

FOR EXAMINER'S USE ONLY	
QUESTION	MARK
1	
2	
3	
4	
5	
6	
TOTAL	

SCHOOL No.	CANDIDATE No.
INITIALS	SURNAME

# **MINISTRY OF EDUCATION BAHAMAS JUNIOR CERTIFICATE EXAMINATION**

## **0047 GENERAL SCIENCE PAPER 2 STRUCTURED QUESTIONS (60 Marks)**

Friday **29 May 2015** 2:15 P.M.–3:15 P.M.

### ***INSTRUCTIONS TO CANDIDATES***

**Do not open this booklet until you are told to do so.**

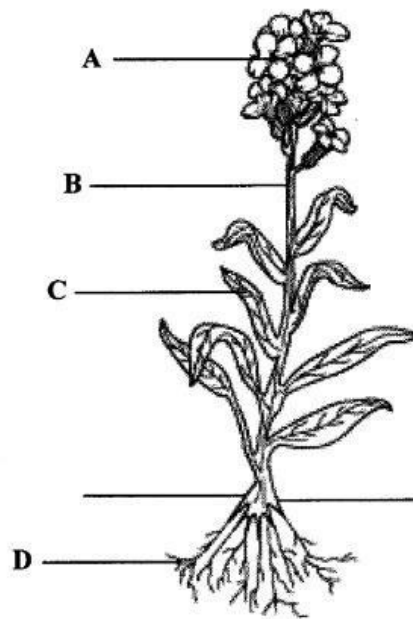
Write your school number, candidate number, surname and initials in the spaces provided at the top right hand side of this page.

Answer **ALL** questions in the spaces provided.



This question paper consists of **11** printed pages and **1** blank page.

1. The diagram shows the structures of a plant labelled A, B, C and D.



- (a) (i) Complete the table by filling in the blank spaces. [3]

letter	function
A	
	absorbs water with dissolved minerals
C	

- (ii) There are four basic groups in the plant kingdom. Classify this plant by naming the group to which it belongs. [1]

\_\_\_\_\_

- (iii) Identify and name **TWO** structures which could be used to classify this plant.

1. \_\_\_\_\_

2. \_\_\_\_\_ [2]

- (b) All living things are classified based on characteristics.

List and describe **TWO** characteristics of all living things.

**characteristic**

**description**

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 [2]

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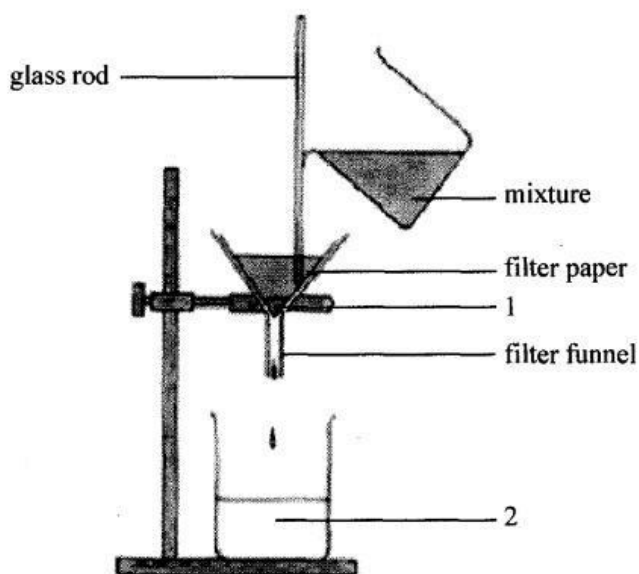
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 [2]

**Total marks [10]**

2. The diagram shows the apparatus set up for the separation of a mixture.



- (a) (i) Name the process shown in the diagram.

\_\_\_\_\_ [1]

- (ii) The mixture in the beaker **before** separation is soil and water.

Name the **TWO** parts of the mixture labelled 1 and 2, **after** separation. (DO NOT use soil or water)

1 \_\_\_\_\_

2 \_\_\_\_\_ [2]

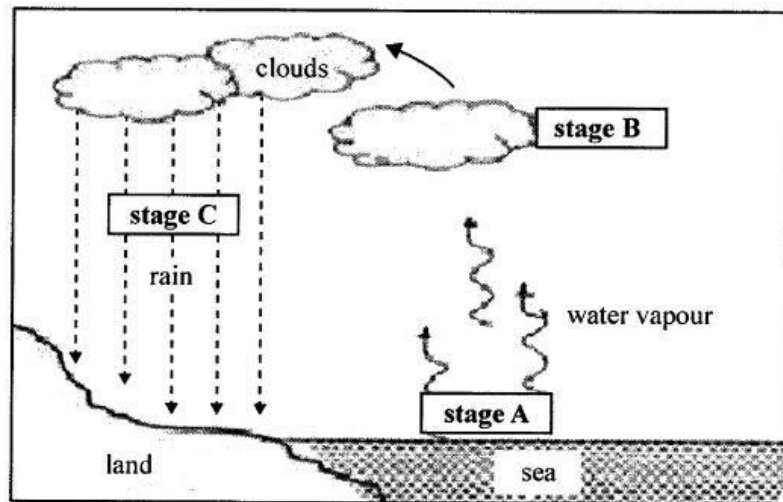
- (iii) Define a mixture.

