

FOR EXAMINER'S USE ONLY	
QUESTION	MARK
1	
2	
3	
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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.

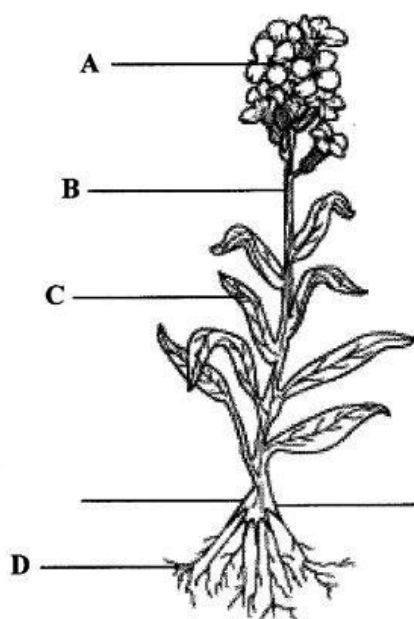
Write your school number, candidate number, surname and initials in the spaces provided at the top right hand side of this page.

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

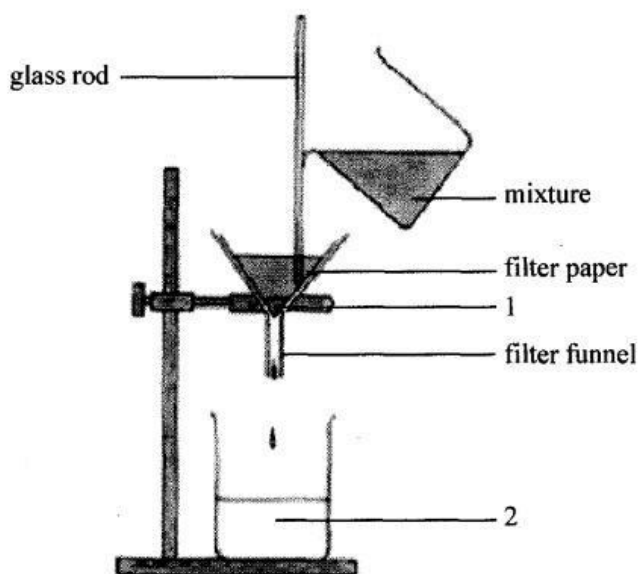
description

 [2]

 [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]

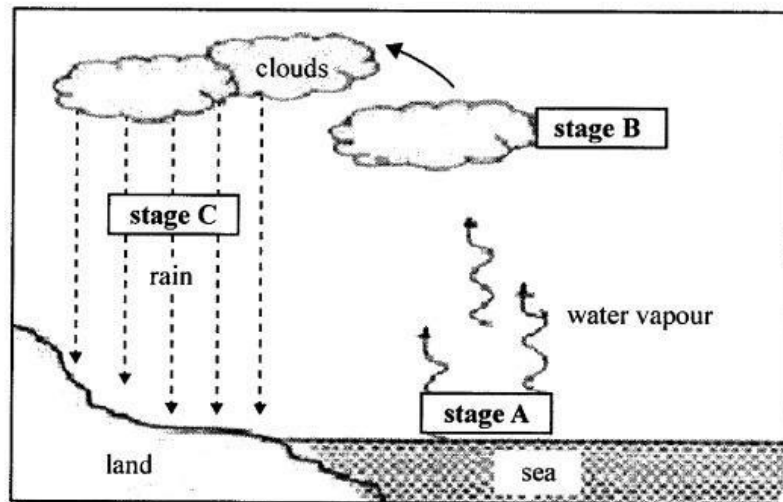
- (iii) Define a mixture.

