H.H.W
11.10.21

Autumn Holiday Homework

1. One Mark Questions

Multiple Choice questions

I. Who coined the term 'cell'?
Ans- d) Robert Hooke

2. Which of the following connects the pharynx to the stomach?
Ans- b) Oesophagus.

3. Transpiration is a function of the
Ans- a) Leaves

4. Which of the following is not good for the eyes
Ans- b) Looking at the Sun directly

5. Oxygen and Carbon dioxide are exchanged at the
Ans- d) Alveoli

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

7. Vacule is a watery sac bounded by a membrane formed as
Ans- a) Tonoplast

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

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

10. Which of these Connects the leaf to the stem?
Ans- d) Petiole

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

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

13. The Corolla is made up of units called
Ans- a) Sepals

14. In plant cells, which of the following Oranelle has smaller units called dictyosomes?
Ans- c) Golgi apparatus

15. During Photosynthesis plants give out
Ans- b) Oxygen

Fill in the blanks

16. The enzyme maltase converts maltose into glucose.
17. Frogs have webbed feet which allow them to swim in water.
18. Fertilization results in the growth and transformation of the ovary into a Fruit.
19. Centrosome consists of one or two rod like bodies called centrioles.
20. One complete sequence of part contraction and relaxation is called Cardiac cycle.

2 mark Question

21. Name the following.

a) The organelle which digests old or injured parts of its own cell. Lysome

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. Plaque

c) The pattern or arrangement of veins on a leaf. Venation

d) The surface of a tooth. Enamel

22. Match the following.

Column A	Column B
1. Chloroplast	a. Converts starch into maltose
2. Cell membrane	b. Converts peptones into amino acids
3. Ribosomes	c) Manufacture of food in plants
4. Amylase	d) Synthesis of proteins
5. Erepsin	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

3 Mark Questions

24. Mention the functions of the following :
i) Spines - Spines are modified leaves, which help to reduce water loss.
ii) Tendril - In case of certain weak stemmed plants the leaves or leaflets are modified into wiry, coiled structures. These are called tendrils. They are sensitive to touch. As they touch any object they coil around it and support the plant to climb up
Example : Sweet Pea
iii) Scale leaves - Some plants like onion ginger have thin and dry or thick and fleshy scale leaves. Their function is to protect the buds.

25. Answer the following questions
a) Name the types of teeth seen in humans.
Ans- The types of teeth seen in humans are - Incisors, Canines Premolars and Molars.

i) Incisors :- Incisors are the four front teeth at the middle of each jaw. They are chisel-shaped for biting and cutting.

ii) Canines :- Canines are one on either side of the incisors in each jaw. They are pointing for tearing the food.

iii) Premolars :- Premolars are two on each side of canines in each jaw. They help in crushing and grinding the food.

iv) Molars :- Molars are the last three teeth on each side in each jaw. They have broad uneven surfaces for finer crushing and grinding of indigested food.

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

Ans- The last part of the small intestine called ileum contains glands which produces intestinal juice. This juice contains enzymes. Due to the action of these enzymes the food completely digested in the ileum. The inner lining of the small intestine contains a large number of tiny finger like projections called villi. These villi greatly increase the inner surface area for absorptions of digested food. The villi absorb the amino acids and glucose to pass them into the blood system. The fatty acid pass into special tubes

called lymph vessels. Vitamins and minerals salts are directly absorbed through the walls of the intestine.

26. Foods are classified into three groups on the basis of the functions they perform in our body. Name these groups and briefly state their functions. Also give two sources of each.

