



**DELHI PUBLIC SCHOOL NEWTOWN**  
**SESSION 2024-25**  
**MONDAY TEST**

**CLASS: IX**  
**SUBJECT: BIOLOGY**

**FULL MARKS: 40**  
**DATE: 30/9/24**

**General Instructions:**

- The paper consists of three printed pages.
- Answers should be to the point.
- Copy the question number carefully before answering the questions.
- Marks will be deducted for spelling errors.

**1. Choose the correct answer:**

**[5]**

**(i) Assertion (A): Ball and Socket joint is present in the knee region.**

**Reason (R): Bones in the knee can move in only one direction.**

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| <b>(a) Both A and R are false</b> | <b>(b) A is true and R is false</b> |
| <b>(c) Both A and R are true</b>  | <b>(d) A is false and R is true</b> |

**(ii) The type of connective tissue which joins bones to muscle.**

- |                           |                            |
|---------------------------|----------------------------|
| <b>(a) Tendon</b>         | <b>(b) Ligament</b>        |
| <b>(c) Areolar tissue</b> | <b>(d) Adipose tissue.</b> |

**(iii) Rahul and his friends read in their biology book that bile is very important for emulsification of fat. They identified that bile contains two pigments. Identify who said the correct answer.**

- |   |   |
|---|---|
| <b>1. Rahul- Bilirubin and Urochrome</b>  | <b>2. Ramaya- Biliverdin and Bilirubin</b>  |
| <b>3. Shyam- Biliverdin and Urochrome</b> | <b>4. Rehan- Enterokinase and Urochrome</b> |

- |                             |                              |
|-----------------------------|------------------------------|
| <b>(a) Rahul is correct</b> | <b>(b) Ramaya is correct</b> |
| <b>(c) Shyam is correct</b> | <b>(d) Rehan is correct</b>  |

**(iv) Dhiti was trying to identify the type of respiration (P) in which 2ATP is produced and also the type of process to which respiration belongs (Q).**

- 1. P is Aerobic Respiration and Q is Catabolic process**
- 2. P is Anaerobic Respiration and Q is Anabolic process**
- 3. P is Anaerobic Respiration and Q is Catabolic process**
- 4. P is Aerobic Respiration and Q is Anabolic process**

- |                   |                   |
|-------------------|-------------------|
| <b>(a) Only 3</b> | <b>(b) Only 1</b> |
| <b>(c) Only 2</b> | <b>(d) Only 4</b> |

(v) **Assertion (A):** Ploughing of the soil creates tiny air spaces for the roots to take in air.

**Reason (R):** In plants gaseous exchange takes place through stomata, lenticels and surface of roots.

- (a) Both A and R are false                      (b) A is true and R is false  
(c) Both A and R are true                      (d) A is false and R is true

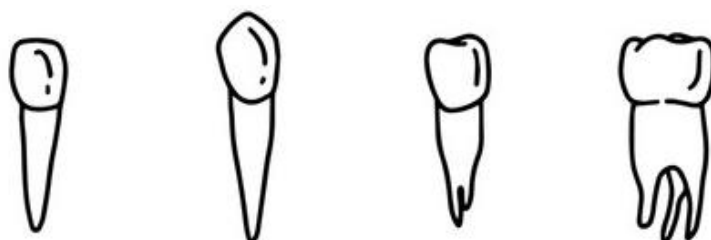
2. Name the following:

[5]

- (a) First vertebra in the cervical region.  
(b) Muscle which is attached to bones in our limbs.  
(c) Another name of aerobic respiration.  
(d) Enzyme which converts protein into peptides in stomach.  
(e) Last set of molar tooth which is present in each jaw.

3. Fill in the blanks:

[5]



The four front teeth are known as (a) and are in the centre of each jaw. Conical and sharply pointed teeth which helps in tearing the food is known as (b). Each (c) has two hill-like projections or cusps on its surface and hence known as (d). The principal grinders and crushers of food are known as (e).

4. Given below is the cross section of pelvic region of human body. Match the labellings marked (a) to (e) with their correct structures:

[5]

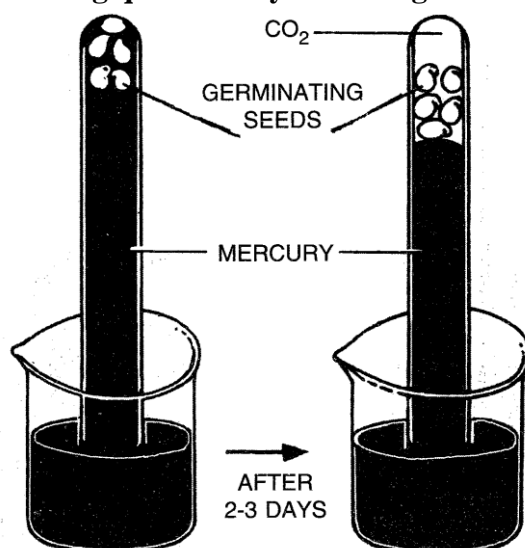
Pelvic region of human body	Structures
	<ol style="list-style-type: none"> <li>1. Spinal cord passes through it.</li> <li>2. Largest bone of the body.</li> <li>3. Also known as centrum.</li> <li>4. Five bones fuses to form one bone.</li> <li>5. Four bones fuses to form one bone.</li> <li>6. Ball and socket joint.</li> </ol>

**5. Answer the following questions:**

- (i) Define Respiration. [1]
- (ii) Differentiate between Pivot joint and gliding joint on the basis of location. [2]
- (iii) "Females have wider pelvis or hip bone". Explain with reasons. Name the bone which is present in the upper arm of our body. [2]
- (iv) State the technical terminology of knee cap and collar bone. [2]
- (v) Draw a neat and well labelled diagram of a long bone. [3]

**6. Answer the following questions:**

- (i) Define Assimilation. [1]
- (ii) Mention the functions of the following: [2]
  - (a) Foramen magnum
  - (b) Yellow marrow
- (iii) Write the equations to show the digestion of starch in mouth and digestion of sucrose in intestine. [2]
- (iv) Vertebral column in human beings is curved. Explain with reasons. [2]
- (v) Answer the following questions by observing the diagram given below: [3]



- (a) Mention the aim of the experiment.
- (b) The seed coat of the seeds are peeled off before the seeds are introduced into test tube. Explain with reasons.
- (c) How will we prove that the gas released in this experiment is carbon dioxide?