0055/2

BJC

| FOR EXAMINERS' USE ONLY | |
|---|---|
| QUESTION | MARK |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| TOTAL | |

| SCHOOL No. | CANDIDATE No. |
|---|---|
| | |
| INITIALS | SURNAME |
| | |

# MINISTRY OF EDUCATION
# BAHAMAS JUNIOR CERTIFICATE EXAMINATION 2019

## 0055 HEALTH SCIENCE

**PAPER II**
**(60 Marks)**

Tuesday **4 June 2019** 2:15 P.M.–3:15 P.M.

***INSTRUCTIONS TO CANDIDATES:***

1. Write your school number, candidate number, surname and initials in the boxes at the top right hand corner of this page.
2. Answer **ALL** questions in the spaces provided.
3. The number of marks available is shown in brackets [ ] at the end of each question part and at the end of the entire question.

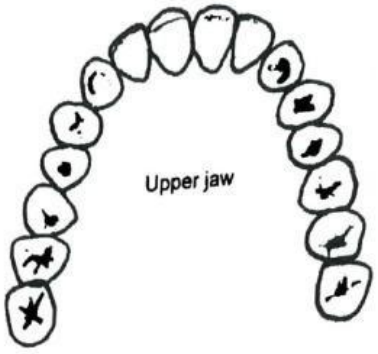


This question paper consists of **8** printed pages.



LIVEWORKSHEETS

1. The diagram shows the arrangement of the permanent teeth in the upper jaw.




(a) Give **ONE** important function of the teeth.

_____ [1]

(b) The table below shows information about the human milk teeth (first set of teeth).

Complete the table by filling in the blank spaces.

| type of tooth | number in upper and lower jaw | function |
|---|---|---|
| incisor | | used for biting |
| | 4 | |
| premolars | | used for crushing and grinding the food |

[4]

(c) State **ONE** reason why the set of teeth shown in the diagram must be permanent teeth rather than milk teeth.

_____

_____ [1]

(d) Name the mineral added to drinking water which helps to prevent tooth decay?

_____ [1]

(e) Complete the paragraph by writing in the missing terms to describe the process of tooth decay.

Choose your answers from these words:

**acids** **dentine** **calcium** **nerves** **sugar**

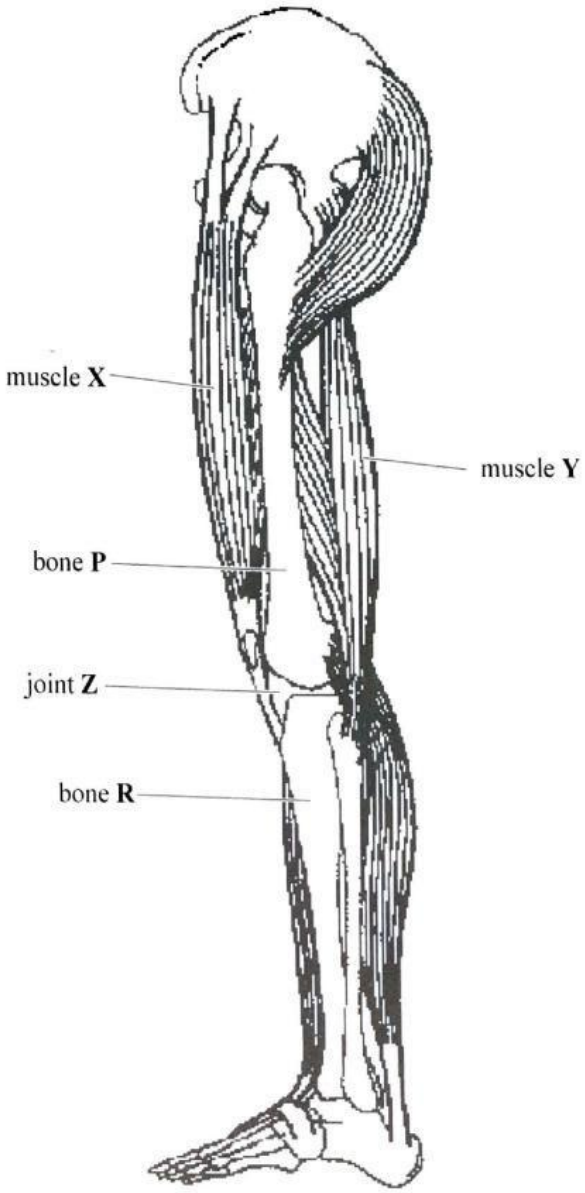
Bacteria feed on _____ left in the mouth producing _____ which break down the tooth structure exposing the _____ causing pain. [3]

**TOTAL MARKS [10]**



LIVEWORKSHEETS

2. The diagram below shows some of the bones and muscles in the human leg.




(a) Write the names of the bones labelled **P** and **R**.

