

ONLINE ASSESSMENT

BIOLOGY

CLASS 9

Chapter: CELL

1. NAME THE FOLLOWING:

[6×1=6]

- A. Brain of the cell.**
- B. Power house of the cell.**
- C. Suicidal bag of the cell.**
- D. Organelle which gives structural framework to the cell.**
- E. The site of protein synthesis.**
- F. Pigment found in cell sap.**

2. Draw a neat labeled diagram of a plant cell.

[4]

3. FILL IN THE BLANKS:

[6×1=6]

- A. _____ is the membrane covering a vacuole.**
- B. _____ is surrounded by microtubules, located near the nucleus.**
- C. Very thin, flexible, living membrane which is differentially permeable is called _____.**
- D. _____ are hereditary units.**
- E. _____ are plastids which store starch.**
- F. _____ is the plastid found in the petals of sunflower.**

4. Draw a neat labeled diagram of an animal cell.

[4]

Chapter: TISSUES: PLANT AND ANIMAL TISSUES

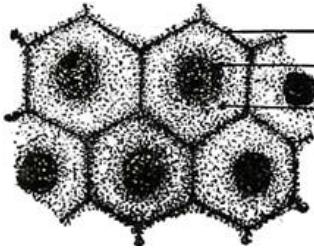
1. Name the kind of plant tissue in which:

[1×6=6]

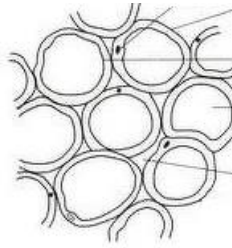
- a) Cells have large vacuole and can store starch.**
- b) Cells have a large nucleus and can divide.**
- c) Cells are elongated and have cell wall thickened at the corners with presence of cellulose.**
- d) Cells are thickened with the presence of lignin.**
- e) Cells have the ability to conduct water.**
- f) Cells have the ability to store food.**

2. Identify the tissues given below and mention their functions.

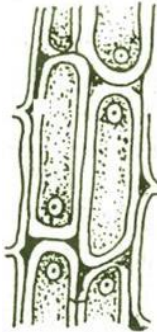
[1×6=6]



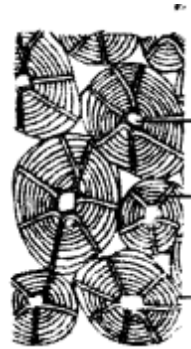
A



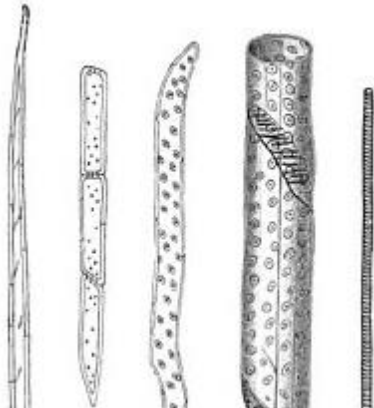
B



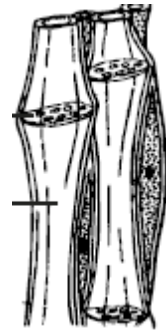
C



D



E



F

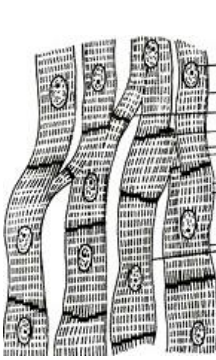
3. Name the kind of animal tissue in which:

[1×6=6]

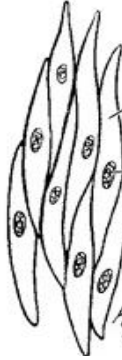
- a) Cells are flat and cuboidal or columnar, forming protective layer.
- b) Cells conduct impulses.
- c) Cells have Haversian canal in them.
- d) Cells are specialized to store fat.

- e) Cells are smooth, unstriped and has single nucleus.
- f) Cells have light and dark bands, uninucleated and are branched.

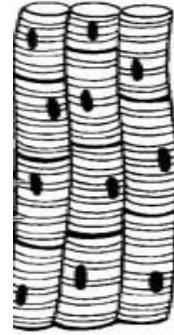
4. Identify the tissues given below and mention their functions. [1×6=6]



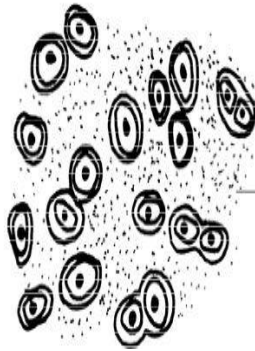
A



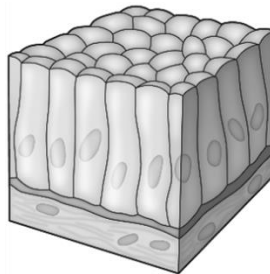
B



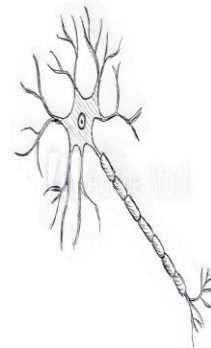
C



D



E



F

Chapter: THE FLOWER

Draw a neat diagram of a section of a *Hibiscus* flower and label all the parts properly. [4]

Chapter: NUTRITION

1. Mention two sources and deficiency disease of the following Vitamins:

a. Vitamin A, b. Niacin, c. Calciferol, d. Riboflavin. [1.5×4=6]

2. Mention the diseases caused due to lack of protein in our body. Mention five symptoms of Kwashiorkor. [1+5=6]

3. Name the mineral element needed for the following respectively: [3]

a. Strong Teeth

b. Proper working of Thyroid

c. Synthesis of haemoglobin.

