

## 2. Mature antheridium

→ The mature antheridium has club-shaped body borne on slender stalk.

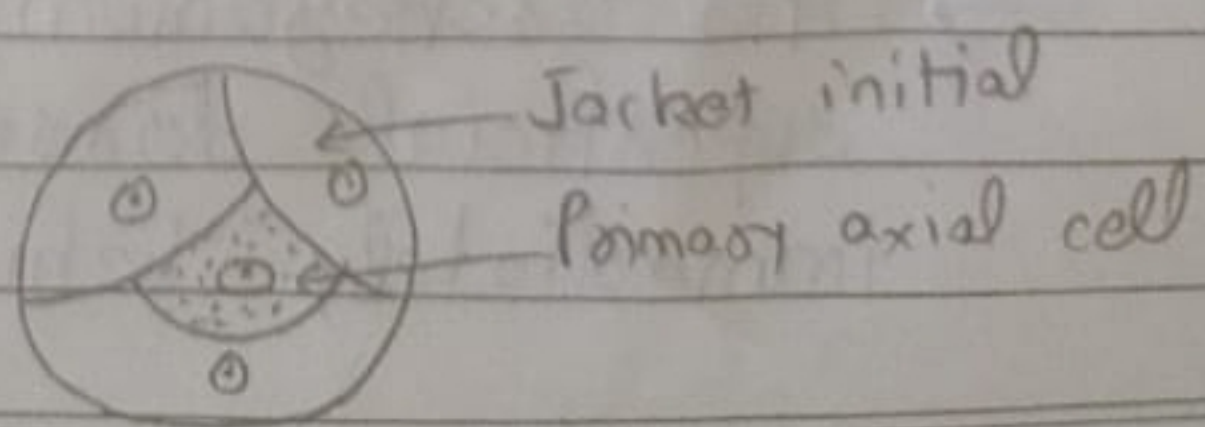
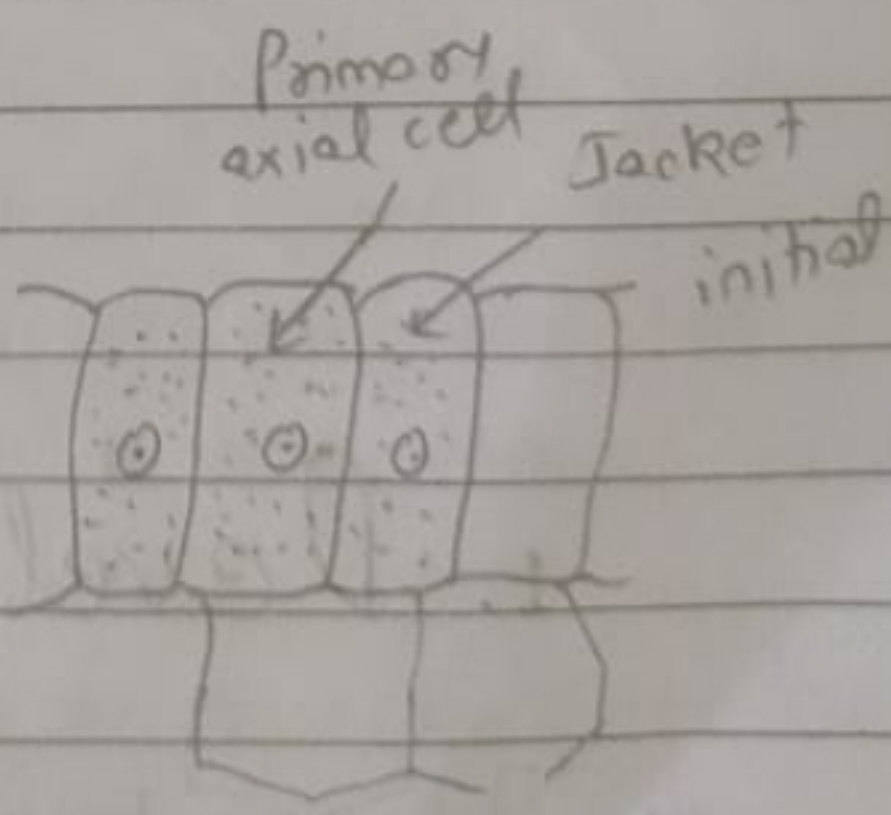
