

Revision

1) Choose the correct answer out of the four available choices given below each question.

1) Who coined the term 'cell'?

a) Robert Hooke

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

a) Oesophagus

3. Transpiration is a function of the leaves.

a) Leaves

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

a) Looking at the sun directly

5. Oxygen and carbon dioxide are exchanged at the alveoli.

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

a) Duodenum

7. Vacuole is a watery sac bounded by a

membrane termed as

✓) Tonoplast

8. The outermost part of a rose flower is

✓) Sepals

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

✓) Carbohydrates.

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

✓) Petiole

11. What is the shape of trees found on mountains?

✓) Cone

12. What is the function of tail in fish?

✓) Changing directions.

13. The corolla is made up of units called _____.

✓) petals

~~14. In plant~~

14. In plant cells, which of the following organelles

has smaller units called dictyosomes?
c) Golgi apparatus

15. During photosynthesis plants give out oxygen
b) oxygen

2. Name the following

B ~~The organelle which digests off~~

2. A thin, sticky film composed of mucous, 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 on the lower side of ~~the side~~ 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. Fertilisation results in the growth and transformation of the ovary into a fruit.

5. One complete sequence of part contraction and relaxation is called respiration.

4. Centriole consists of ~~two~~ one or two rod like structures called centrioles.

3. A) Match the following

Column A

1) Chloroplast

2) Cell membrane

3) Ribosome

4) Amylase

5) Pepsin

Column B

~~e)~~ c) manufacture of food in plants

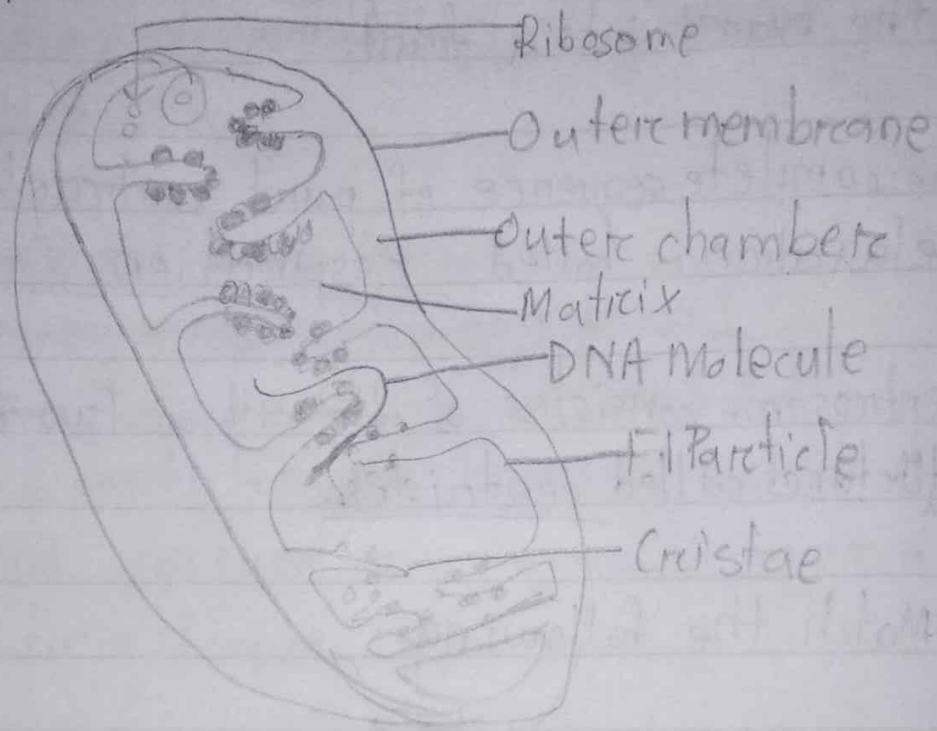
e) entry and exit of materials

d) synthesis of proteins

a) Converts starch into maltose

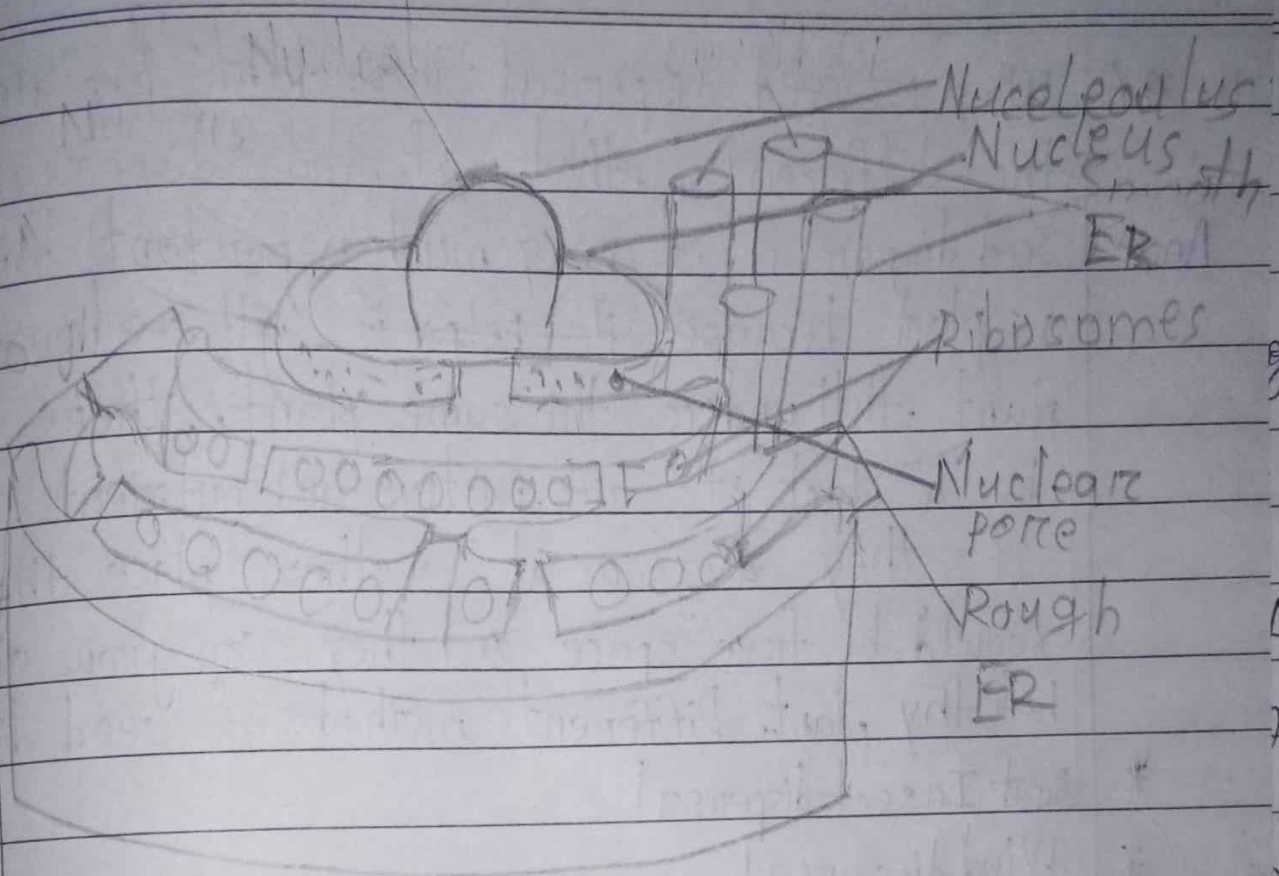
b) Converts peptones into amino acids

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



Mitochondria

Mitochondria are a double membrane-bound organelle found in both plant and animal cells. They are found inside the cytoplasm and essentially function as the cell's 'digestive system' and are popularly known as "powerhouse of the cell". It is rod-shaped. Its size ranges from 0.5 to 1.0 micrometre in diameter. It contains an outer membrane, an inner membrane and a gel-like material called the matrix. It regulates the metabolic activity of the cell, promotes the growth of new cells and cell multiplication. It helps in detoxifying ammonia in the liver cells etc.



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 rough endoplasmic reticulum. These membranes form continuous folds, eventually joining the outer layer of the nuclear membrane. Except for sperm cells and red blood cells, the endoplasmic reticulum is observed in every other type of eukaryotic cell.

