0047/2 BJC

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 **31 May 2019** 2:15 P.M.–3:15 P.M.

INSTRUCTIONS TO CANDIDATES

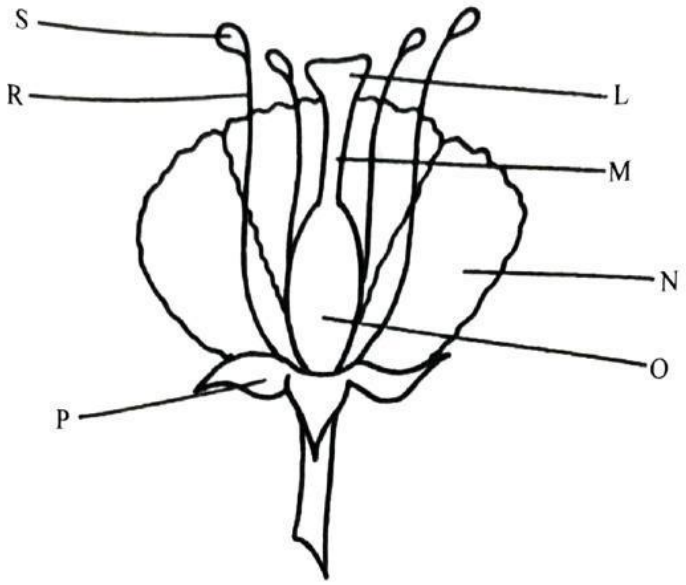
Do not open this booklet until you are told to do so.

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 **8** printed pages and **4** blank pages.

1. The diagram shows the structure of a flower.



(a) State the main function of a flower.

_____ [1]

(b) Give the names of the following structures.

L _____

N _____

R _____

S _____ [4]

(c) Write the letters of the parts which make up

(i) the female part of the flower: _____

(ii) the male part of the flower: _____ [2]

(d) Give the name of **part P** and state its function.

Name _____

Function _____ [2]

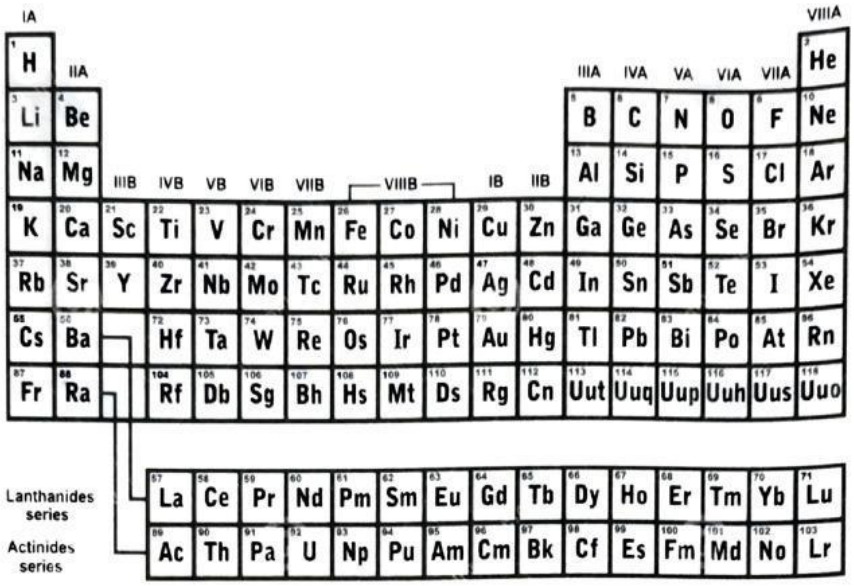
(e) Explain what takes place in flower when fertilisation occurs.

_____

_____ [1]

TOTAL MARKS [10]

2. The diagram shows the table of elements. There are over 120 different kinds of elements.



(a) What is the name of the table shown above?

_____ [1]

(b) What name is given to the rows shown in the table?

_____ [1]

(c) On the diagram above, shade in the column for noble gases. [1]

(d) Noble gases are said to be **inert**. What does this mean?

