



TOM NEWBY SCHOOL EXAMINATION



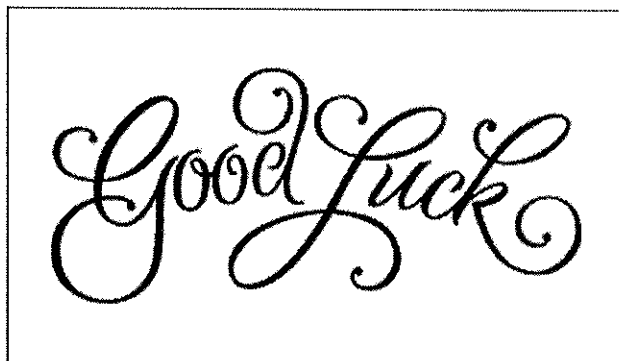
Subject	NS and TECH	Examiner	Miss Botha
Date	8 June 2015	Total marks	75
Session	2	Duration	1 Hour, 30 Min
Grade	6	Moderator	Mrs. Fourie
Special instructions/ Equipment			

This Exam has been compiled using notes and information contained in the Tom Newby School book. The marking memorandum has been compiled accordingly. While alternative responses will be given due acknowledgement, the official memorandum will be considered a priority document to ensure uniformity of marking. Up to 10% of the total mark allocation may be deducted for spelling and grammatical errors, except in the case of Language papers, where deductions are made according to a memorandum. Time allocation on this examination includes provision for concession.

Name and Surname: _____ **Grade 6:** _____

Instructions

1. Make sure that you check the mark allocation of each question before you answer it.
2. Read questions carefully before answering them.
3. Answer all questions.
4. Please work neatly.
5. Draw in pencil.



QUESTION 1

Match the concept (term) in column A with the definition in column B. Write only the correct answer next to the number in the answer column.

<u>Column A</u>		<u>Column B</u>	<u>Answer</u>
1.1	Carbon Dioxide	A. Small plants called algae feed off the fertilisers	1.1
1.2	Insoluble Substances	B. These substances can dissolve in water	1.2
1.3	Eutrophication	C. The process of preserving food in salt water or vinegar	1.3
1.4	Fats and Oils	D. Plants absorb this gas from the air, through their leaves.	1.4
1.5	Soluble Substances	E. The smallest part of a substance	1.5
1.6	Preservatives	F. These are substances that cannot dissolve in water	1.6
1.7	Carbohydrates	G. Makes food last longer	1.7
1.8	Particles	H. Store energy and insulation	1.8
1.9	Pickling	I. The combination of two or more different substances	1.9
1.10	Mixing	J. These foods contain sugar and starch	1.10

[10]



QUESTION 2

Illustrate the arrangement of particles in the following substances

A. Solid	B. Liquid	C. Gas

[3]

QUESTION 3

Provide a definition for the following terms

3.1 Habitat

(2)

3.2 Hypothesis

(2)

3.3 Matter

(2)

3.4 Fermentation

(2)

3.5 Saturated solutions

(2)

[10]

QUESTION 4

Ecosystems

4.1 There are many different types of ecosystems. Name three types of ecosystems

(3)

4.2 Explain the difference between a healthy ecosystem and an unhealthy ecosystem

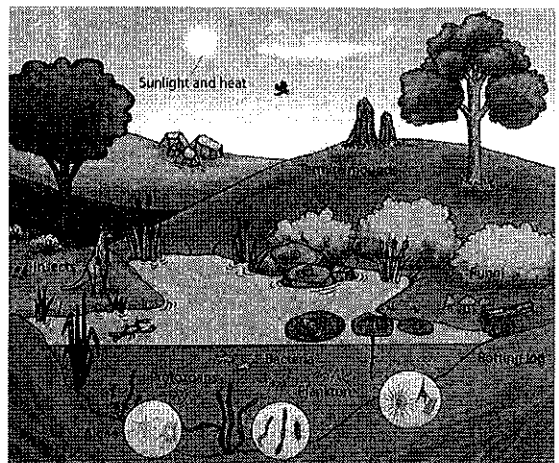
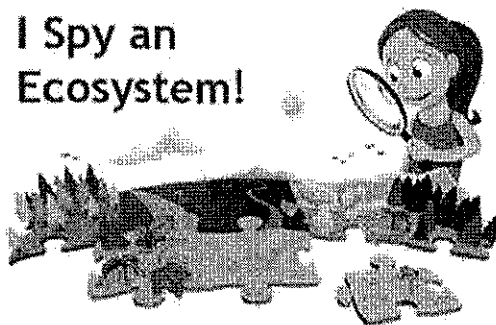
Healthy ecosystem:

(2)

Unhealthy ecosystem:

(2)

I Spy an Ecosystem!

