

Standard High School

Mughalabad Road, Tench Bhatta, Rwp Cantt.

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السلام وعلیکم!

ہم سب آپ کے لیے دُعا گو ہیں کہ اللہ تعالیٰ آپ
سب کو اپنی حفظ و امان میں رکھے۔ اُمید ہے آپ سب
خیریت سے ہوں گے۔

آپ کے خیر خواہ

سٹینڈرڈ ہائی سکول انتظامیہ بمعہ سٹاف

شکریہ

STANDARD HIGH SECONDARY SCHOOL
VACATION WORK 2020
GENERAL SCIENCE CLASS: 6TH

Note:

Read thoroughly chapters no. 1 "Cellular organization of Plants and Animals" and chapter no. 2 "Sense organs" and write question/answers of these chapters in your copies (if available) or loose sheets. Do your work neatly. If you have any problem, you can contact subject teacher on 0330-5366653 between 1 to 10 pm.

CHAPTER NO. 1

CELLULAR ORGANIZATION OF PLANTS AND ANIMALS

Q1. What do you know about cells?

Ans. A cell is the basic unit of structure and function of all living organisms. Cells differ in sizes, shapes and functions.

Q2. What is microscope? What is its importance?

Ans. MICROSCOPE:-

Microscope is an instrument which is used to see very small things that cannot be seen with naked eye.

IMPORTANCE OF MICROSCOPE:-

With the help of microscope, things appear larger, so we can

observe them clearly.

Q3. What do you know about light microscope?

Ans. Light microscope uses light to show the image.

PARTS OF LIGHT MICROSCOPE:-

Light microscope

has following parts:-

- | | |
|----------------------|-------------------|
| a) Base | e) A stage |
| b) Adjustment screws | f) Eye piece |
| c) An arm. | g) Objective lens |
| d) A tube. | h) A mirror. |

Q4. What are different parts of cell?

Ans. Following are different parts of a cell:-

1) CELL WALL:

The outermost covering of a plant cell is called Cell wall. It is made up of "Cellulose". Cell wall is absent in an animal cell.

2) CELL MEMBRANE:

The outermost covering of an animal cell is called cell membrane. It controls the movement of materials in and out of cell.

3) CYTOPLASM:

Jelly like material present inside the cell membrane is called Cytoplasm.

4) NUCLEUS:

The most important part of a

cell is its Nucleus. It is the control centre of cell. It has many thread like structures called "Chromosomes".

5. CELL ORGANELLES:-

Following are some important

cell organelles:-

a) ENDOPLASMIC RETICULUM:-

It controls the movement of materials in cell.

b) MITOCHONDRIA:-

It provides energy to cell.

c) CHLOROPLAST:-

They contain chlorophyll and help in Photosynthesis.

d) VACUOLES:-

They store waste materials.

e) CENTRIOLES:-

They help in cell division.

Ques What are differences between plant and animal cell?

ANIMAL CELL

1. Cell wall is absent
2. Nucleus lies in the centre of cell.
3. Many small vacuoles are present.
4. Chloroplasts are absent.
5. Centrioles are present.

PLANT CELL

1. Cell wall is present.
2. Nucleus lies near the side of cell wall because of a large vacuole.
3. Single large vacuole is present.
4. Chloroplasts are present.
5. Centrioles are absent.

Q6. Define unicellular and multicellular organisms.

Ans. UNICELLULAR ORGANISMS:

They are made up of only one cell e.g. Bacteria, Amoeba etc.

MULTICELLULAR ORGANISMS:

They are made up of more than one cell e.g. plants, animals etc.

Q7. What are Tissues?

Ans. TISSUE:

A group of cells performing same function is called a tissue.

PLANT TISSUES:-

Following are some plant tissues:

- Epidermal tissue.
- Xylem tissue.
- Phloem tissue.
- Mesophyll tissue.

ANIMAL TISSUES:-

Following are some animal tissues:-

- Muscle tissue.
- Bone tissue.
- Blood tissue.

Q8. What are Organs?

Ans. ORGANS:-

Different tissues group together to form organs.

PLANT ORGANS:-

Following are some plant organs:-

- a) Leaf
- b) Root
- c) Flower.

ANIMAL ORGANS:-

Following are some animal organs:-

- a) Heart
- b) Lungs
- c) Liver.

Q9. What are Organ systems?

Ans. An organ system is a group of organs which work together.

ORGAN SYSTEM IN PLANTS:-

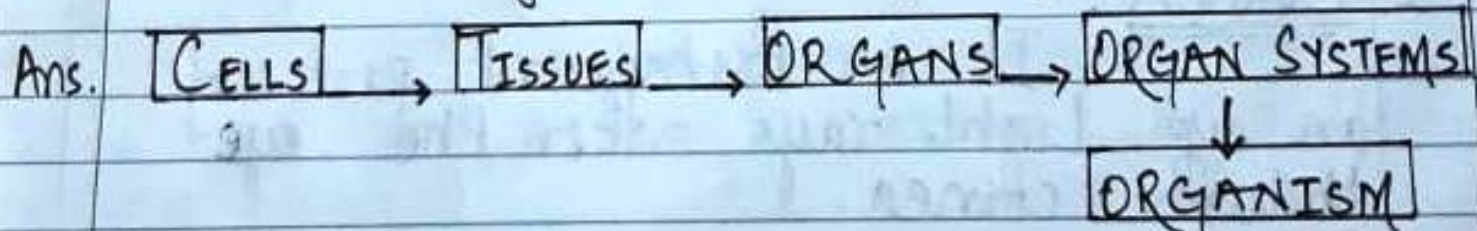
Root system and shoot system are main organ systems of plants.

