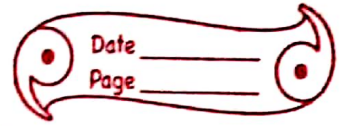


# Biology Homework



Q 1 Choose the correct answer out of the four available choices given below. ~~ask~~

1. Who coined the term 'cell'?

a) Robert Hooke.

2. Which of the following connects pharynx to the stomach?

Ans) Oesophagus

3. Transpiration is a function of the

a) leaves.

4. Which of the following ~~is~~ is not good for the eyes?

b) Looking at the sun directly.

5. Oxygen and carbon dioxide are exchanged at the

d) Alveoli

6- Which of the following refers to the initial U-shaped part of the small intestine

c) Duodenum

7- Vacuole is a watery sac bounded by a membrane termed as

a) Tonoplast

8- The outermost part of a rose flower is

a) Sepals.

9- Which of the following is the main source of energy?

d) Carbohydrates

10- Which of these connects the leaf to the stem?

d) Petiole

11- What is the shape of the trees found on the

mountains)

c) Cone

12. What is the function of tail in fish?

Ans- Changing directions

13. The corolla is made up of units called:

b) Petals

14. In plant cells, which of the following organelles has smaller units called dictyosomes?

c) Golgi Apparatus

15. During photosynthesis plants give out

b) Oxygen.

Q2. A. Name the following:

1. The organelle which digests old or injured parts of its own cell → lysosome

2. A thin, sticky film composed of mucus, food particles and bacteria, which develops on the surface of the teeth over a period of time → Plaque.

3. The pattern or arrangement of veins on a leaf → Venation.

4. The surface of a tooth → Crown

5. Tiny openings found on the lower side of the leaf for the exchange of gases → Stomata

B. Fill in the blanks:

1. The enzyme Maltase converts maltose into glucose.

2. Frogs have webbed feet which allow them to swim in water.

3. Fertilization results in the growth and transformation of the ovary into a fruit.

4. Centrosome consists of one or two rod-like

bodies called Centrioles.

5- One complete sequence of part contraction and relaxation is called

Q 3-A. Match the following:

Column A

Column B

1- Chloroplast

a- Converts starch into maltose

2- Cell membrane

b- Converts peptones into amino acids

3- Ribosome

c- Manufacture of food in plants.

4- Amylase

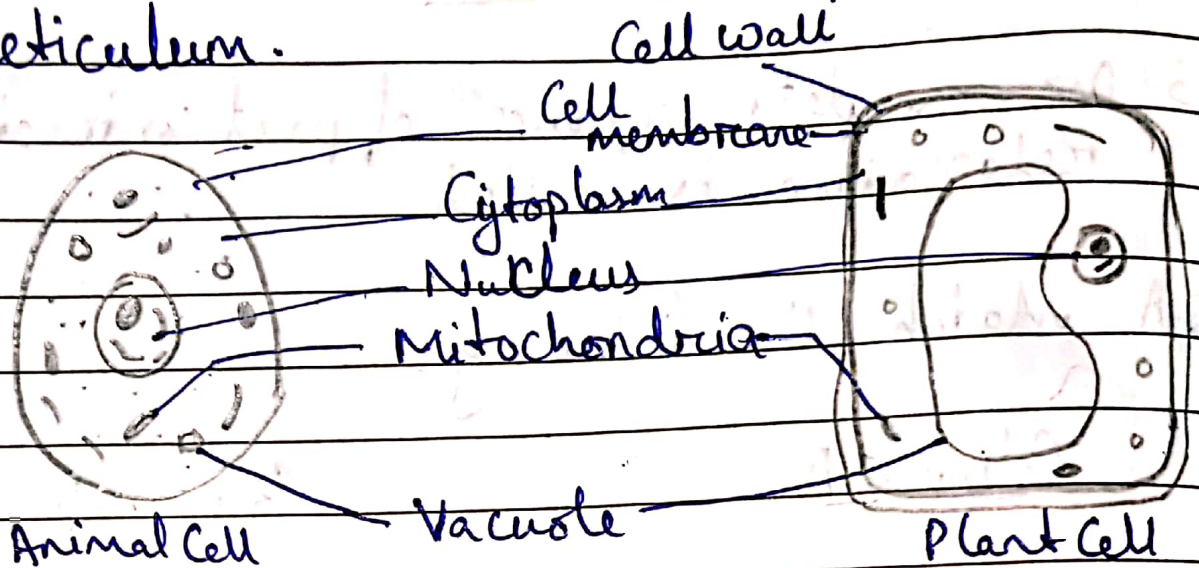
d- Synthesis of proteins

5- Erepsin

e- Entry and exit of materials.

B. With the help of a suitable diagram explain the structure and function of the

mitochondria and the endoplasmic reticulum.



Endoplasmic reticulum transpires in two forms: a type with ribosome-studded surface and another with a smooth surface. The latter is called the smooth endoplasmic reticulum, and the former is called the rough endoplasmic reticulum. These membranes form continuous folds, eventually joining the outer layer of the nuclear membrane. Except for sperm cell and red blood cells, the endoplasmic reticulum is observed in every other type of eukaryotic cell.