Ans. The three groups of food on the basis of their functions are -

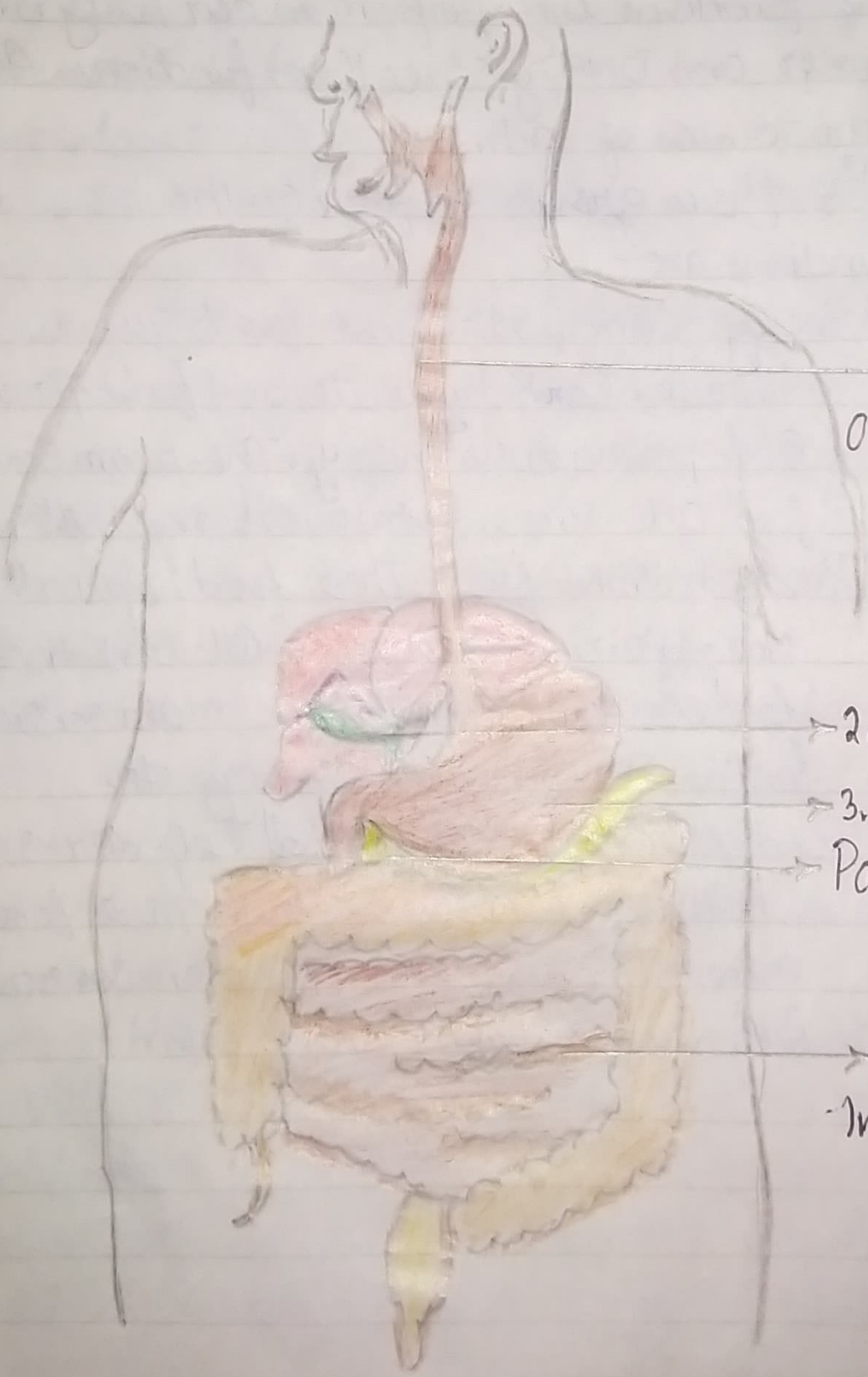
a) Energy giving food :- These foods gives us energy to do work. Carbohydrate and fats present an food provide us energy. The main source of the food are rice, potato, oil and butter.

b) Body building food :- These food help in the growth and repair of damaged cells and tissues. These food contain proteins. The main sources of these food are Pulses, milk and egg etc.

c) Protective food :- These food help our self-keeping healthy and diseases free. These food contain minerals and vitatins. The main source of these food are vegetables and fruits.

