



**DELHI PUBLIC SCHOOL NEWTOWN**  
**SESSION 2025-26**  
**MONDAY TEST**

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

**FULL MARKS: 40**  
**DATE: 05/05/25**

**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): Connective tissues have abundance of intercellular substance known as matrix.

Reason (R): These tissues bind one tissue with another and also connects various organs.

- |                            |                              |
|----------------------------|------------------------------|
| (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 |

- (ii) Reema was observing different types of tissues under the microscope. She saw few specialized cells which we find under the skin and around the kidney and they help to store fat. Identify the tissue.

- |                    |                         |
|--------------------|-------------------------|
| (a) Nerve          | (b) Areolar tissue      |
| (c) Adipose tissue | (d) Cuboidal Epithelium |

- (iii) Rahul was observing a slide with cells in dividing stage. He observed “P” in the nucleus which is said to carry hereditary information from parents to offsprings as it is composed of hereditary units “Q”. Identify “P” and “Q”.

- |  |
|--|
| (a) P is Chromosome and Q is Chromatin |
| (b) P is Genes and Q is Chromosome     |
| (c) P is Chromatin and Q is Ribosome   |
| (d) P is Chromosome and Q is Genes     |

- (iv) Dhiti went to the biology laboratory for the first time and her biology teacher was explaining different parts of the microscope to the class. After sometime she asked a question to her students regarding the name of the scientist who had constructed the first microscope. Identify the correct name of the scientist from the below given options:

- |                                  |                         |
|----------------------------------|-------------------------|
| 1. Dhiti- Antony Van Leeuwenhoek | 2. Riddhi- Robert Hooke |
| 3. Rajiv- Carl Linnaeus          | 4. Mathias Schleiden    |

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

(v) Assertion (A): Ropes and mats are made up of fibres like hemp and linen.

Reason (R): These fibres are sclerenchyma cells.

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

- (b) A is true and R is false  
(d) A is false and R is true

2. Name the following:

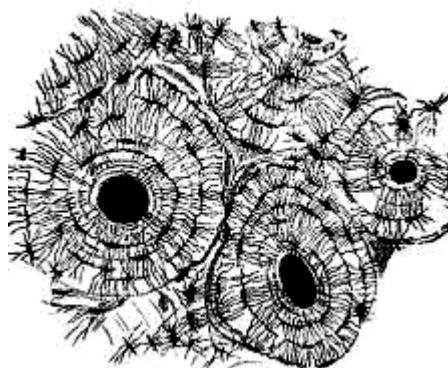
[5]

- (i) Organelle made up of tubules and vesicles.  
(ii) Single walled organelle which are spherical bodies composed mainly of RNA.  
(iii) Membranous sacs budded off from Golgi Bodies.  
(iv) Regulates the entry of certain solutes and ions.  
(v) Tissue which are dead and have thick cell wall due to deposition of lignin.

3. Read the sentences given below and fill in the blanks:

[5]

Bone is a supportive connective tissue which helps to form the skeleton of our body.



Bone is a hard and porous tissue. (a) canals are found in the bone matrix of long bone of mammals. It has a good supply of blood vessels and (b). It consists of both living cells called (c) and a rigid mass of (d). (e) is a semitransparent and elastic supportive connective tissue.

4. Given below is the diagram of a dividing cell. Match the labellings marked (a) to (e) with their correct structures:

[5]

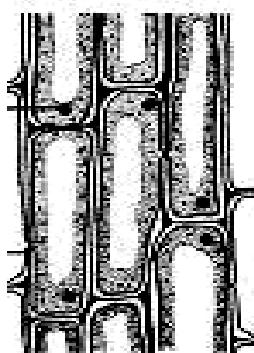
Dividing Animal Cell	Functions
A detailed black and white line drawing of a cell in mitosis. The cell is roughly circular with a prominent nucleus containing a dark, twisted mass. Several arrows point from five boxes labeled (a) through (e) to specific features: (a) points to a dark, thickened region of chromatin; (b) points to a small, dense cluster of organelles; (c) points to a portion of the nuclear envelope with cristae-like folds; (d) points to a thin, delicate membrane surrounding the cell; (e) points to a small, irregularly shaped organelle.	<p>1. They are made up of chromatin fibre and become thick during cell division. 2. Contains organelles in the cell. 3. Made of cristae. 4. Delicate membrane which is filled with relatively dense nucleoplasm. 5. Made up of lipoprotein. 6. Initiates cell division.</p>

**5. Answer the following questions:**

- (i) Name the muscle which is found in the walls of the intestine and helps in passage of food. [1]
- (ii) Saptarshi read in an article that Lymph is a very important fluid connective tissue present in our body. So, he asked his Biology teacher regarding this and she told him two important functions for which Lymph is very important in our body. Mention two important functions of Lymph which you think his teacher might have told him. [2]
- (iii) Riddhita went for a quiz competition where she was shown a slide in which there was a picture showing the pith region of the stem. The quiz master asked her to identify the tissue and mention the main important features of that cell. She took the help of her friend to answer the questions. What do you think would be her friend's answer to the questions asked? [2]
- (iv) Seema is a famous athlete of her school. Her teacher told her friends that she has strong muscles in her limbs. Identify the muscle and mention the characteristic features of the muscle. [2]
- (v) Draw a neat and well labelled diagram of L.S. of phloem. [3]

**6. Answer the following questions:**

- (i) Define Cell. [1]
- (ii) "Organelles are known as little organs". There are few organelles which we find only in plant cell. Below given are two organelles of a plant cell, mention the functions of the following organelles: [2]
- (a) Chromoplast  
(b) Chloroplast
- (iii) Ravi told his mother that "nucleus of the cell is the most important part of the cell." Give reasons to explain the above statement said by Ravi. [2]
- (iv) Schleiden, Rudolf Virchow and Schwann had proposed Cell Theory. Explain the major points of cell theory. [2]
- (v) Answer the following questions by observing the diagram given below: [3]



- (a) Identify the tissue.  
(b) Mention the characteristic features of the above tissue.  
(c) Mention one important function of the tissue.