WORKSHEET

Multiple choice questions.

1- Who coined the term 'cell'? option-d: Robert Hooke

2- Which of the following connects the pharynx to the stomach? option-b: Oesophagus

3- Traspiration is a function of the option-a: leaves

4- Which of the following is not good for the eyes option-b: Looking at the sun directly.

5- Oxygen and carbon dioxide are exchanged at the option-d: alveoli

6- Which of the following refers to the intial U-shaped part of the small intestine? option-c: duodenum

7- Vacuole is a watery sac bounded by a membreane termed as option-a: tonoplast

8- The outmost part of a rose flower is option-a: sepals

9- Which of the following is the main source of energy? option-d: carbohydrates.

10- Which of these connects the leaf to the stem? option-d: petiole

11- Which is the shape of the trees found on the mountain? option-c: cone

12- Which of the following is a function of tail in fish? option-b: changing directions

13- The corolla is made up of units called option-b: petals

14- In plant cells, which of the following organelles has smaller units called dictyosomes? option-c: Golgi appareatus

15- During photosynthesis plants give out option-b: oxygen

Fill in the blanks.

16- The enzyme maltase converts maltose into glucose.

17- Frogs have moist and webbed feet which allow them to swim 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.

21- Name the following.

a- The organelle which digests old or injured parts of its own cell: lysosomes

b- A thin, sticky film composed of mucous, food particles and bacteria, which develops on the surface of the teeth over a long period of time: Plaque

c- The pattern or arrangement of veins on a leaf: Venation

d- The surface of a tooth: occlusal

22- Match the following:

Column A	Column B
1- Chloroplast	a- Converts starch into
2- Cell membrane	b- Converts protein into amin
3- Ribosome	c- Manufacture of food in p
4- Amylase	d- Synthesis of proteins
5- Erepsin	e- Entry and exit of mate

Answer: 1-c ; 2-e ; 3-d ; 4-a ; 5-b

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

24- Mention the functions of the following.

i- Spines

ii- Tendrill and

iii- Scall leaves

Ans: Spines: leaves or parts of leaves get modified into pointed structures called spines. Spines help to reduce the loss of water by transpiration.

Tendril: When the leaf is modified into a thin thread-like coiled structure called a tendril. They are sensitive to touch, as they touch any object they coiled around it. It support the weak-stemmed-plants to climb up.

Scale leaves: Scale leaves may be thin and dry as in ginger, are thick and fleshy as in the onion and they perform the function of protecting the bud and is to store food.

25- Answere the following questions.

i Name the types of teeth seen in humans.

Ans: Human teeth are of four types:

Incisores: These teeth are characteristically thin, flat-bottom teeth that help us to make initial bite on your food.

Canine: These teeths are used for tearing of food.

Molars: They have broad uneven surface for finer crushing and grinding of food that are ingested.

Peronolars: They help in crushing and grinding of food.

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

Ans: The small intestine's inner lining contain a large number of tiny finger-like projections called villi. The villi greatly increases the inner surface area for the absorption of digested food.

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

Ans: Function:

a- energy giving food.

b- body-building food.

c- regulatory and protective foods.

Nutrient:

i Carbohydrates and fats

ii proteins

iii vitamins

Food:

a- Cereals, fats

b- milk, meat

c- fruits and vegetables

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

Ans: Dispersal of seed 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 dispersal allows plants to spread out from a wide are avoid competing with one another for the same resources.

Following is the various methods of seed dispersal:

Dispersal by wind:

Seeds of some plants are light-weight and some hairy or wing-like structures are present on them. Such seed float in air and are thus dispersed by wind. Example: Dandelion, maple, drumstick, etc.

Dispersal by water:

Dispersal by water takes place in some aquatic plants

and in some which grow near a water body. Seeds of water lily float and thus dispersed by water. The coconut seed has a tough fibrous covering which has plenty of air inside. This helps the coconut seeds in floating on water.

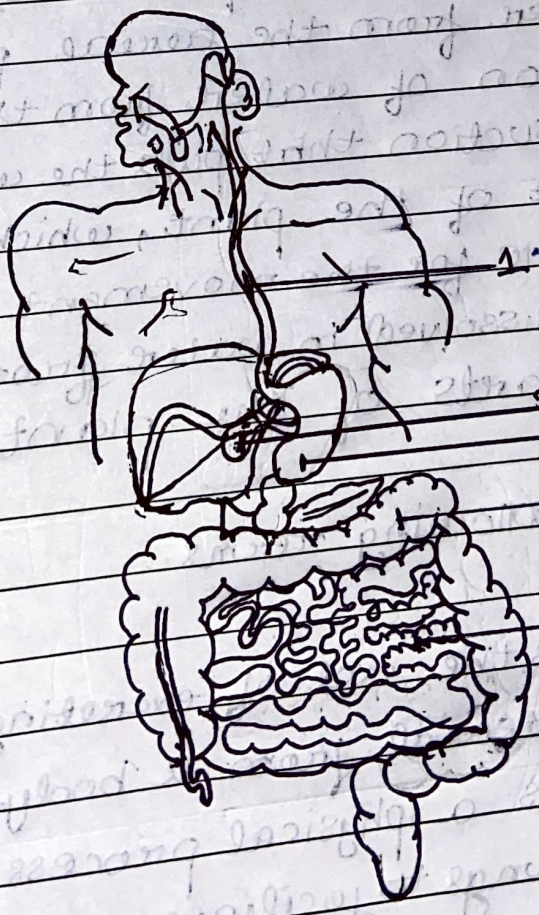
Dispersal by animals:

Some seeds have spine-like structures on them. They get stuck to the fur of animals and thus get spread to different places. Some seeds are swallowed by birds and animals along with fruits. These seeds get dispersed with bird or animal droppings.

Dispersal by Humans:

Humans also help in dispersal of seeds. Especially during farming.

28-15 Label the parts in the given diagram.



29- Describe the structure and functions of leaves.

Ans: A leaf surface area helps the leaf to absorb as sunlight as possible. Leaves are thin, minimising distance for carbon dioxide to travel into leaf. A midrib provides strength throught the leaf, keeping it upright and sturedy in the wind. Chlorophyll is the green pigment that absorbs sunlight. The two main functions performed by the leaf are photosynthesis and transpiration.

Photosynthesis is the process by which green plants make their food from carbon dioxide and water in the presence of sunlight. The main site of photosynthesis is the chloroplast, which is present inside the leaf. The food formed is in the form of glucose and is used to perform all the vital functions.

Transpiration is a process of elimination of the excess water from the aerial parts of the plant. Evaporation of water from the surface of leaves creates a suction that pulls the water from the lower part of the plant, which is root. Transpiration is responsible for the movement of mineral and nutrition dissolved in water from roots to the different parts of the plant.

30- Define the following terms.

a- Egestion: It is the act of excreting unusable or undigested material from a body.

b- Breathing: It is a physical process of moving air out and in the lungs to faciliate exchange with the internal environment.

c- Internodes: An interval or part between two nodes is called internode.

d- **Plaque**: It is a sticky, slimy substance made up most of the germs that cause tooth decay.

e- **Bisexual flower**: Flowers that have both male and female reproductive structures are called bisexual or perfect flowers.