Name of Candidate

Index Number

School

Mauritius Examinations Syndicate
Prevocational Examination
Specimen Paper Year III

NUMERACY & PROBLEM SOLVING SKILLS
UNDERSTANDING NATURE

DURATION: 1 HOUR

Instructions

1. Write your Name, Index Number and School Name in the space provided above.

2. You should not use red ink in answering questions.

3. Write all your answers clearly on the question paper.

4. Attempt all questions.

<table>
<thead>
<tr>
<th>Section/Question</th>
<th>Marking</th>
<th>Revision</th>
<th>Quality Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qu 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qu 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qu 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qu 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qu 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qu 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Question 1 (20 marks)

Circle the correct answer.

a) Which one of the following is a natural calamity which often affects Mauritius and Rodrigues?
   A  Tsunami
   B  Earthquake
   C  Cyclone
   D  Tornado

b) Which one of the following is a man-made resource?
   A  Plastic
   B  Wood
   C  Soil
   D  Rocks

c) Which one of the following is used to purify water?
   A  Oxygen
   B  Chlorine
   C  Carbon dioxide
   D  Water Vapour

d) Which one of the following is the source of energy in an electric circuit?
   A  Dry cell
   B  Bulb
   C  Electrical wires
   D  Switch
e) **Diagram 1** shows a model filter bed. Which one of the following shows the correct labelling of the model filter bed?

![Diagram 1: Model Filter Bed]

A I- Sand, II-Small pebbles, III – Big pebbles IV- Muddy Water  
B I- Muddy Water, II-Small pebbles, III – Big pebbles IV- Sand  
C I- Muddy water, II- Sand, III- Small pebbles, IV- Big pebbles  
D I- Sand, II- Muddy water, III- Big pebbles, IV- Small pebbles

f) Which one of the following is a natural and renewable source of energy used for the production of electricity in Mauritius?

A Coal  
B Oil  
C Diesel  
D Sun
g) Which one of the following shows a safe way of using electricity?

A  
B  
C  
D  

h) Which one of the following is an example of a device which uses electricity for communication?

A  Oven  
B  Phone  
C  Blender  
D  Drill  

i) Which one of the following is a description of deforestation?

A  Cleaning of beaches  
B  Extracting sand from the sea  
C  Cutting down of trees in large numbers  
D  Removing of rocks from the soil
j) Which one of the following shows a sustainable way of using our natural resources?

A Use of sun and wind to produce energy
B Dumping of waste in open space
C Overfishing from the Ocean
D Cutting down of trees in forests
Question 2 (4 marks)

The following are the steps through which water goes when it leaves the reservoirs till it reaches the tap in your house. **Number** them in the correct order.

<table>
<thead>
<tr>
<th>Step</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water goes into the chlorination room.</td>
<td></td>
</tr>
<tr>
<td>Dirty water stored in reservoirs</td>
<td></td>
</tr>
<tr>
<td>Water from reservoirs flow to the filter bed.</td>
<td></td>
</tr>
<tr>
<td>Water is distributed to houses.</td>
<td></td>
</tr>
</tbody>
</table>

Question 3 (5 marks)

You are provided with the following:

1. A dry cell
2. A bulb
3. Electric wires
4. A switch

Using all of the above, draw and label a complete closed electric circuit in the space below.
Question 4 (6 marks)

a) Match column A which shows some environmental problems, to their corresponding solutions in column B.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of natural habitats of birds</td>
<td>Conserve coral reefs</td>
</tr>
<tr>
<td>Soil erosion</td>
<td>Reduce the number of cars on the road</td>
</tr>
<tr>
<td>Loss of fish in our lagoon</td>
<td>Conserve natural forests</td>
</tr>
<tr>
<td>Traffic jam</td>
<td>Reclaim eroded areas</td>
</tr>
</tbody>
</table>

b) Why is it important to conduct an Environmental Impact Assessment before starting a new project?

....................................................................................................................................................

....................................................................................................................................................
Question 5 (7 marks)

Study Diagram 2. Some children are playing on a beach and swimming in the sea.

Diagram 2: Children playing on the beach and swimming in the sea

a) Name two natural resources you can see in the picture.

........................................................................................................
........................................................................................................

b) Name one renewable resource you can see in the picture.

........................................................................................................

c) How can you obtain a man-made resource from a natural resource?

........................................................................................................
d) Fossil fuels are non-renewable resources used to produce energy. Why do we say they are non-renewable?

Question 6 (8 marks)

Study diagram 3 which shows some of the effects of a cyclone.

Diagram 3: Effects of a cyclone

a) Give two harmful effects caused by cyclones which you can see in the picture.

i) .................................................................................................................................

.................................................................................................................................

ii) .................................................................................................................................

.................................................................................................................................
b) Why is it not safe to touch the damaged electric wires shown in diagram 3?


c) With heavy rainfall during a cyclone, tap water often gets muddy and is unsafe for drinking.

   What can you do to make this water safe for drinking?