**P** _____

**R** _____ [2]

(b) When the leg bends backwards, what action is carried out by muscles **X** and **Y**?

Muscle **X** _____

Muscle **Y** _____ [2]

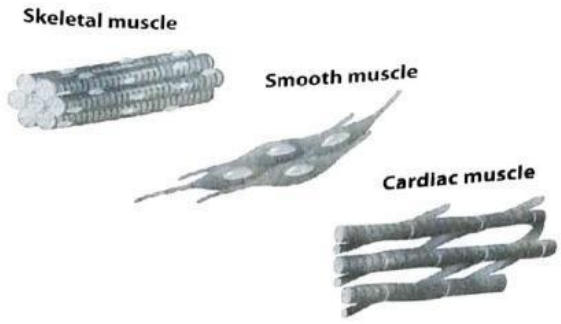
(c) Name the type of moveable joint shown at **Z**.

_____ [1]



LIVEWORKSHEETS

The diagram shows the three types of muscle tissues found in the human body.




(d) Which type of muscle, shown in the diagram, is found in the following structures?

(i) leg _____

(ii) digestive system _____

(iii) heart _____ [3]

(e) Muscles can be either voluntary or involuntary.

What is the difference between voluntary and involuntary muscles?

_____

_____ [1]

(f) Accidents in sports are some of the leading causes of skeletal injuries. One example of such injuries is a facture.

What is a facture?

_____

_____ [1]

**TOTAL MARKS [10]**



LIVEWORKSHEETS

3. **Diagram 1** shows the digestive system and **diagram 2** shows a structure found within one of the organs in this system.

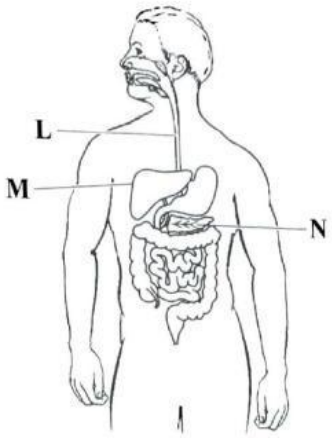



**Diagram 1**

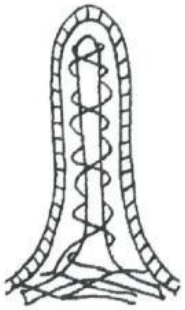


**Diagram 2**

(a) Using **diagram 1**, name the structures labelled **L**, **M** and **N**.

**L** _____

**M** _____

**N** _____ [3]

(b) From **diagram 1**, which letter points to a structure where peristalsis takes place.

_____ [1]

(c) (i) Name the structure shown in **diagram 2**.

_____ [1]

(ii) Where in the digestive system would you find the structure named in (c)(i)?

_____ [1]

(iii) Name the process which occurs in the structure in **diagram 2**.

_____ [1]

(d) The process of digestion involves both mechanical and chemical digestion.

What is mechanical digestion?

_____

_____ [1]

(e) What are the following nutrients broken down into after digestion is completed?

(i) Protein _____

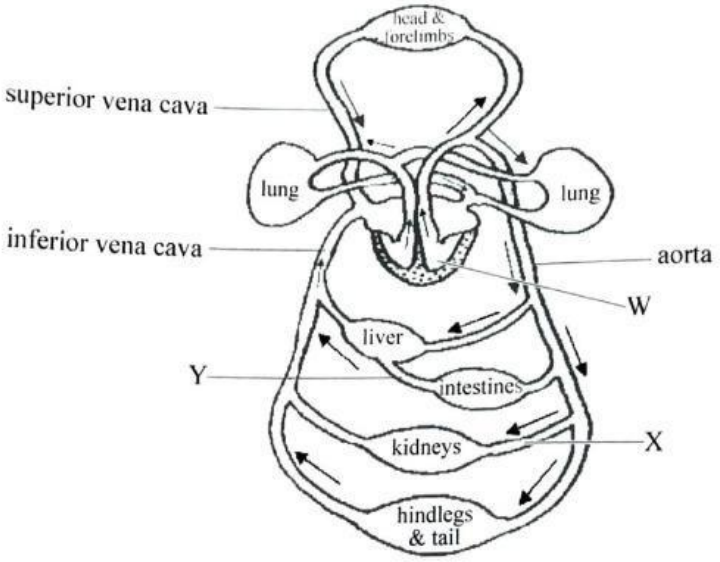
(ii) Carbohydrates _____ [2]

**TOTAL MARKS [10]**



LIVEWORKSHEETS

4. The diagram represents the circulatory system.




(a) Name the blood vessels labelled **X** and **Y** and say what type of blood is found in each blood vessel.

| structure | name of blood vessel | type of blood present |
|---|---|---|
| **X** | | |
| **Y** | | |

[4]

(b) Organ **W** is a major component of the circulatory system.

