

Q 6. Give characters of female cone of Pinus?

Ans. The female cone of Pinus consists of megasporangia (ovules) in which megaspores are produced.

Q 7. What do you mean by carpellary and ovuliferous scales of Pinus?

Ans. In female cone of Pinus the upper larger scales are called ovuliferous scales, which bear ovules. The lower scales are carpellary scales.

ACTIVITY 11 — (Chromatography)

Q 1. What is chromatography?

Ans. Chromatography is a technique for the separation of different pigments of leaf.

Q 2. How many types of pigments are generally found in plants?

Ans. In plants generally four types of pigments are found

Carotene - or brown orange colour

Xanthophyll - yellow colour

Chlorophyll a — Blue green

Chlorophyll b — Yellow green

Q 3. What is the function of plant?

Ans. The function of plant is photosynthesis i.e. manufacturing of food.

Q 4. What is paper chromatography?

Ans. The process of separation of pigments by using the chromatography paper is called paper chromatography.

Q 5. How these pigments are separated by chromatography?

Ans. The pigments move on paper by the solvent, which is used in chromatography. These pigments show particular spot on the paper which is properly identified.

ACTIVITY 12 — (Plasmolysis, Deplasmolysis)

Q 1. What do you mean by hypertonic solution?

Ans. The solution which has more concentration of solute than cell sap is called hypertonic solution.

Q 2. Define solution?

Ans. When solute is dissolved in a solvent (water), it is called solution.

Q 3. What is solute?

Ans. The substance which is dissolved in a solvent is called solute.