

Biology

A. MCQs

1. Who coined the term 'cell'?
a) Robert hooke.
2. Which of the following connects the pharynx to the stomach?
b) Oesophagus.
3. Transpiration is a function of the Leaves
a) Leaves
4. Which of the following is not good for the eyes?
b) Looking at Sun directly
5. Oxygen and carbon dioxide are exchanged at the Alveoli
Alveoli
6. Which of the following refers to the initial U-shaped part of the small intestine?
Duodenum
7. Vacuole is a watery Sac bounded by a membrane termed as Tonoplast.

8. The outermost part of a rose flower is it
a) Sepals

9. Which of the following is the main source of energy?
a) Carbohydrates

10. Which of these connects the leaf to the stem?
a) Petiole

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

12. What is the function of tail in fish?
b) Changing directions

13. The corolla is made up of units called
Petals
b) petals

14. In plants cells, which of the following organelles has smaller units called
a) Lysosomes?
c) Golgi apparatus

15. During photosynthesis plants give out
Oxygen

b) Oxygen

Fill in the blanks.

16. The enzyme Lysosome converts maltose into glucose.

17. Frogs have plaque feet which allow them to swim in water.

18. Fertilisation results in the growth and transformation of the ovary into a menstruation.

19. Centriosome consists of one or two rod-like bodies called Franel.

20. One complete sequence of part contraction and relaxation is called stomata.

21. Name the following.

a. The organelle which digests old or injured parts of its own cell, maltase

b. A thin, sticky film composed of mucous food particles and bacteria, which develops on the surface of the teeth over a period of time. webbed

c. The pattern or arrangement of veins on a leaf fruit

1. The surface of a tooth. Centrioles

MATCH THE FOLLOWING

Column A

1. Chloroplast
2. Cell Membrane
3. Ribosome
4. Amylase
5. Erection

Column B

- A. Convert starch into Maltose
- B. Convert peptides into amino acid
- C. Manufacture of food in plants
- D. Synthesis of proteins
- E. Entry and exit of materials

23. Name the following

a. The part of the plant which grows under the ground. Root

b. The part of the plant which grows above the soil. Shoot

(29) Mention the function of the following.

(i) Spines! — Leaves are modified into spines to reduce water loss, like cactus. In prickly poppy, leaves bear spine on the margin.

(11) Tendrils - In case of certain weak-stemmed plants, leaves or leaflets are modified into airy, coiled structures called tendrils. They are sensitive to touch. As they touch any object, they coil around it and support the plant to climb up. Ex: Sweet pea.

(12) Scale leaves In some plants like onion and ginger, thick and fleshy or thin and dry scale leaves are present respectively. Their function is to store food and protect the buds.

(25) Name the type of teeth seen in humans.

Ans: The types of teeth seen in humans are:

* 8 Incisors

* 4 Canines

* 8 Premolars

* 12 molars

ii) How is the Small intestine best suited for the digestion and absorption of food?

The Small intestine is good for absorption since it has a large inner surface area. This is formed due to the plicae circulares which project many tiny finger-like structures of tissue called villi. The individual epithelial cells also have finger-like projections, which are called known as microvilli.

26. Food are classified into three groups on the basis of the function they perform in our body. Name the three categories, and briefly give their two sources each.

A: Carbohydrates: → Provide us energy like rice, potato and Sugarcane.

Protein: → Proteins provide the body with building material to grow like pulses, milk, egg, etc.

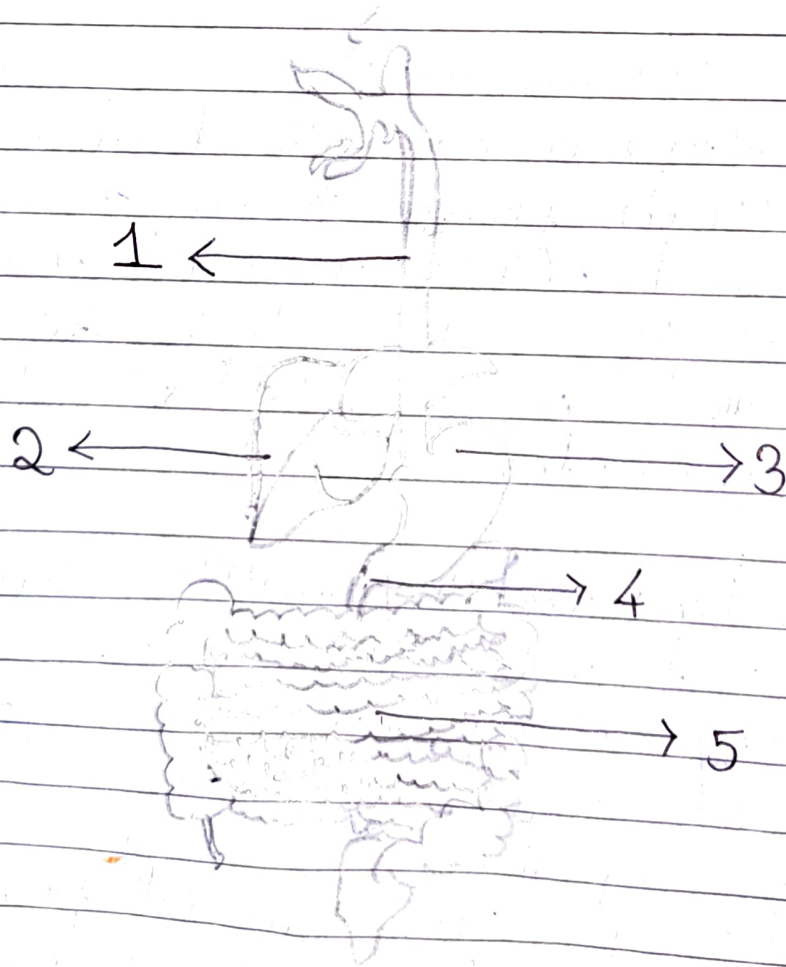
Minerals: → Minerals are needed for their specific roles in the body such as iron, Sodium, Calcium, phosphorus, etc.