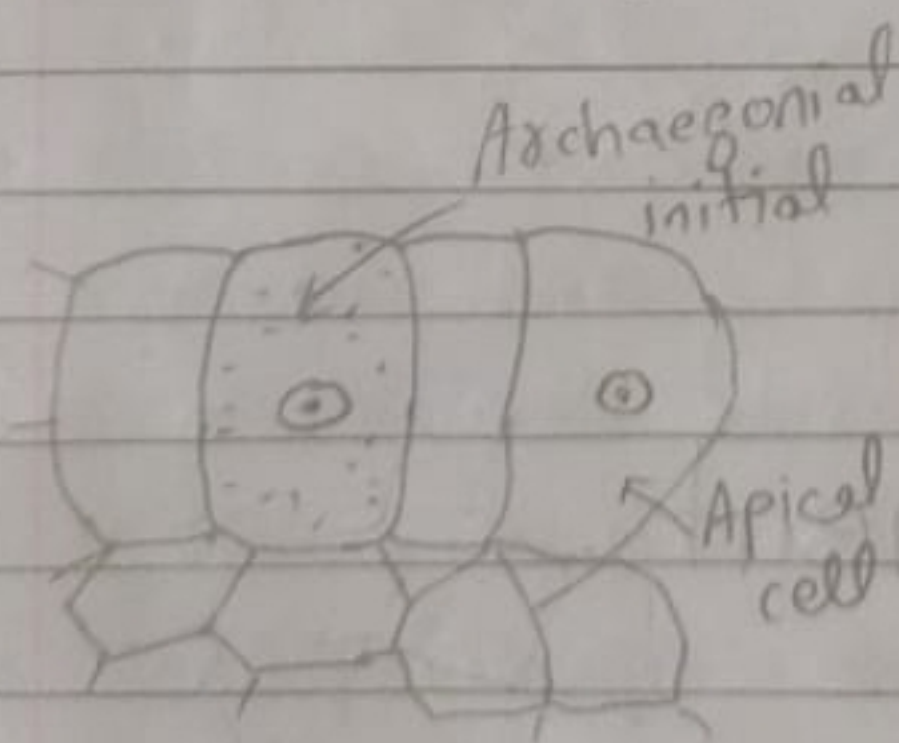
→ The wall of antheridium is composed of single layer of plastid containing polygonal or elongated cells.

