

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]

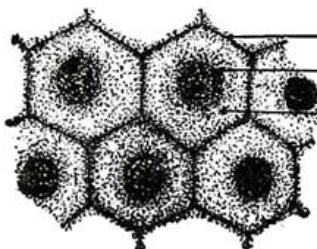
Chapter: TISSUES: PLANT AND ANIMAL TISSUES

1. Name the kind of plant tissue in which: [1×6=6]

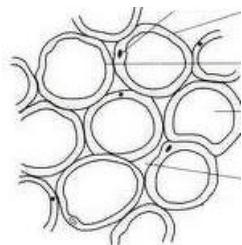
- a) Cells have large vacuole and can store starch.
- b) Cells have a large nucleus and can divide.
- c) Cells are elongated and have cell wall thickened at the corners with presence of cellulose.
- d) Cells are thickened with the presence of lignin.
- e) Cells have the ability to conduct water.
- f)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

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

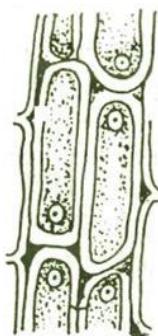
[$1 \times 6 = 6$]



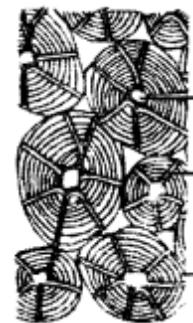
A



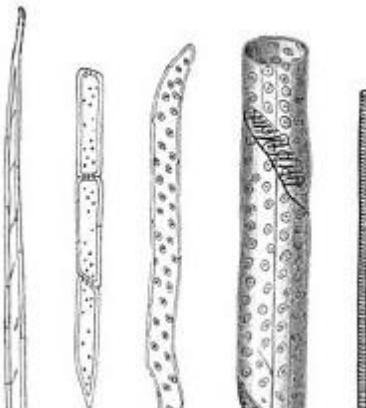
B



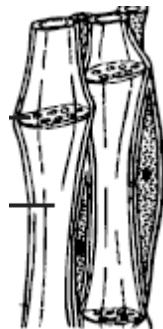
C



D



E



F

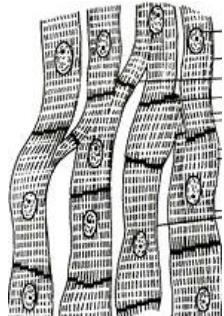
3. Name the kind of animal tissue in which:

[$1 \times 6 = 6$]

- Cells are flat and cuboidal or columnar, forming protective layer.
- Cells conduct impulses.
- Cells have Haversian canal in them.
- 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.

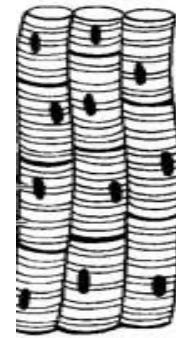
4. Identify the tissues given below and mention their functions. [1×6=6]



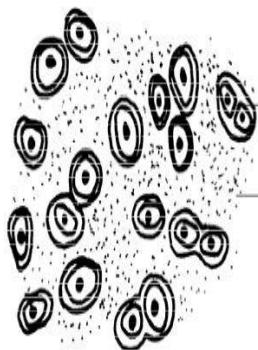
A



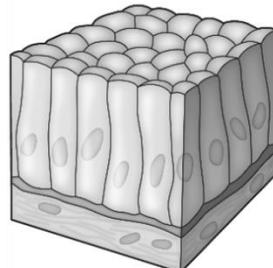
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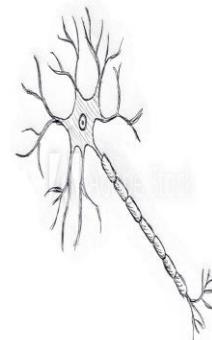
C



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 Kwashiorkar. [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]

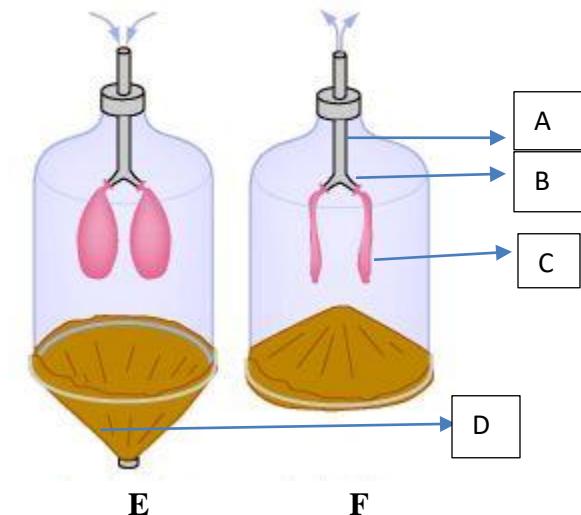
- 4. What are antagonistic muscles? Give one example.** [2]

- 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:**
 - 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 Hypogaeal 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]