AUTUMN HOLIDAY HOMEWORK

BIOLOGY

1) Who coined the term 'cell'? → D) Robert Hooke
2) Which of the following connects the pharynx to the stomach? → B) Oesophagus
3) Transpiration is a function of the leaves.
4) Which of the following is not good for the eyes? → B) 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? → C) Duodenum
7) Vacuole is a watery sac bounded by a membrane termed as Tonoplast.
8) The outermost part of a rose flower is → 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? → 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? → B) changing directions.

13) The corolla is made up of units called petals.
14) In plant cells, which of the following organelles has smaller units called dictyosomes? → C) Golgi apparatus.
15) During photosynthesis plants give out oxygen.
16) The enzyme maltase converts maltose into glucose.
17) Frogs have webbed feet which allow them to swim in water.
18) Fertilisation 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) a) The organelle which digests old or injured parts of its own cell. → Lysosome
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) 1) Chloroplast → C) manufacture of food in plants.
2) cell membrane → E) entry and exit of materials.
3) Ribosomes → D) synthesis of proteins

4) Amylase -> A) converts starch into maltose
5) Trepsin -> B) Converts peptones into amino acids.
23) a) The part of the plant which grows under the ground -> Root System.
b) The part of the plant which grows above the soil -> Shoot System.
24) i) Spines -> Leaves are modified into spines to reduce water loss, like cactus.
ii) Tendril -> In case of certain weak-stemmed plants, leaves or leaflets are modified into wiry, coiled structures called tendrils. They support the plant to climb up. Ex- Sweet pea.
iii) Scale leaves -> In some plants like onion, thick and fleshy or thin and dry scale leaves are present. Their function is to store food and protect the buds.
25) i) The types of teeth seen in humans are :-
* Incisors
* Canines
* Premolars
* Molars
ii) The small intestine is best suited for the digestion and absorption of food because the small intestine is a long coiled tube of about 7 metres. The food remains in the small intestine

for about 3-5 hours for digestion and absorption.
26) The three groups of food on the basis of their function are :-
(a) Energy giving food - These food gives us energy to do work. Carbohydrate and fats present in the food provide us energy. The main source of these 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 source of these food is Pulses. Milk and egg etc.
(c) Protective food - These food help our self-keeping healthy and diseases free. These food contains minerals and vitamins. The main source of these food are vegetables and fruits.
27) If all the seeds had to germinate in the same place, there would be an 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 -
* Dispersal by insects :- When the insect visits a flower to collect nectar, the pollen grains stick to its mouth-parts, wings, legs, etc. Transfer of pollen by insects is called insect-pollination.

* Dispersal by wind → If the flower happens to fall on the feathery stigma of a flower of the same type, then pollination occurs. Such type of pollination is called wind pollination.
* Dispersal by water → The kind of pollination where water acts as an agent to transfer the pollen is known as water pollination.

28) 1- Oesophagus
2- Gall bladder
3- Stomach
4- Pancreas
5- Small intestine.

29) The structure of a leaf are:-
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 and the central vein of the leaf. Smaller veins grow from the midrib.

30) (a) Egestion :- Egestion 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.

(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.

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