27. Why is Seed disp. dispersal important? Explain the different methods of Seed dispersal. If all the seeds had to germination in the same place, there would be unhealthy competition for food and light between the plants. Thus, seed dispersal is important which scatters the seeds far and wide. The different methods of seed dispersal are as follows:

1. Dispersal by explosion - Fruits of plants like pea, bean, castor, etc burst open once they are ripe, thereby scattering the seeds in all directions. This mechanism is also referred as 'explosion'.
2. Dispersal by wind - Seeds of certain plants develop wing-like hairy structures which allow them to be carried away by the wind. Once mature and dry, they burst open and release seeds, which are dispersed by wind. Ex: → Moringa, Calotropis, etc.
3. ~~Dispersal~~ Dispersal by animals - Certain birds eat fruits like tomato, guava and cherry along with their soft parts. Since these seeds are hard and thick, they escape digestion and are passed out with their droppings. Fruits of plants like Xanthium and Urena are covered with tiny hooks and those of Spear grass have

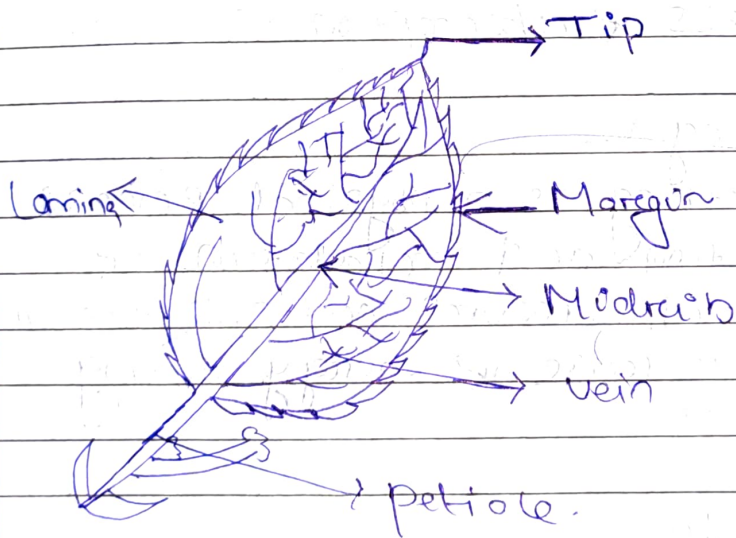
stiff hair. When ripe and dry, they cling to the bodies of passing animals or to the clothing of humans and get transported over great distances.

4. Dispersal by water - Plants which grow along the coastal regions like coconut tree produce fruits that float in water and hence get transported by ~~to the coastal regions like~~ ~~coconut tree~~ waves. The fruit is protected by a waterproof outer covering.



1. Oesophagus
2. Gall bladder
3. Stomach
4. Pancreas
5. Small intestine.

29.



1. Lamina - It is the flat, green portion of the leaf and is also known as the leaf blade.

2. Veins - They form a supporting framework and transport raw materials and manufactured food in and out of the lamina.

3. Petiole - It is a narrow, stalk-like structure connecting the leaf to the stem.

4. Midrib - It is the continuation of the ~~petiole~~ petiole and the central vein of the leaf. Smaller veins grow from the midrib.

1. Egestion: Egestion also called defecation, is the process of removal of undigested food materials left behind after the process of absorption is complete.

2. Breathing -

Breathing is a physical process of inhalation and exhalation of gases which occurs on the side of the cells with no release of energy during the process.

3. Internode

The space between two adjacent nodes is called as an internode.

4. Plaque - Plaque is a thin, sticky, transparent film which forms on the surface of teeth, due to germs in the mouth along with saliva and food particles, leading to the decay.



of the tooth.

5. Bisexual flower - A flower which contains both male and female reproductive parts is termed bisexual flower.