



DELHI PUBLIC SCHOOL NEWTOWN
SESSION 2024-25
MONDAY TEST

CLASS: IX
SUBJECT: BIOLOGY

FULL MARKS: 40
DATE: 29.4.24

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]

- a. Assertion (A): Vacuoles are clear spaces with water and other substances in solution.

Reason (R): They help in storing water and other substances and provide turgidity to the cell.

- | | |
|----------------------------|------------------------------|
| i. Both A and R are false | ii. A is true and R is false |
| iii. Both A and R are true | iv. A is false and R is true |

- b. The type of connective tissue which joins bones to muscle:

i. Tendon, ii. Ligament, iii. Areolar tissue, iv. Adipose tissue.

- c. Elongated thick walled cells whose cell walls are thickened with lignin:

i. Collenchyma, ii. Parenchyma, iii. Sclerenchyma, iv. Epithelial tissue.

- d. Rehan was studying about human sperm structure and he came to know that an organelle in the cell helps in the formation of acrosome in the sperm.

Identify the organelle which helps in the formation of acrosome in sperm from the given below list.

- | | |
|----------------------|------------------|
| i. Plastid | ii. Ribosome |
| iii. Golgi Apparatus | iv. Mitochondria |

- e. Assertion (A): Bacteria is an example of a Prokaryotic cell.

Reason (R): Nucleus present in bacteria has a nuclear membrane protecting the nuclear material present in the cell.

- | | |
|----------------------------|------------------------------|
| i. Both A and R are false | ii. A is true and R is false |
| iii. Both A and R are true | iv. A is false and R is true |

2. Choose the odd one out and write the correct category to which the others belong: [5]

- a. Cell Sap, Mitochondria, Lysosome, Ribosome.
b. Vesicle, Cisternae, Golgi bodies, Nucleus.

- c. Meristematic tissue, Parenchyma Tissue, Collenchyma Tissue, Sclerenchyma tissue.
- d. Haemoglobin, Chlorophyll, Carotene, Xanthophyll.
- e. Axon, Blood, Red Blood Cell, Platelets.

3. Fill in the blanks: [5]

_____a_____ are present in the wall of heart and are _____b_____ in function.
The fibres of this muscle are _____c_____, uninucleated and branched. They can _____d_____ without outside stimulation and do not get _____e_____ easily.

4. Match the correct answers of Column I with Column II. Please rewrite the correct pairs: [5]

Column I	Column II
a. Vascular tissue	No blood vessel
b. Parenchyma	Suicidal bag
c. Cartilage	Uninucleate
d. Smooth Muscle	Xylem and Phloem
e. Ribosome	Multinucleate
	Store food
	Protein synthesis

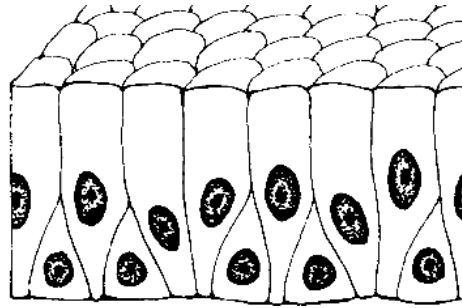
5. Answer the following questions:

- a. Define Tissue. [1]
- b. Differentiate between Collenchyma and Sclerenchyma on the basis of their structural features. [2]
- c. "Meristematic tissue has a large nucleus". Explain with reasons. [2]
- d. Differentiate between cristae and cisternae. [2]
- e. Draw a neat and well labelled diagram of an animal cell. [3]

6. Answer the following questions:

- a. Define Lymph. [1]
- b. Mention the function of the following organelles: [2]
 - i. Chromoplast
 - ii. Endoplasmic reticulum
- c. Name the parenchyma cells which contain chlorophyll. Which type of cells are found in the pulp of pear? [2]
- d. State the chemical nature of cell membrane and cell wall. [2]

- e. Answer the following questions by observing the diagram given bellow: [3]



- i. Identify the tissue.
- ii. Mention one important location of this tissue.
- iii. Mention one important function of this tissue.