

VHEMBE WEST DISTRICT

GRADE 08

NATURAL SCIENCES
MEMORANDUM

MARKS: 100

This **MEMO** consists of **FIVE (5)** pages including the cover.

QUESTION 1

QUESTION 1

- 1.1 C✓✓
- 1.2 A✓✓
- 1.3 C✓✓
- 1.4 D✓✓
- 1.5 A✓✓
- 1.6 D✓✓
- 1.7 D✓✓
- 1.8 A✓✓
- 1.9 B✓✓
- 1.10 D ✓✓

[20]

QUESTION 2

- 2.1 Photosynthesis✓
- 2.2 Virus✓
- 2.3 Poaching✓
- 2.4 Clear lime water✓
- 2.5 Decomposers✓

[5]

QUESTION 3

- 3.1 C✓
- 3.2 E✓
- 3.3 A✓
- 3.4 B✓
- 3.5 D ✓

[5]

QUESTION 4

- 4.1 Radiant energy/ light energy✓✓(2)
- 4.2 Photosynthesis✓✓(2)
- 4.3 Carbon dioxide✓ + water✓ Sunlight✓ chlorophyll✓ glucose✓ + oxygen✓ (6)
- 4.4 Respiration✓✓ (2)
- 4.5 Water lily✓
Green algae✓
Rushes✓ (3)
- 4.6 Photosynthesis produces oxygen that is used by respiration and respiration
produce carbon dioxide which is used by photosynthesis✓✓ (2)

4.7

PHOTOSYNTHESIS	RESPIRATION
Food producing and storing process	Energy releasing process✓
Occurs in green plants	Occurs in living organisms✓
Takes place during the day	Takes place all the time(day and night) ✓
By product oxygen	By product carbon dioxide✓
Product glucose	Product energy✓
requirements; carbon dioxide, sunlight, chlorophyll and water	Requirements :glucose and oxygen✓

(Any matching **3** pairs) plus **1** mark for a table
(4)

[21]

QUESTION 5

- 5.1 (a) Producer: Reeds/ Water plants✓✓ (2)
 (b) Herbivore: Hippo/Snail / Tad pole /Fruit gnats✓✓ (2) (any two)
 (c) Carnivore: Heron / Kingfisher /Fish /dragon fly /Crocodile✓✓ (2) (any two)
- 5.2 Reeds✓→ tadpole✓→ fish→ crocodile✓ (4) (Any correct four)
 Reeds✓→ snail✓→ fish →crocodile✓
 Water plant✓→ tadpole✓→ fish→ crocodile ✓ (Any one)
- 5.3 Green plant is the producer of food for all living organisms. ✓✓ (2)
 5.4 Organisms that break down dead materials✓✓ (2)
 5.5 The recycle materials ✓(1)
 They break down dead materials✓ (1)
 They clean the land✓ (1)
 They fertilize the soil✓ (1) (any two)
- 5.6 Fish will be over populated✓ (1)
 Fish will finish all tadpoles, snails and fruit gnats✓ (1)
 Fish suffer or die from hunger ✓(1) (any two)
- 5.7
 5.7.1 Water pollution✓(1)
 5.7.2. Aquatic organisms will die✓.(1)
 Lots of decay may cause the outbreak of diseases✓(1)
- 5.8 Do awareness campaign on ecosystem conservation✓✓(1)
 Form non-profits organizations **-to preserve wetlands**, ✓(1)
-to avoid erosions✓ (1)

(Any relevant three)(3)

5.9 When organism develops special features that help it to survive✓✓ (2)

5.10 Large and strong muscular to catch and kill the prey✓ (1)

Web toes to swim✓ (1)

Large strong muscular tail to move fast ✓ (1)

Well camouflage not to be seen by prey✓ (1)

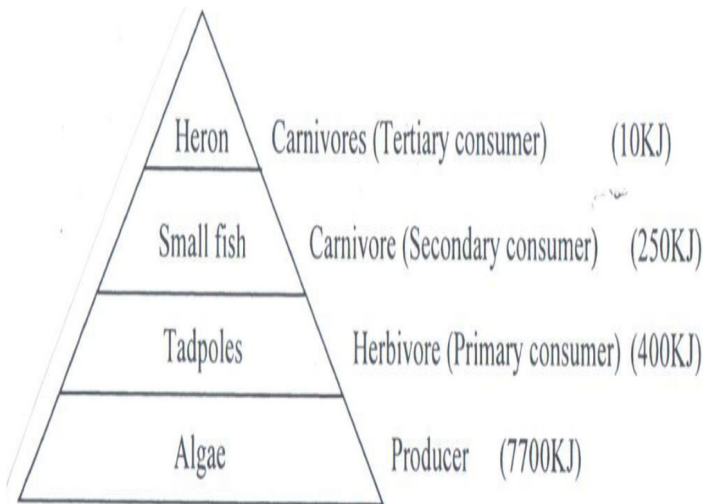
(Any relevant two)(2)

5.11.1 Producers✓✓ (2)

5.11.2 A stage in a food chain or food web✓✓ (2)

5.11.3 Energy is lost in each and every level by life processes and heat until it reaches the top level with less energy✓✓(2)

5.11.4



(5)

Rubric

1 mark each for a name of organism in its correct trophic level with its correct KJ (total is 4 marks)

1 mark for structure of a pyramid with four levels

[39]

QUESTION 6

6.1 Fungi✓ (1)

6.2

- Sporangium✓ (1)

- Sporangophore ✓ (1)

-Stolon✓ (1)

- Rhizoids ✓✓ (1) (4)

6.3

-Wash hands with before eating✓

-Wash hands with soap after using the toilet✓

-Practice safe sex✓

-Wash fruits and vegetables before eating✓

- Do not share personal items (toothbrush, comb, bath towel) ✓
- Cover mouth when cough or sneeze ✓
- Put food in the refrigerator ✓

(any three) (3)

6.4 Pasteurization ✓ – heating of liquid to kill micro-organisms ✓ (2)

[10]