_____ [1]

(e) Name the elements of the symbols listed in the table below.

Element Symbol	Element Name
Mg	
F	

[2]

(f) (i) How many atoms are in one molecule of glucose ($C_6H_{12}O_6$)?

number of atoms in one molecule of glucose: _____ [1]

(ii) Identify the **THREE** elements that make up a glucose molecule.

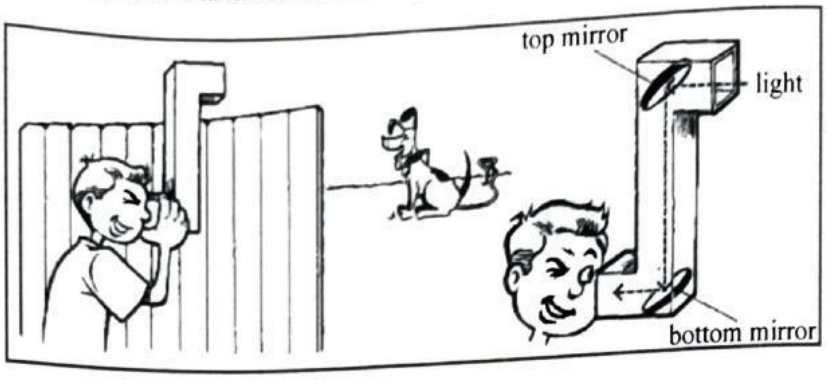
_____

_____

_____ [3]

TOTAL MARKS [10]

3. Samuel builds a periscope out of empty milk cartons and mirrors. Using his periscope, he is able to see objects on the other side of a fence that is taller than he is. Study the picture and answer the questions.



(a) (i) Which form of energy must be present for objects to be seen?

_____ [1]

(ii) What happens to this form of energy as it strikes the mirror?

_____ [1]

(iii) If this form of energy passed through different mediums, what would happen?

_____ [1]

(iv) Explain how it is possible for Samuel to see the dog on the other side of the tall fence.

_____

_____ [2]

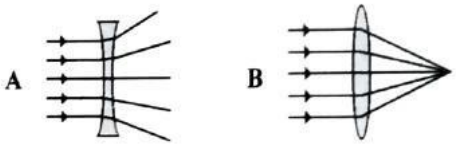
(b) Name the **THREE** types of mirrors.

(i) _____

(ii) _____

(iii) _____ [3]

(c) The diagram shows two types of lenses. Name **ONE** instrument in which you can find lens **A** and lens **B**.



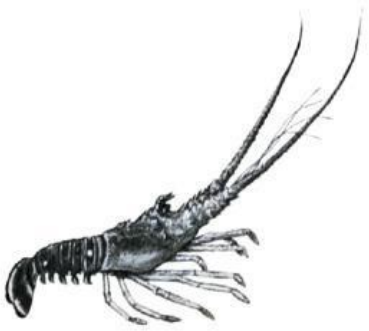
(i) Lens **A** _____ (ii) Lens **B** _____ [2]

TOTAL MARKS [10]

4. The pictures show some animal and plant species found in The Bahamas. Some of these species are invasive.

Casuarina Tree

West Indian Flamingo



Spiny Lobster

Lion fish

Sea-grape Tree

Green Sea Turtle

(a) Identify **ONE producer** organism from the picture.

_____ [1]

(b) Name **ONE marine** organism. _____ [1]

(c) Name **ONE** organism from the diagram that best fits each description.

(i) Reptile _____

(ii) Gymnosperm (evergreen) _____

(iii) Crustacean _____

(iv) Warm-blooded _____

(v) Dicotyledon _____ [5]

(d) What does the term **invasive** mean?