Q4-A Why is seed dispersal important? Explain the different methods of seed dispersal.

Ans. Dispersal of seeds is very important for the survival of plant species. If plants grow too closely together, they have to compete for light, water and nutrients from the soil. ~~Seed dis~~

Seed dispersal is movement or transport of seeds away from the parent plant.

There are five modes of seed dispersal:

① Wind, water, animal, explosion and gravity.

Wind ⇒ Seeds that are scattered by wind are usually small and light. This makes it easy for the wind to carry the seeds away. Ex - Cotton dandelion.

Water ⇒ Seeds of plants that grow in or near flowing water may be dispersed by water. Ex ⇒ water lily, lotus, coconut, etc.

Animal ⇒ When birds and animals eat fruits they also eat seeds with them. The seeds are small and hard and they come out of body as waste. Ex - Guanas, Berries, etc.

Explosion :- Some plants burst open or explode when they are dry, scattering the seeds away from the mother plant! Ex - Balsam, Pea, etc.

B- Label the parts in the given diagram.

1- Oesophagus

4- Pancreas

2- Gall Bladder

5- Small Intestine

3- Stomach

Q5-A- How is cactus adapted to survive in a desert?

Ans- Cactus is a desert plant. These plants are adapted to hot and dry climate of deserts through the following adaptations.

→ Their leaves are reduced to scale or spines - this reduce loss of water by transpiration.

→ Their leaves bear sunken stomata.

→ They have thick cuticle on the stem and ~~the~~ leaves to prevent loss of water.

2- Why does mountain goat has strong hooves?

Ans- The mountain goat has strong hooves



so that they can run up the rocky slopes of the mountain easily.

B- Find the odd one out.

1- Thyroid, Diphtheria, Tetanus, Measles.

2- Dengue, Conjunctivitis, Chicken pox, Measles.

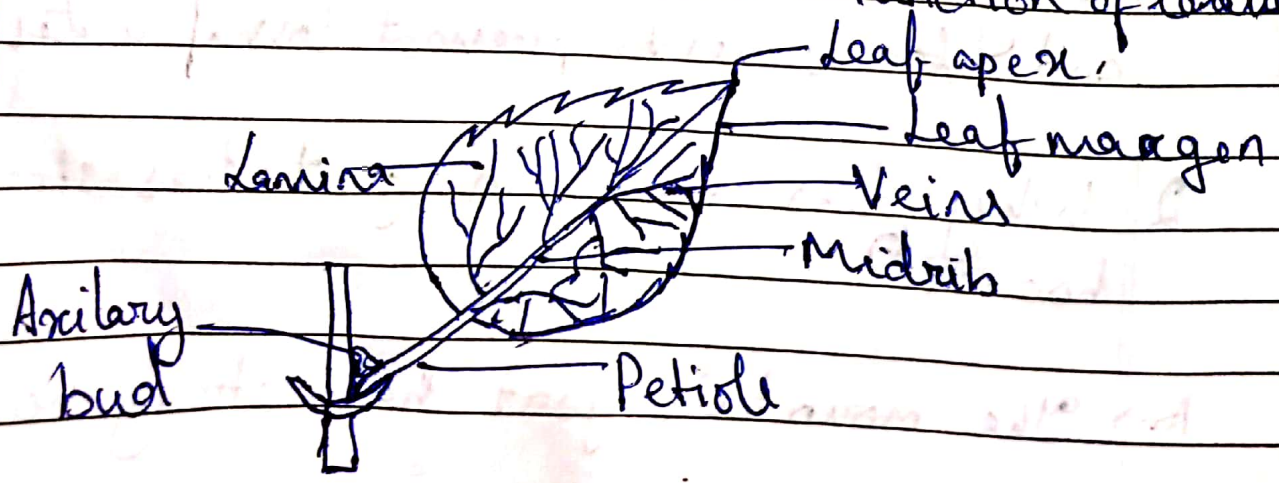
3- Rose, Neem, Acacia, Mango.

4- Night Blindness, Beri-beri, Diabetes, Pellagra.

5- Cell wall, Mitochondria, Cytoplasm, Cell membrane.

Q

6- Describe the structure and function of leaves.



Two important functions of leaf are

- i) Photosynthesis → The term photosynthesis means combining light. During this time, water is combined with carbon dioxide to produce glucose and oxygen.
- ii) Transpiration - This is the process by which water is lost in the form of water vapour by evaporation from the surface of leaves and other aerial parts of a plant.

B. Define the following terms.

1. Egestion - Egestion is the act of excreting unusable or undigested material from cell.
2. Breathing - The process of inhaling and exhaling air from the lungs is called breathing.
3. Internode → It is a part of stem between two successive nodes.

4- Plaque → Plaque is a thin sticky film composed of mucose, food particles and bacteria, which develops on the surface of teeth over a period of time.

5- Bisexual flower → If all the four whorls viz. calyx, corolla, androecium and gynoecium are present in the same flower, it is known as bisexual flower.