_____ [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.

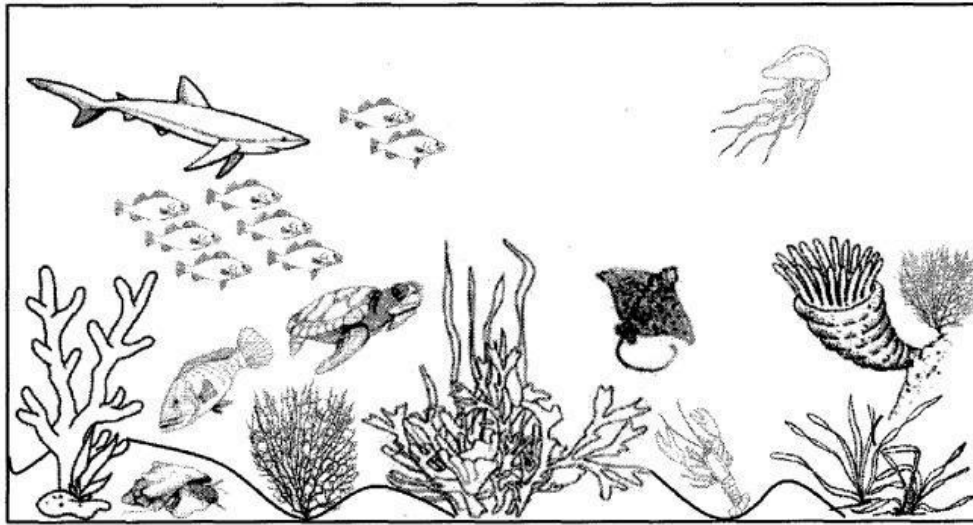
_____ [1]

- (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.

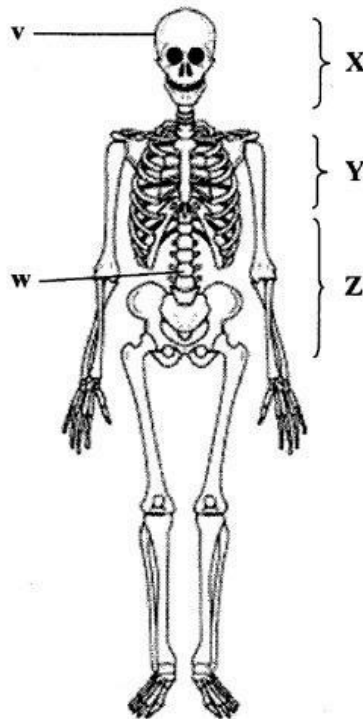
_____ [2]

- (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.

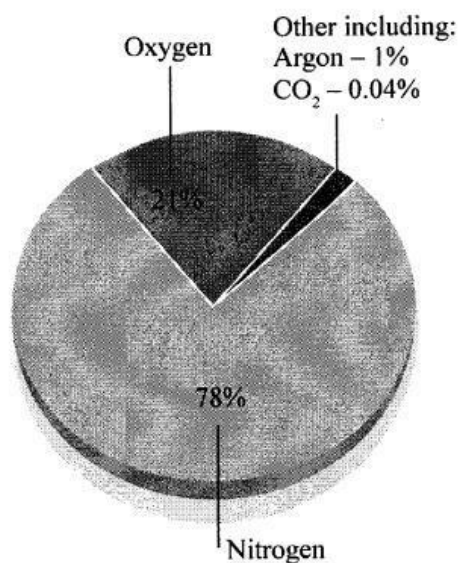


- (a) (i) Name this system and give **ONE** function of this system.
 name _____
 function _____ [2]
- (ii) Identify the specific structures labelled v and w.
 v _____
 w _____ [2]
- (iii) The diagram shows **THREE** major body cavities labelled X, Y and Z.
 Name **ONE** organ found in each of the cavity 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]

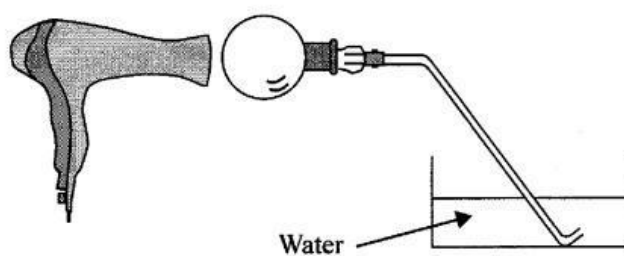
[Turn over]

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**.

[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**



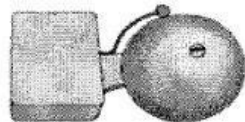
water kettle

[1]



reading lamp

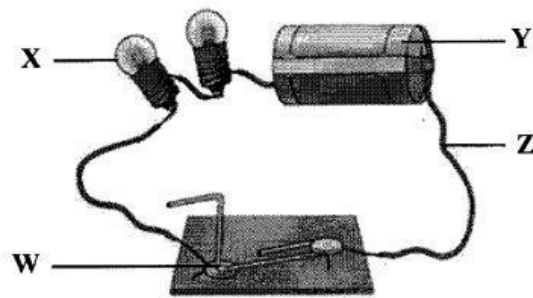
[1]



door bell

[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
W	
X	
Y	

[3]

Total marks [10]