ORGAN SYSTEM IN ANIMALS:-

Following are main organ systems of animals:-

- a) Digestive system.
- b) Respiratory system.
- c) Circulatory system.
- d) Nervous system.

Q10. What is organization of life?



CHAPTER No. 2

SENSE ORGANS

Q1. What are sense organs?

Ans. SENSE ORGANS:-

Sense organs are special parts of our body that tell us what is going on around us. Our eyes, ears, skin, nose and tongue are our sense organs.

Q2. Explain the structure and function of Human eye.

Ans. THE EYE:-

We see with our eyes.

OUTER PARTS OF EYE:-

The eye is covered with eye lids. Eye lashes keep away the dust particles. Under upper eye lid tear glands open.

MAIN PARTS OF AN EYE:-

Following are main parts of an eye:-

1. CORNEA:-

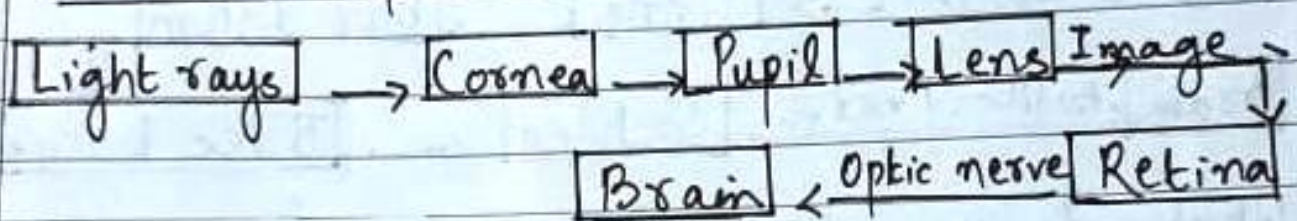
It is transparent part of an eye. Light rays enter the eye through cornea.

2. IRIS:-

It is coloured portion of an eye.

3. PUPIL:- Pupil is a hole in the middle of iris.
4. LENS:- Behind the pupil, lens is present. The lens helps eye to focus light.
5. RETINA:- Retina is light sensitive portion of an eye ball. Image is formed on retina.
6. OPTIC NERVE:- When light hits retina, its cells make nerve signals. Optic nerve take these signals to the brain.

FUNCTIONING OF EYE:



Q3. Explain the structure and function of human ear.

Ans. THE EAR:-

Ear is an organ of hearing. Human ear consists of three parts i.e. Outer ear, Middle ear, Inner ear.

1. OUTER EAR:-

Outer ear consists of "Pinna" and a long narrow tube called "Ear canal".

2. MIDDLE EAR:-

Ear drum connects outer

ear to middle ear. Middle ear has three small bones in the body i.e. Hammer, Anvil and Stirrup.

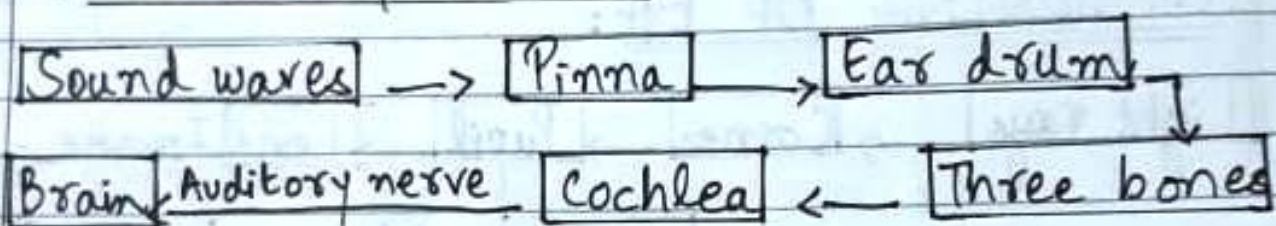
3. INNER EAR:

It is last part of ear. It is filled with a liquid.

COCHLEA:

Cochlea is a coiled structure of inner ear. The Cochlea send signals to brain through auditory nerve.

FUNCTIONING OF EAR:-



Q4. What do you know about skin, nose and tongue?

Ans. THE SKIN:

Skin is the sense organ of touch. Outer layer of skin is pigmented and protects the skin. Inner layer is sensitive part of skin.

THE NOSE:-

It is sense organ of ~~touch~~ smell. It has two openings called Nostrils. Nose has nerve cells to sense smell.

TONGUE :-

It is sense organ of taste. Tongue has taste buds to detect sweet, salty, sour and bitter taste.

- a) Tip of tongue has taste buds to detect sweet taste.
- b) Sides of tongue has taste buds to detect salty and sour taste.
- c) Back of tongue has taste buds to detect bitter taste.

NOTE:

Diagrams related to these questions will be practised in class. (IN-SHA-ALLAH)