Name this organ and state its main function in the circulatory system.

Name of organ _____

Main function _____ [2]

(c) Describe **TWO structural** differences between the **aorta** and **vena cava**.

(i) _____

_____

(ii) _____

_____ [2]

(d) Blood is a fluid which circulates throughout the body with many substances dissolved in it.

(i) Name the main substance which diffuses out of the lungs into the blood and is transported around the body.

_____ [1]

(ii) Name the process taking place in the body which uses the substance named in (d)(i).

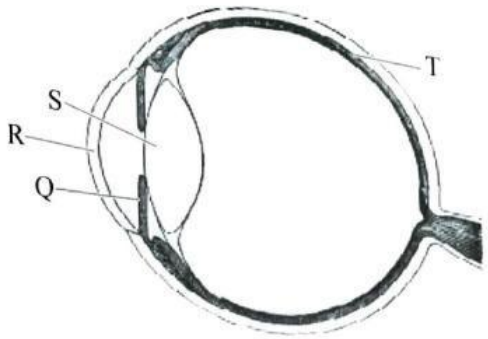
_____ [1]

**TOTAL MARKS [10]**



LIVEWORKSHEETS

5. The diagram represents a section through the human eye.




(a) Name the parts labelled **Q**, **R** and **S**.

**Q** _____

**R** _____

**S** _____ [3]

(b) The structure labelled **T** on the diagram contains two types of light sensitive cells.

Give the name of structure **T** and name **ONE** type of light sensitive cell it contains.

Structure **T** _____

Name of light sensitive cell _____ [2]

(c) On the diagram, draw a line to the part of the eye which connects it to the brain and name it.

_____ [1]

(d) Identify the stimulus which the eyes detect?

_____ [1]

(e) Lenses are used to correct eye defects.

Name the type of lens shown below and identify the eye defect it is used to correct.



Lens _____

Eye Defect _____ [2]

(f) Conjunctivitis is a contagious disease which affects which labelled eye structure.

_____ [1]

**TOTAL MARKS [10]**

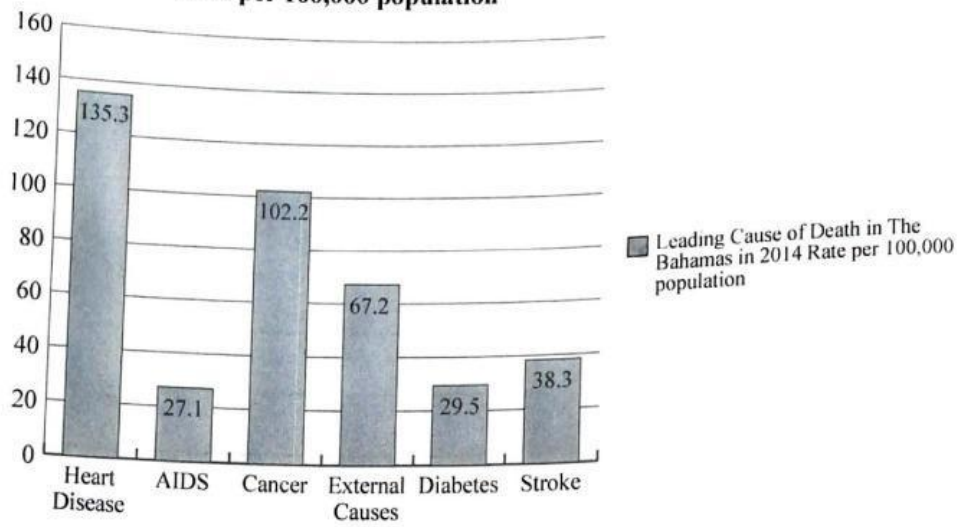


LIVEWORKSHEETS

6. The graph shows six diseases which accounts for the leading cause of death in The Bahamas in 2014.

Use the graph to help you answer the questions which follow.

**Leading Cause of Death in The Bahamas in 2014**
**Rate per 100,000 population**




External causes include accidents, violence and poisonings

(a) (i) Name the disease which accounts for the leading cause of death.

_____ [1]

(ii) In 2014, how many more persons died from cancer than stroke?

_____ [1]

(b) From the graph, identify the disease which is most likely to be caused from each of the following:

(i) excess sugar in the blood _____

(ii) fatty deposits on the walls of the arteries _____

(iii) having sex with an infected partner _____

(iv) a lack of a continuous supply of oxygen to the brain _____ [4]

(c) AIDS is described as a sexually transmitted disease.

(i) What do the letters 'AIDS' stand for?

_____ [1]

(ii) Name the organism which causes this disease.

_____ [1]

(d) Suggest **TWO** ways Bahamians can develop a healthy lifestyle.

1 _____

2 _____ [2]

**TOTAL MARKS [10]**



**End]**

LIVEWORKSHEETS