\_\_\_\_\_ [1]

- (iv) State how the **water** can be made safe for drinking.

\_\_\_\_\_ [1]

- (b) The diagram shows the stages in the water cycle.



- (i) Name the processes taking place at stages A and B.

process A \_\_\_\_\_

process B \_\_\_\_\_ [2]

- (ii) Water released from the clouds in the form of rain, hail, snow or sleet is an important stage in the water cycle.

Name this process which takes place at stage C in the water cycle.

\_\_\_\_\_ [1]

- (c) (i) Name the form of energy needed for the process at stage A.

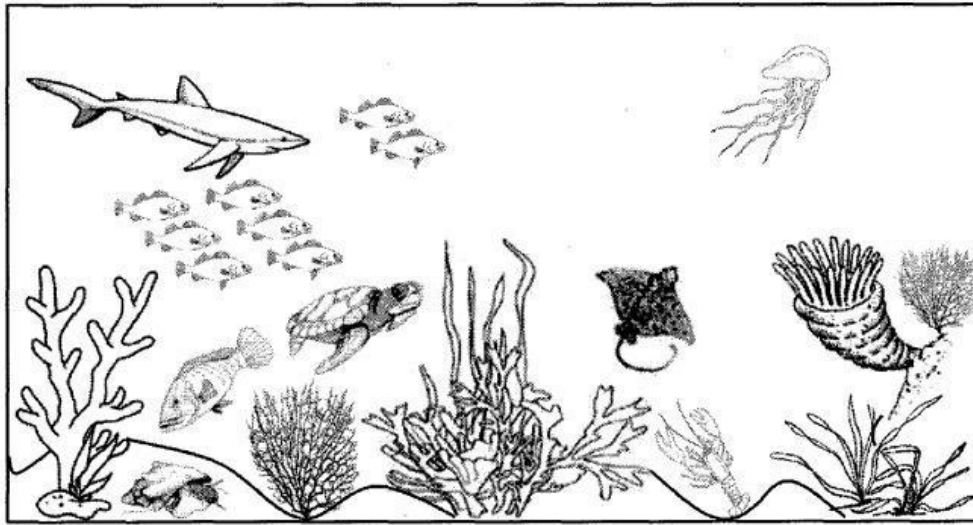
\_\_\_\_\_ [1]

- (ii) State the main source of this form of energy.

\_\_\_\_\_ [1]

**Total marks [10]**

3. The diagram shows some of the organisms found in a coral reef ecosystem.



- (a) (i) On the diagram, use an **X** to identify a coral. [1]
- (ii) Give the name of **TWO** vertebrates and **TWO** invertebrates shown in the diagram.

invertebrates	vertebrates

[4]

- (b) (i) Define the word **ecology**.

\_\_\_\_\_ [2]

- (ii) Explain briefly why ecology is a branch of biology.

\_\_\_\_\_ [2]

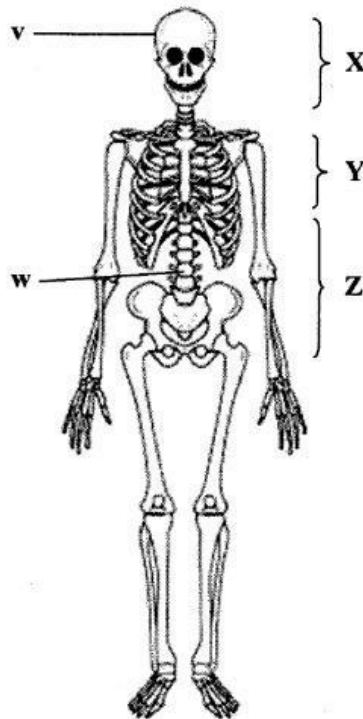
- (c) Give **ONE** way scuba divers can damage coral reefs.