_____

_____ [1]

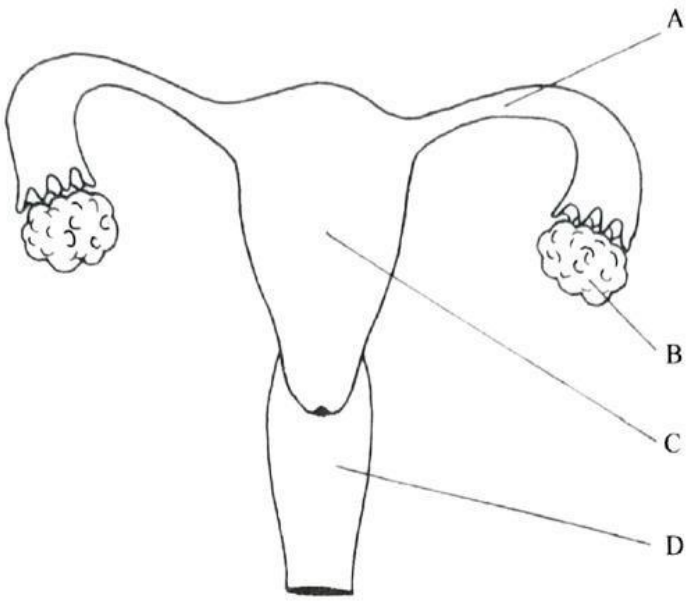
(e) Which **TWO** organisms shown are **invasive** to The Bahamas?

(i) _____

(ii) _____ [2]

TOTAL MARKS [10]

5. The drawing shows some of the main organs of the female reproductive system. Study the drawing then answer the questions.



(a) (i) Identify **Part B** in the diagram. _____ [1]

(ii) Name the cells produced in **Part B**. _____ [1]

(iii) In a normal, healthy woman, how often does **Part B** release a mature egg cell?

_____ [1]

(b) (i) Name the part where fertilisation takes place?

_____ [1]

(ii) What is a fertilised egg called?

_____ [1]

(iii) If a woman becomes pregnant, name the structure where the unborn child normally develops.

_____ [1]

(c) During delivery the baby passes first through the "neck" of the womb and then through the "birth canal".

Give the correct names for

(i) the neck of the womb _____

(ii) the birth canal _____ [2]

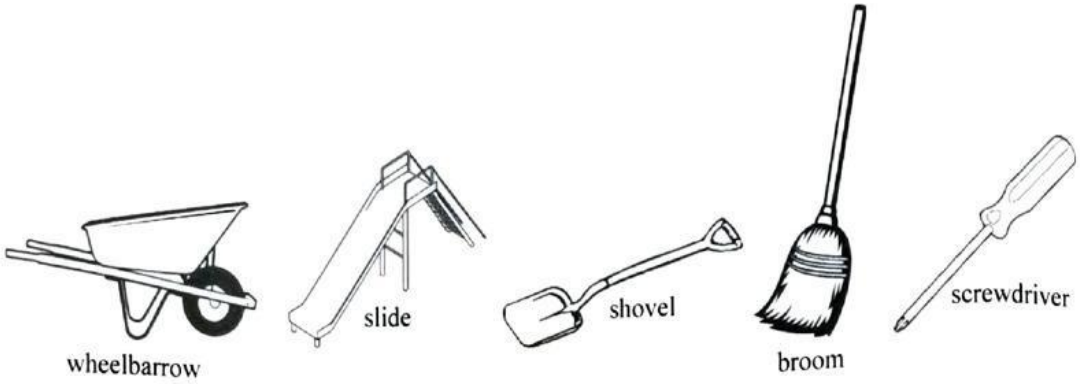
(d) Explain what happens during "**implantation**".

_____

_____ [2]

TOTAL MARKS [10]

6. The pictures show examples of different types of simple machinery. Use the pictures to answer the questions.



(a) What type of simple machine are the following?

(i) Slide _____

(ii) Shovel _____

(iii) Broom _____

(iv) Screwdriver _____ [4]

(b) The doorknob and rod make up which type of simple machine?

_____ [1]

(c) (i) What class of lever is the wheelbarrow?

_____ [1]

(ii) On the wheelbarrow, place the letter **X** on the fulcrum. [1]

(iii) Name the **TWO** other parts of the lever.

(i) _____ (ii) _____ [2]

(d) Explain why the inside of a bathtub is designed like an inclined plane.

_____ [1]

TOTAL MARKS [10]