28. 5 mark Question

28. Label the parts in the given diagram.



27. Why is seed dispersal important? Explain the different methods of seed dispersal.

Ans- If all the seeds had to germinate in the same place, there would be an unhealthy competition for the food and light between the plants. Thus, seed dispersal is important which scatter the seeds far and wide.

i) Dispersal by explosion:- Fruits of plants like pea, bean Castor etc burst to open once they are ripe, thereby scattering the seeds in all directions. This mechanism is also refered as 'explosion'.

ii) Dispersal by Wind:- Seeds of certain plants develop with wings - 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. Examples - Moringa (drum stick) Calotropis (milk weed), etc.

iii) Dispersal by animals:- Certain birds eat fruits like tomato, guava, chilly 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 hairs. When ripe and dry, they cling to the bodies of passing animals or to the clothing of humans and get transported over great distance

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

29. Describe the structure and functions of leaves.

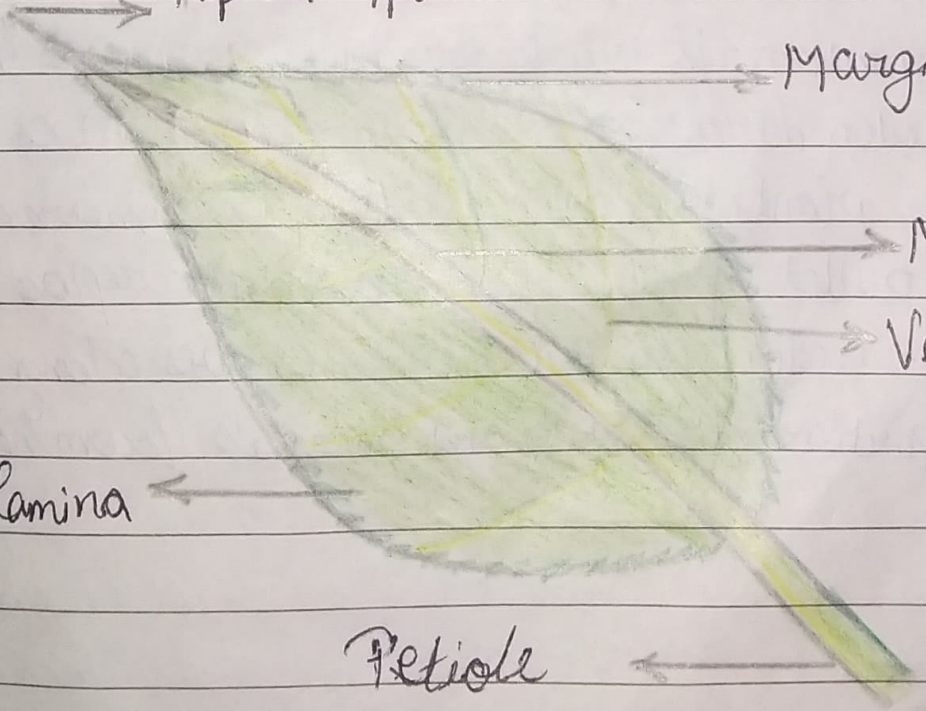
Ans- The structure of a leaf -

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

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

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

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



Structure of a leaf

The functions of leaves are -

i) Manufacturing of food - The pigment, chlorophyll present in leaves gives the green colour to them. This green pigment helps plants to absorb energy from sunlight and use it to manufacture food from carbon dioxide and water. This process is termed as photosynthesis.

ii) Exchange of gases :- During the daytime, plants take in carbon dioxide and give out oxygen and during the night oxygen is taken in and carbon dioxide is given out. This exchange of gases takes place by means of small openings called stomata which are present in the lower surface of the leaves.

iii) Transpiration :- It is a process by which plants lose water, through the stomata. It helps in cooling the plant. Also since water is lost, more water is pulled upwards from the roots to replace the lost water. This pulled water carries along important nutrients and minerals from the roots.

30. Define the following terms

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

b) Breathing: Breathing is a physical process of inhalation and exhalation of gases, which occurs outside the cells, with no release of energy during the process.

c) Internode:- The space between two adjacent nodes is called an internode.

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

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