\_\_\_\_\_ [1]

**Total marks [10]**



4. The diagram shows the framework of the human body and the location of three body cavities labelled X, Y and Z.

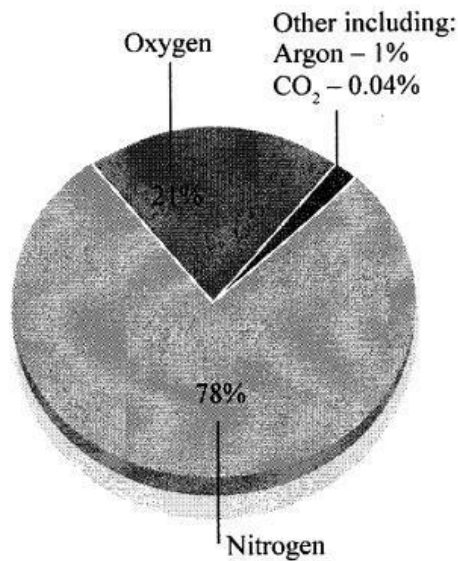


- (a) (i) Name this system and give **ONE** function of this system.  
 name \_\_\_\_\_  
 function \_\_\_\_\_ [2]
- (ii) Identify the specific structures labelled v and w.  
 v \_\_\_\_\_  
 w \_\_\_\_\_ [2]
- (iii) The diagram shows **THREE** major body cavities labelled X, Y and Z.  
 Name **ONE** organ found in each of the cavity labelled X, Y and Z.  
 X \_\_\_\_\_  
 Y \_\_\_\_\_  
 Z \_\_\_\_\_ [3]
- (b) (i) Give the name of **TWO** minerals which keep bones and teeth strong and healthy.  
 1. \_\_\_\_\_  
 2. \_\_\_\_\_ [2]
- (ii) State the number of bones in the human body.  
 \_\_\_\_\_ [1]

Total marks [10]

[Turn over]

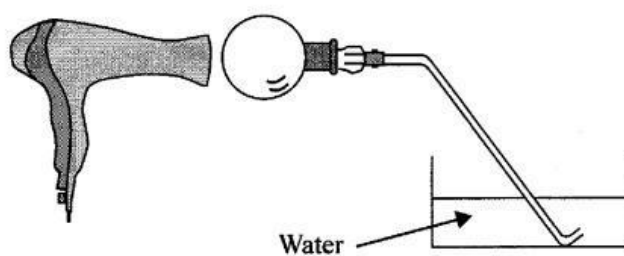
5. The chart shows the main composition of the Earth's air.



- (a) State the gas needed for the processes of photosynthesis and combustion.  
 \_\_\_\_\_ [1]
- (b) Name the gas which
- (i) makes drinks fizzy \_\_\_\_\_
- (ii) is converted into nitrates \_\_\_\_\_ [2]
- (c) (i) Name the gas which combines with food nutrients to produce energy.  
 \_\_\_\_\_ [1]
- (ii) Name the gas that is a compound and give a reason for your answer.  
 gas \_\_\_\_\_ reason \_\_\_\_\_  
 \_\_\_\_\_ [1]
- (d) The **condition** of the air surrounding the Earth may be hot or cold, wet or dry, calm or stormy, clear or cloudy.
- (i) Name the layer of air surrounding the earth.  
 \_\_\_\_\_ [1]
- (ii) What is the name given to the **condition** of the air surrounding the Earth?  
 \_\_\_\_\_ [1]



- (e) The diagram shows an experiment to investigate the effect of heat on gases.



- (i) Briefly describe what happens to the **movement** and **spacing** of the air molecules when the heat from the hair dryer heats up the air in the flask.

movement \_\_\_\_\_

spacing \_\_\_\_\_ [1]

- (ii) Briefly describe what will be observed in the water.

\_\_\_\_\_ [1]

- (iii) Write **ONE** sentence as a conclusion for this investigation.

\_\_\_\_\_ [1]

**Total marks [10]**

6. This question is about electricity.

- (a) (i) Define the term **current electricity**.

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[2]

Electricity is a convenient form of energy. Many appliances convert electricity into other useful forms of energy.

- (ii) State the main form of energy these appliances convert electrical energy into.

**electrical appliance**      **converts electrical energy into**



water kettle

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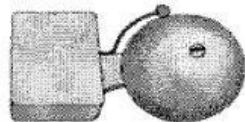
[1]



reading lamp

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[1]

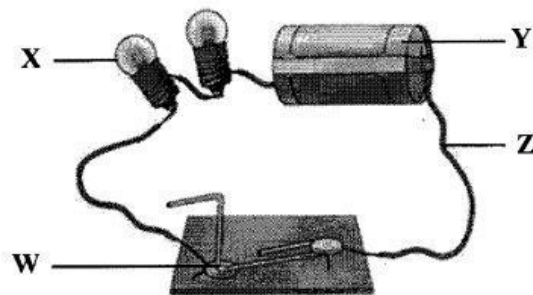


door bell

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[1]

- (b) The diagram shows a simple electric circuit drawn without using electrical symbols.



- (i) Give the **letter** and **name** of the part which conducts electricity around the circuit.

letter	name

[1]

- (ii) The part labelled **W** is a paper clip.

Give the function of **W** in an electrical circuit.

function \_\_\_\_\_ [1]

- (iii) Complete the table by drawing the electrical symbols for the components labelled **W**, **X** and **Y**.

letter	symbol
<b>W</b>	
<b>X</b>	
<b>Y</b>	

[3]

**Total marks [10]**