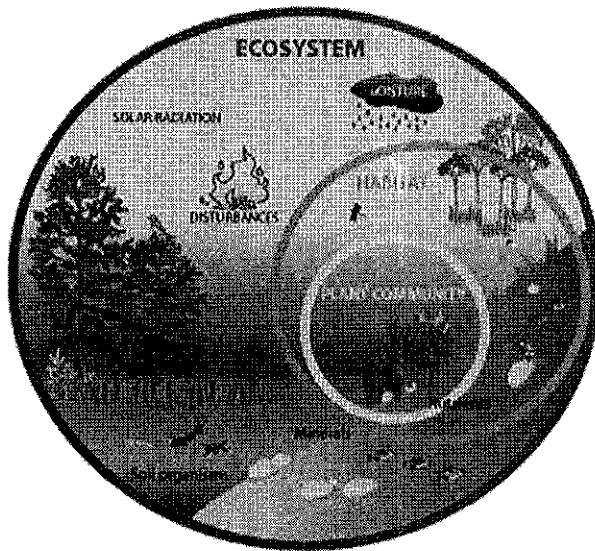


4.3 In an ecosystem, plants and animals are connected by their feeding relationships.

Explain the following statement: More than one animal eats the same plant or animal

(3)

[10]



QUESTION 5

Separating Mixtures

5.1 Name four ways of separating mixtures.

(4)

5.2 Choose one method of separating mixtures. Explain how it works and what it involves.

(5)

5.3 What method would be the best to use when separating sand and salt?

_____ (1)

5.4 Give a simple definition for the term 'solution.'

_____ (1)

5.5 What could be a natural example of **saturated solutions**?

_____ (1)

[12]

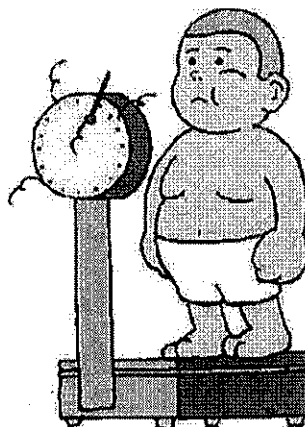
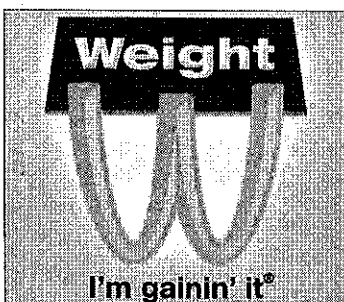
QUESTION 6

Diseases related to diets

6.1 Some diseases are the result of a poor diet.
Discuss the following disease: **OBESITY**
Give a definition and also include diseases caused by obesity.

_____ (5)

[5]



QUESTION 7

State whether the following statements are TRUE or FALSE. If false provide a corrected statement.

7.1 Fibre is found in plant food like fruit, vegetables and grains.

_____ (1)

7.2 Fats and oils are used by the body to keep it warm and to provide all the energy it needs for growth and movement.

_____ (1)

7.3 Solutions are uniform in appearance.

_____ (1)

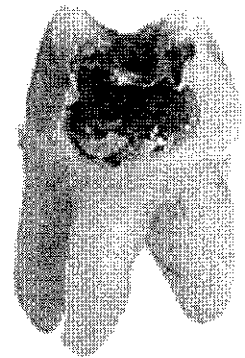
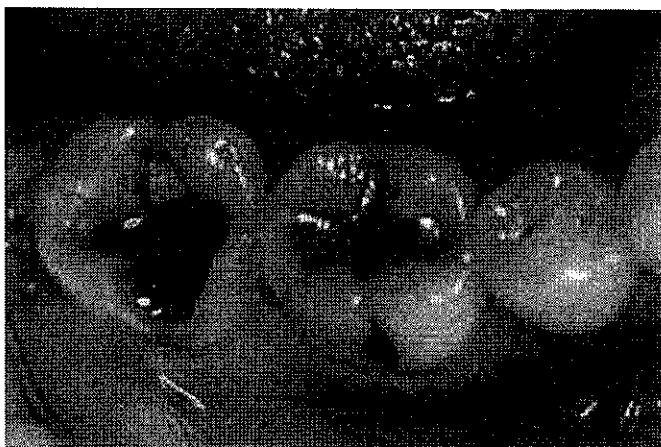
7.4 There are small spaces between the particles in liquids.

_____ (1)

7.5 Tooth decay is caused by bacteria.

_____ (1)

[5]



QUESTION 8

Read the following case study and answer the questions that follow

Kosi Bay System

The Kosi Bay system is on the north coast of KwaZulu-Natal, just below the border of Mozambique. It comprises of over 16 different wetland systems, made up of four lakes which are linked, mangrove forests, salt marshes, mud flats and shallow marine waters with coral reefs.



It is the only place in South Africa where five types of mangrove trees grow. These are the black, red, white, grey and yellow mangrove trees. In these forests you will find fiddler crabs, red mangrove crabs and mud skippers.

It is the only place where there is naturally occurring Raffia Palm forest. The Palm Nut Vulture can be seen here. Other bird species which occur here include the rare Pel Fishing Owl. Crocodiles and hippos are found in the lakes. Both Loggerhead and Leatherback sea turtles lay their eggs on the beaches.

Kosi Bay is home to the Tonga tribe. Traditionally they used lakes for fishing. They have a unique, sustainable fishing method, which catches mature fish as they leave the lake system and head back into the sea. The small fish are small enough to escape through the gaps between the reeds so they can grow into mature fish.

The reeds that grow around the lake system are used to build houses and make mats and blankets

8.1 What is a wetland?

(2)

8.2 What do 'marine waters' refer to?

(1)

8.3 Name two bird species that can be seen in the Kosi Bay System.

(2)

8.4 What does the word 'sustainable' mean?

Only circle the correct answer.

A Using natural resources in a responsible manner.

B An attempt to clean polluted rivers.

C A unique way of catching fish.

(1)

8.5 How do wetlands control floods?

(3)

8.6 Name four ways in which wetlands contribute to the cleaning of polluted water.

(4)

8.7 Name 3 ways of preventing water pollution.

(3)

8.8 In a few short sentences, explain how the cycle of infection works.

(4)

[20]

TOTAL : 75