

EVS, Class - 5
Chapter - 1
PLANTS

Life cycle → It is defined as journey of organism from birth till death.

Extinct → Now not present on the Earth.

Reproduction is necessary so plant species do not become extinct.

Most plants reproduce from seeds.

Some plants like potato can grow from buds, while Bryophyllum grows by margin from leaves.

⇒ PARTS OF SEED

It has - embryo, cotyledons and seed coat.

Seed coat protects embryo from injury and drying out.

Embryo is baby plant with tiny root & tiny shoot.

Cotyledons have store of nutrients for baby plant.

Seeds with 2 cotyledons are called dicotyledons / dicot, while with 1 cotyledon is monocot.

Dicot → Beans and peas

Monocot → Wheat, rice.

⇒

Germination

The process of growth of seed into young plant or seedling in presence of air, water and temperature is called as germination.

Steps of germination :-

Seeds germinate in presence of air, water and temperature. Roots appear.

Shoot appears and cotyledons provide food.

Peas appear and start making food. Seed ~~leaves~~ coat falls as cotyledons have been exhausted.

Young plant grows to adult.

⇒ Flowers in reproduction
Flowers have male and female reproductive organs.

Male reproductive organ is stamen
It has stick called filament and cap called anther that has pollen grains.

Female reproductive organ is carpel
It has stigma, style & ovary and ovule.

Pollen grains are dusty substances and have male reproductive parts.

Ovule contains female reproductive organ called egg.

⇒

Pollination

It is transfer of pollen grains from anther to stigma of same species. It is done by wind, or animals.

Pollination between flowers of different plants is cross pollination.

Pollination between flowers of same plant ~~are~~ is self pollination.

An insect that sucks nectar gets covered with pollen and can transfer to another flower.

⇒

Fertilisation

It is the process of fusing of male reproductive cell with female reproductive cell.

Egg develops to embryo

Ovule develops to seed

Ovary develops to fruit.

Seed dispersal is movement of seeds from one place to another. It prevents overcrowding and competition with one another, parent plant for sunlight, rainfall

Dispersal by wind

Seeds that are dispersed by wind are small, light and have wing like structures.

Eg: Dandelion

Dispersal by water

Seeds dispersed by water have spongy -ness that allows them to float and waterproof covering.

Eg: Coconut.

Dispersal by explosive action or splitting

These fruits have capsules or pods that rupture to release seeds.

Eg: Lady finger

Dispersal by animals

Plants with fleshy and edible fruits have tiny seeds eaten by birds and animals. They are swallowed and passed to surroundings.

Eg: Dates, tomatoes