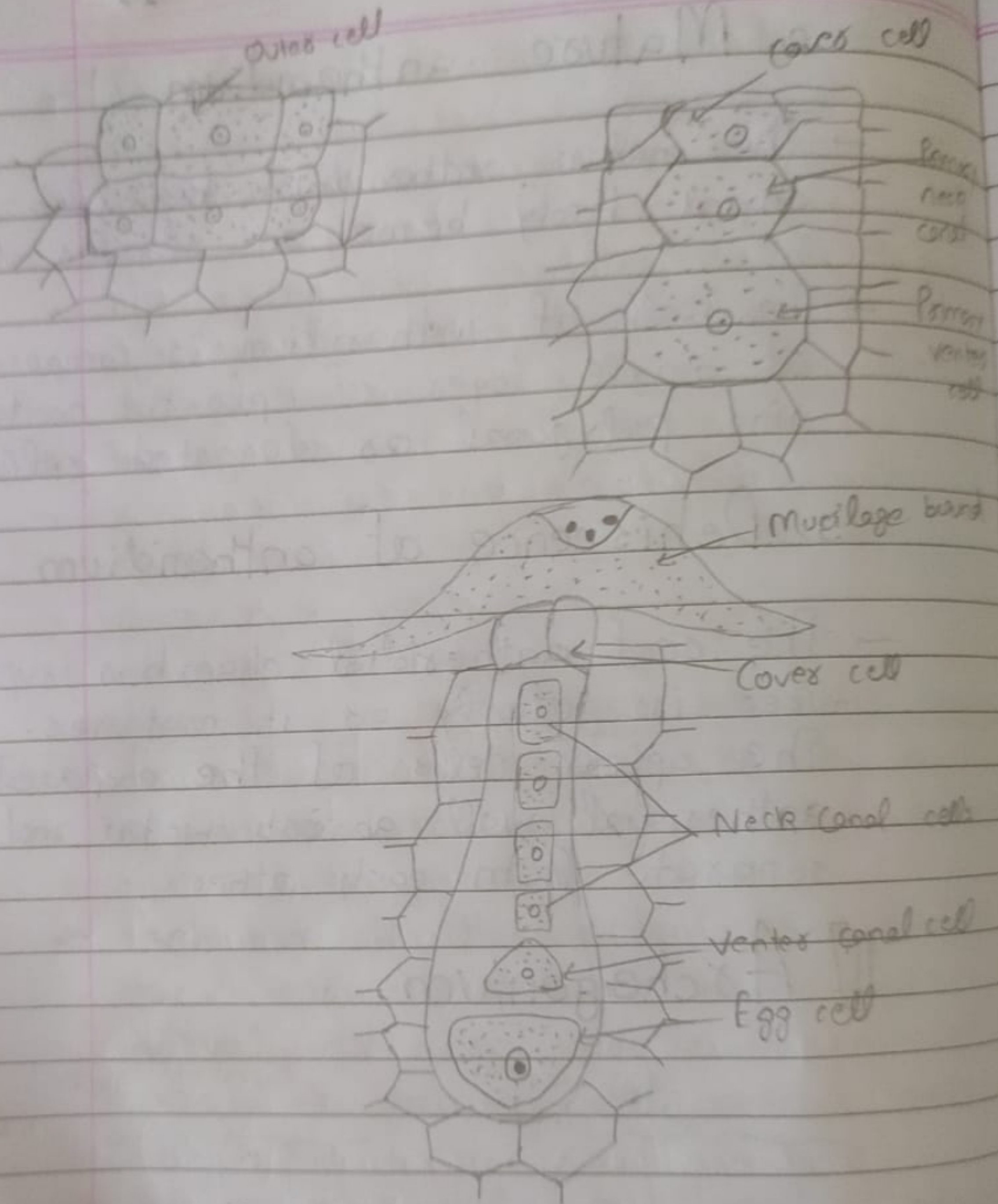
## 3. Dehiscence of antheridium

→ The roof antheridial chamber ruptures irregularly as it matures.

The apical cells of the exposed antheridial wall absorb water and separate from each other.

## II] Archegonium





## 1. Development

→ The archegonium develops from single superficial dorsal cell that lies immediately behind the growing apex

- The archegonial initial divides by transverse wall to form outer primary archegonial cell and inner primary stalk cell.
- The jacket initials divide transversely forming two tiers of three cells. The upper tier divide antichlinally and form six cells.
- The latter undergo repeated divisions and form neck of archegonium which is six vertical rows of sterile neck.
- The lower daughter cell functions as primary venter cell and upper cell divides into upper cover initial and lower primary neck canal cell.
- The cover initials divide by two vertical walls at right angles to each other and form four cover cells.
- The primary venter cell divides by a transverse wall to form upper small venter cell and lower large egg cell.

## 2. Mature archegonium

→ The mature archegonium is embedded in dorsal surface of gametophyte, but covers cells protrude slightly above surface of thallus.

→ The lower swollen venter contains a large egg and relatively small venter cell.

### III] Fertilization

→ Prior to fertilization cover cell present at tip of archegonium separate.

→ The neck canal cells and venter canal cell disintegrate at same time forming mucilagenous tissue.

→ Freely swimming antherozoids are attracted towards the neck of the archegonium by the chemicals present at the mucilage.