4. Define: [2]

a. Balanced diet, b. Malnutrition.

5. Mention how roughage plays a very important role in our diet. [2]

Chapter: DIGESTIVE SYSTEM

1. Draw neat labeled diagrams of the following: [3+3=6]

a. The internal structure of tooth.

b. Microscopic structure of Intestinal Villus.

2. Differentiate between the following: (any 2 points) [2×3=6]

a. Incisor and Canine

b. Ptyalin and Pepsin

c. Chyme and Bolus

3. Mention the chemical equations to show the digestion of Carbohydrates in our body from mouth till small intestine. [5]

4. Mention the end products of digestion of Carbohydrate, Protein and Fat. [3]

Chapter: LOCOMOTION AND MOVEMENT

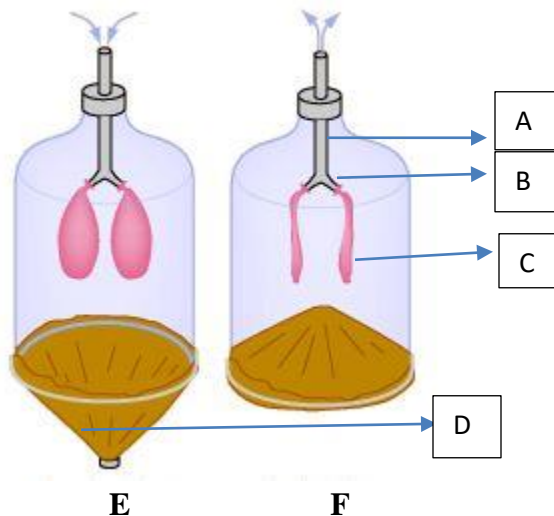
1. Differentiate between the three different kinds of muscles present in human body on the basis of structure of the cell, function and location. [3]
2. Name the following: [5]
 - a. The longest bone
 - b. Scientific term for shoulder plate
 - c. The last two pairs of ribs
 - d. Other name of knee cap
 - e. Scientific term for collar bone
3. Differentiate between Ball and socket and Hinge joint. (any 2 points) [2]
4. What are antagonistic muscles? Give one example. [2]
5. Draw neat labeled diagrams of the following: [3×3=9]
 1. Structure of a long bone.
 2. Structure of a typical Vertebra.
 3. A Synovial joint.

Chapter: RESPIRATORY SYSTEM

1. Define Respiration and write the equation of the process. [2]
2. Explain the process of Inspiration and Expiration. [2]
3. Why do we use Yeast in making bread? [1]
4. Write the balanced equation of Aerobic and Anaerobic respiration and define the processes. [2+2=4]
5. Differentiate between Hypoxia and Asphyxiation. [1]
6. Draw the diagram of Human Respiratory System. [4]
7. Give reasons: [3]
 - a. We use lime water in the experiments of respiration.
 - b. Air inside the lungs is never replaced completely.

- c. In higher altitude a person may feel dizzy and experience complete blackout.

8. Answer the following questions by observing the diagram given below:



- a. Identify the processes “E” and “F”. [2]
- b. “A”, “B”, “C” and “D” represent different parts in human respiratory system. Mention the names of the parts “A” to “D”, which corresponds with the human respiratory system. [2]
- c. Mention the site of exchange of gases in ‘C’. [1]

Chapter: RESPIRATION IN PLANTS

1. Define respiration and write the balanced equation. [2]
2. Why do we treat the boiled seeds with antiseptic in the experiment of respiration? [1]
3. Why do we use lime water in the experiment of respiration? [1]
4. Mention the use of a ‘Control’ in any experiment. [1]
5. Mention two differences between aerobic and anaerobic respiration. [2]

Chapter: POLLINATION AND FERTILIZATION

1. Give one word answers for the following: [6]
 - a. Maturing of stigmas earlier than the anthers
 - b. Pollination by wind
 - c. A flower which contains only pistil
 - d. Removal of anthers in young flowers during artificial pollination
 - e. Fusion of nuclei of male and female gametes
 - f. Small opening left by the integuments for the entry of pollen tube
2. Give reasons- [4]
 - a. Pansy flowers are bisexual but cross pollination takes place in these flowers.
 - b. Insect pollinated flowers have large, showy petals and they produce nectar.
 - c. Female flowers in Maize plant have feathery stigma and they hang out of the flower.
 - d. Stigma in insect pollinated flowers are sticky.
3. Fertilization in flower is known as double fertilization. Explain with proper reason. [2]
4. Draw and label the different stages of fertilisation in a flower. [5]

Chapter: SEED- STRUCTURE AND GERMINATION

1. Draw a neat labelled diagram of monocot and dicot seed. [3+3=6]
2. Differentiate between the following: [2]
 - a. Albuminous and Exalbuminous
 - b. Epigeal and Hypogeal Germination
3. Mention the reasons why seeds sown deep into the soil fails to germinate. [2]
4. “Maize is known as a grain and not a seed”. Justify this statement. [1]