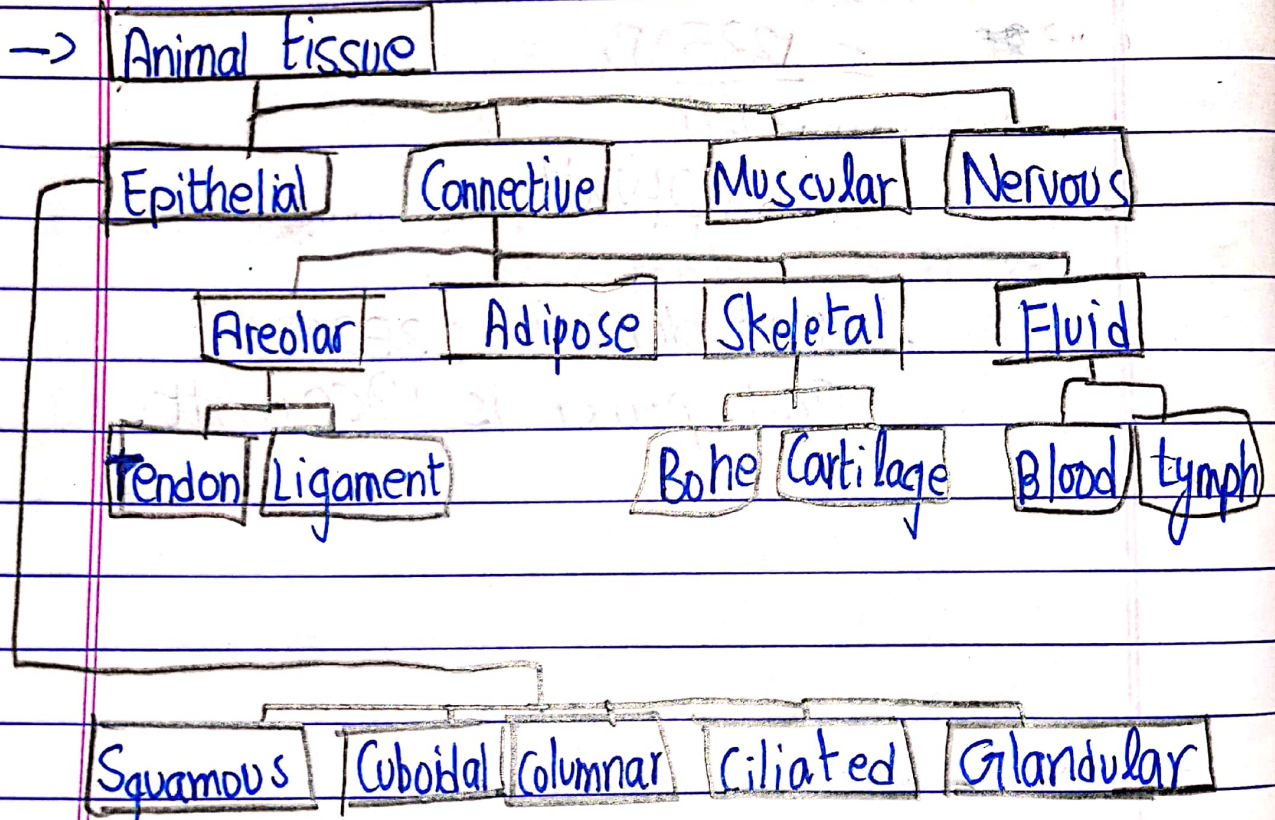


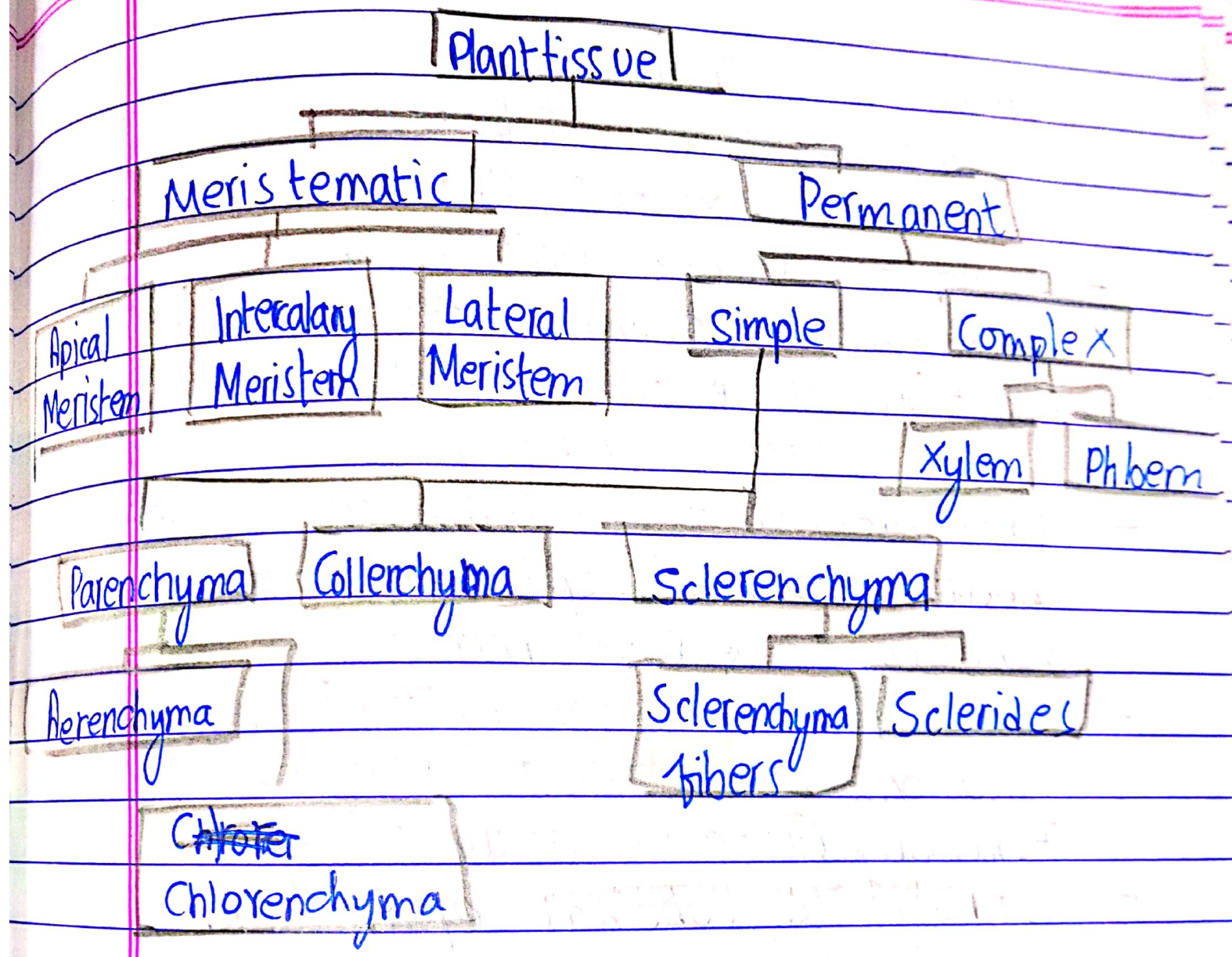
Classwork Cell and Tissues

1. Define the term cell and tissue.

- Cells are the smallest building block of all organisms including plants and animals.
- Tissues are the set ~~of~~ or collection of cells which have common functions.

2. Draw a flowchart of animal tissue and plant tissue.





3. Name the types of epithelial tissue along with their location and function.

→ a.) Pavement epithelium

Location: Lining of skin, lungs, heart, kidneys, oesophagus and blood vessels.

Function: Protection, filtration and making passage for flow of liquid and gases.

b.) Cubical Epithelium

Location: In thyroid gland, terminals of bronchioles, ducts of excretory organs etc.

Function: Protection, Secretion and Germination.

c.) Columnar Epithelium

Location: Found in lining layer of stomach, intestine, etc.