4. A) Why is seed dispersal important? Explain the different methods of seed dispersal.

Ans- Seed dispersal is very much important for a plant because ~~it helps~~ if all seeds of a plant fall under the same plant, there would be a lack of air, water and nutrients. So, if they ~~at~~ grow at another place there would be free space and they can grow as healthy plants. Different methods of seed dispersal-

- * ~~and~~ Insect dispersal
- * Wind dispersal
- * Water dispersal
- * Animal dispersal

B.1) Oesophagus

2) Gall bladder

3) Stomach

4) Pancreas

5) Small intestine



5. B) Find the odd one out

~~Typhoid, Diphtheria~~

1) Tetanus

2) Dengue

3) Malaria

Q. Cell wall

6. A) Ans- The structure of leaves -

There are three main parts of leaves -

- * Petiole: It is the basal part of the leaf connected the leaf to the stem.
- * Lamina or leaf blade: It is the flat, green ~~part~~ ^{and broad} part of the leaf. The outer edge is called 'leaf margin'.
- * Midrib: The petiole continues into the leaf lamina as midrib.

Functions of leaf:

Photosynthesis: The process by which a plant leaf prepares its own food ~~is~~ with the help of carbon dioxide and water in the presence of sunlight and chlorophyll is called photosynthesis.

Transpiration: The process by which plant leaf loses water in the form of water vapour is called transpiration.

B) Egestion: The process of elimination of undigested food through anus is called egestion.

2. Breathing: The physical process which involves of breathing in oxygen (inhalation) and breathing out carbon dioxide (exhalation) is called breathing.
 3. Internodes: The ~~space~~ ^{part of the stem} between two successive nodes is called internode.
 4. Plaque: A bacteria on the teeth's surface forming a yellow coloured film is called plaque.
 5. Bisexual flower: A flower with both the male reproductive part (Androecium) and female reproductive part (Gynoecium) is called a bisexual flower or ~~hermaphrodite~~ hermaphrodite flower.
- 7.1) The modifications in leaves
- * Leaf tendrils: ~~Some~~ In certain weak-stemmed plants, the leaf or leaflets become tendrils to give support to plant. They are sensitive to touch and give support to the plant as they touch ~~to~~ anything by coiling around it. E.g. pea plant.
 - * Spines: In some plants, the leaves are turned into spines to reduce water loss. E.g. Cactus.
 - * Scale leaves: In some plants like onion and

ginger, the leaves are thick and fleshy or thin and ~~small~~ dry scale leaves to protect buds and store food

B.2) The process by which water is lost from the leaf ~~to~~ in the form of water vapour, is called transpiration. It helps to keep the plant cool when it is hot outside and also helps to develop a suction force ~~to~~ so that roots can pull up more water from the soil ~~which~~ along with important mineral salts. Hence, without transpiration the plant would dry up and ~~the~~ the suction force will be affected.