

CLASS IX PRACTICALS FOR SUMMATIVE ASSESSMENT SA-1

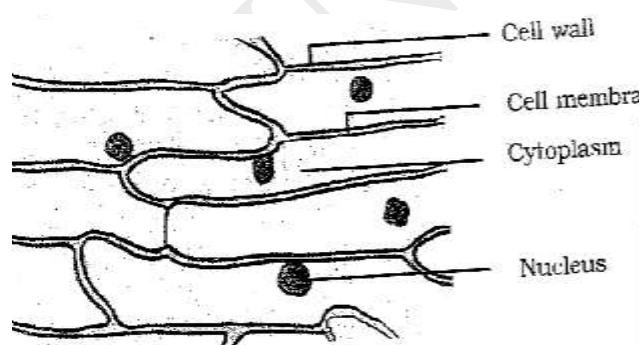
Experiment 5. To prepare stained temporary mounts of (a) onion peel and (b) human cheek cells and to record observations and draw their labeled diagrams.

Materials Required : Onion bulb, slides, coverslips, two watchglasses, spatula toothpick, needle, brush, forceps, razor/blade, compound microscope, blotting paper, Methylene blue (Or Safranin) soln., glycerine and water.

Procedure : (a) Onion Peel

- i. Cut on onion bulb into small pieces.
- ii. Take out on epidermal peel from the inner side of a piece of bulb with the help of forcep.
- iii. Keep this peel in watch glass having some water to avoid dehydration.
- iv. Mix 1 or 2 drops of safranin or methylene blue in a small quantity of water taken is another watch glass.
- v. Transfer the peel into it and leave it for about 3 minutes.
- vi. Dip the peel in water to remove the excess stain and wash it two three times.
- v. Transfer the peel into it and leave it for about 3 minutes.
- vi. Dip the peel in water to remove the excess stain and wash it two three times.
- vii. Take clean slide with a drop of glycerine in the middle.
- viii. Using a brush transfer the washed and stanied peel on to this slide.
- ix. Place a cover slip over it by slowly lowering it with a needle. Avoid the entry of air bubbles.
- x. Remove excess glycerine from the edges of cover slip with the help of a piece of blotting paper.
- xi. Observe the slide under the microscope first in low-power and then in high power.
- xii. Draw the labelled diagram and not the features

Precautions :



1. The folded peel piece should not be selected to study.
2. Always use this brush for transferring the material.
3. Spread the material uniformly in the middle of slide.
4. Remove excess stain and glycerine with the help of blotting paper.
5. While covering with coverslips, avoid the entry of air bubbles.

(b) Human cheek cells :

1. Take a clean tooth-pick or sterilized spatula and scrap gently the inner side of your cheek to get some epithelial cells.

2. Place the cheek scrap (with a brush) in watch glass containing water to clean it.

3. Add a drop of methylene blue extra stain and wait for 2-3 minutes.

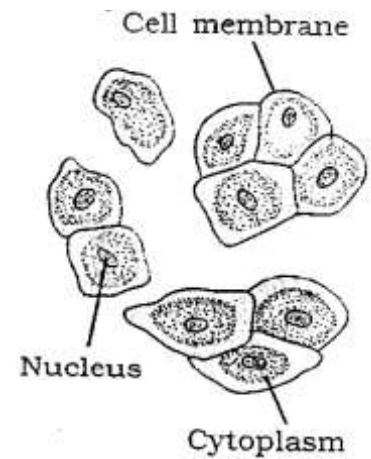
4. From the material remove extra with the help of blotting / filter paper.

5. With the help of brush put this material in the middle of a clean slide and put a drop of glycerine over it.

6. Place a clean cover slip over the glycerine and remove the excess glycerine from the edges of cover slip with the help of a piece of blotting paper.

7. Examine the slide under microscope, first under low power and then under high power.

8. Observe and record the features.



Precaution :

1. Cheek should be scrapped gently to prevent injury.

2. Avoid over staining of the material.

3. Spread the material on the slide to form a thin uniform layer.

4. While mounting the cover slip, avoid the entry of air bubbles.