Function: Absorption and secretion.

d.) Glandular Epithelium:

Location: Found in various Endocrine and Exocrine glands.

Function: Secretes various chemicals like enzymes, hormones, sweat, saliva, and other digestive juices.

e) Sensory epithelium

Location: Olfactory epithelium of nose, retina of eye, etc.

Function: It is sensory in function.

4. Name the types of muscular tissue and define each of them.

- a) ~~Cardiac muscle tissue~~ Skeletal Muscle Tissue; Skeletal Muscle Tissue is a muscle tissue which is attached to the bones and is involved in functioning of different parts of body.
- b) Smooth Muscle: Smooth muscle is a type of muscle tissue that is utilized by different systems

for application of pressure to organs and vessel.

c) Cardiac Muscle: It is a muscle tissue found in heart, which enables heart to pump blood throughout the body through the circulatory system.

5.) Draw a well labelled diagram of the following.

a) Squamous epithelial tissue:



Fig: Squamous Epithelial Tissue

b) Cuboidal epithelial Tissue

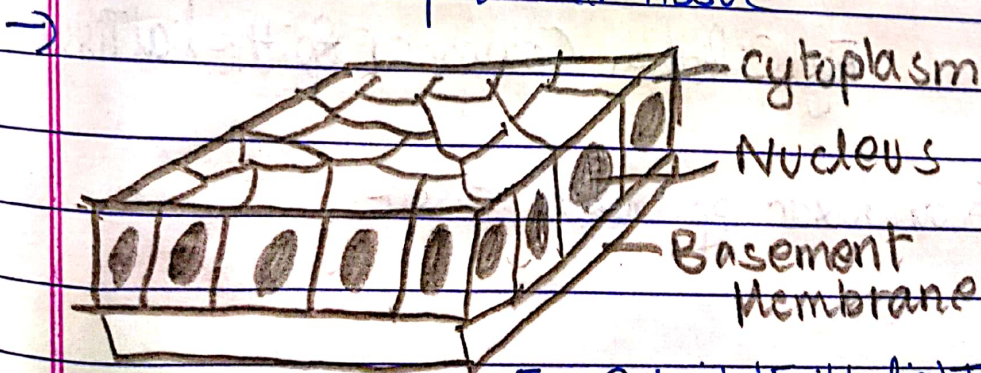


Fig: Cuboidal Epithelial Tissue

c) Columnar Epithelial Tissue

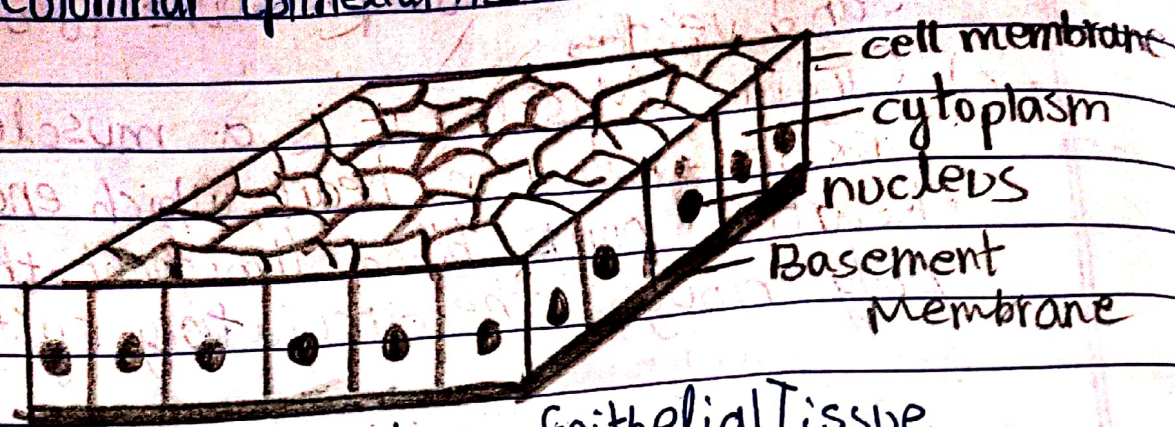


Fig: Columnar Epithelial Tissue

d) Ciliated columnar epithelial tissue

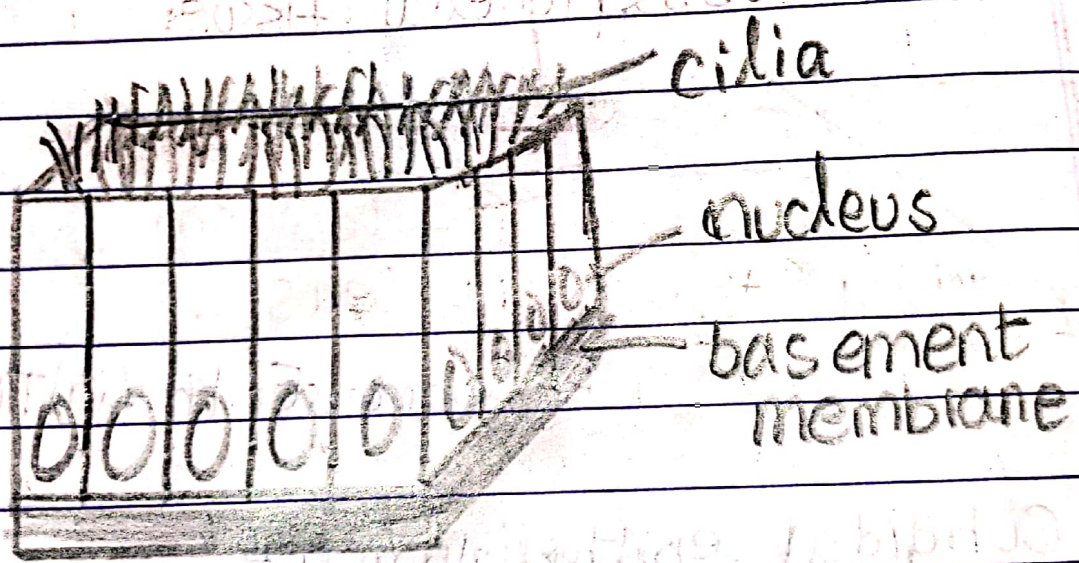


Fig: Ciliated Columnar Epithelial Tissue.

e) Glandular epithelial tissue.

