4)

[5]

QUESTION 5

5.1 Nutrition ✓, Growth ✓, Sensitivity ✓, Reproduction ✓, Respiration ✓,

Excretion ✓ and Movement ✓

5.2.

- A. Solar energy ✓
- B. Carbon dioxide ✓
- C. Oxygen. ✓
- D. Water and mineral salts ✓

5.2 Photosynthesis is the process by which plants use the energy from sunlight to produce their own food ✓.

Water ✓, Sunlight ✓, Carbon dioxide ✓ (**ANY TWO**)

(15)

QUESTION 6

6.1 Presence of Carbon dioxide (CO₂) ✓ (1)

6.2 It turns milky ✓ (1)

6.3 Glucose + Oxygen ✓ energy ✓ + carbon dioxide ✓ + water (3)

6.4 During respiration ✓ carbon dioxide is released ✓ (2)

[5]

TOTAL SECTION C [25]