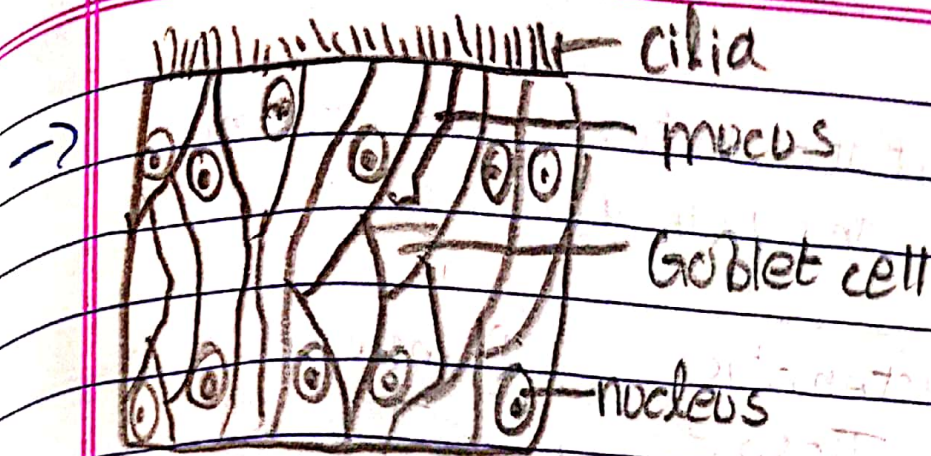


Fig: Glandular Epithelial Tissue

f) Stratified Epithelial Tissue

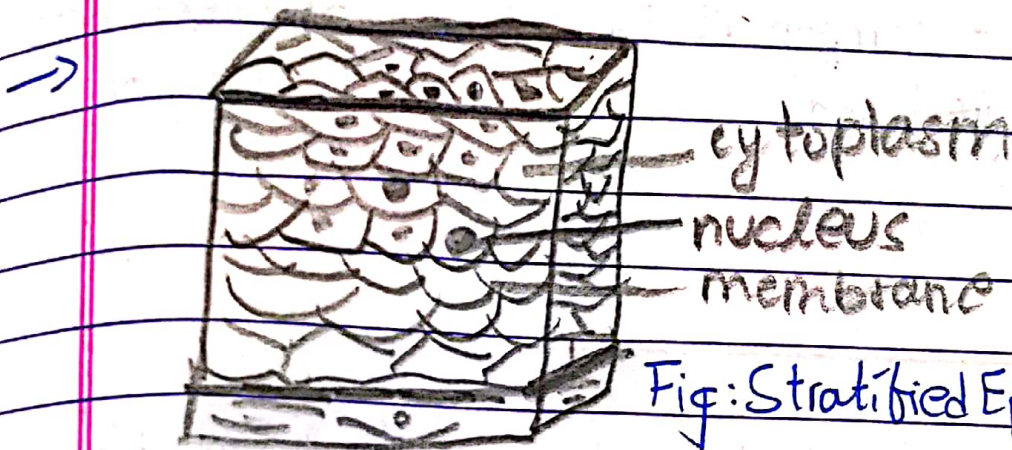


Fig: Stratified Epithelial Tissue

g) Nerve Cell

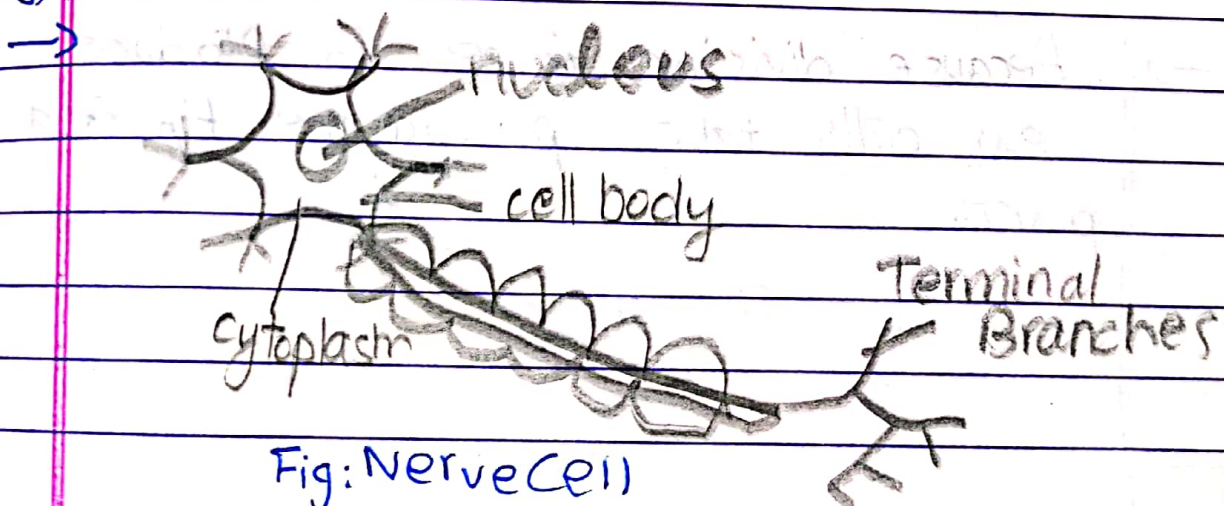


Fig: Nerve Cell

6) Differentiate between meristematic tissue and Permanent tissue.

Meristematic Tissue	Permanent Tissue
- Cell organelles are simple.	- Cell organelles are well developed.
- Its Its component cells are not living.	- Its component cells may be living or dead.

7) Why a plant does not grow its height if its tip is cut-off?

→ .. Because division of cells to produce new cells takes place at the tip of a plant only.

8) Write down the function of xylem and phloem.

→ Xylem: Transports water and minerals from roots to stem and then, to the leaves.

→ Phloem: Transports and distributes food from leaves to other parts of plant.