

CLASS 8**SUBJECT BIOLOGY****CHAPTER - 4 THE FLOWER**

Teacher - Ms Nidhi

This lesson is for Class 8 for the subject of Biology, Topic - Structure of flower which is covered in Chapter 4 'The flower' starting on Page No 33 of your text book titled Concise Biology Selina Publications.

Dear children before we start with the structure of a flower let us recall a few characteristics of a flower -

- (i) Flower is the most attractive part of a plant
- ii) Flower attracts the insects for pollination

ii) Flower is the reproductive organ of the plant. Let me elaborate it for you - The primary purpose of a flower is 'reproduction' of a plant. It helps the plant to produce its offsprings and to make its new generation. Hence we can say that the flower is the reproductive organ of the plant.

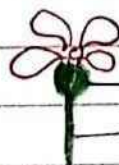
Now let us define a flower -

Flower is a specialised shoot (or stem) in which the leaves are modified (or changed) into various floral structures (like petals, sepals, carpels, stamens etc.).

Now let us discuss the structure of a typical 'Flower'. Various parts of a flower are -

- (i) Pedicel - is the stalk of the flower that gives support to the flower.

Few flowers are without a stalk. Such flowers are called sessile flowers.



Thalamus

Pedicel

2) Thalamus or Receptacle - The tip of the flower stalk is expanded to form a 'cup-shaped' structure called thalamus or receptacle. Further the floral parts are borne on a flower in four concentric rings or whorls as follows -

- (i) First whorl - Sepals
- (ii) Second whorl - Petals
- (iii) Third whorl - Stamens
- (iv) Fourth whorl - Carpels

Now let us discuss these four whorls of a flower in detail -

(i) First whorl - sepals

Starting from the outside, the outer most whorl of a flower consists of sepals. Sepals are green coloured leaf like structure of a flower.

function - (a) Sepals protect the flower during bud stage.

(b) Being green in colour sepals help to perform photosynthesis.

All sepals are collectively called as Calyx.

(ii) Second whorl - Petals

Second whorl of a flower consists of large brightly coloured petals. You must have observed flowers of various colours like - red, pink, yellow etc. These coloured parts of flowers are the petals.

function - Petals attract insects for pollination.

All petals collectively are termed as 'Corolla'.

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Before going further in the chapter let us take a short break. Answer the following questions during the break -

- Q1) Name the 4 whorls of a flower.
Q2) Name the coloured part of a flower that forms the 2nd whorl of a flower.
Q3) Name the term given to - all the sepals taken together

You may pause the lesson for 3 min break
Break is over. Listen to the correct answers.

A1) 4 whorls of a flower are -

- a) Sepals c) Stamens
b) Petals d) Carpels

A2) Petals form the coloured part of a flower

A3) Calyx is the collective term for sepals

Now let us resume the topic with discussion of - Stamens - Third whorl

Stamens are the male part of a flower. All the stamens taken together in a flower are termed as Androecium. Let us discuss the structure of a stamen.

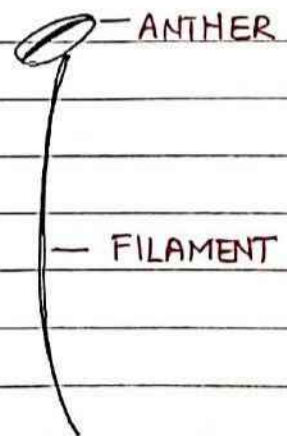
Stamen consists of 2 parts -

(i) Filament - is a long tubular thread like process projecting out of a flower.

(ii) Anther - Filament ends in a bilobed tip called the anther (bilobed means having 2 lobes)

Male gametes (reproductive cells) i.e. pollen grains are produced in the anthers which further help in reproduction

function - Stamens produce pollen grains for reproduction.



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4) Fourth whorl - Carpel

Last whorl which is the inner most in a flower is the centrally placed female p. of a flower called the pistil or the carpel. carpels are collectively termed as Gynoecium.

A Carpel consists of 3 parts =

(i) Stigma - The uppermost expanded tip of carpel

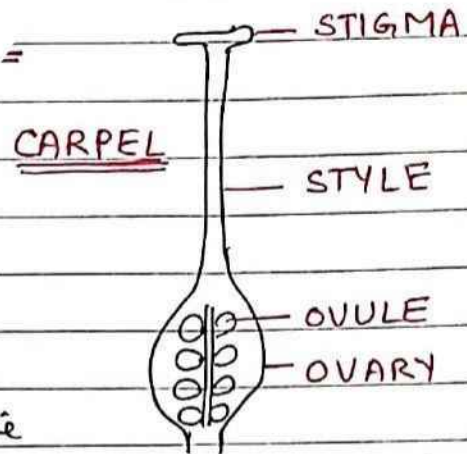
(ii) Style - A long tubular structure below the stigma

(iii) Ovary - A swollen structure present at the base of style

Female gametes [or reproductive

cells] i.e. ovules are produced in ovary which further helps in reproduction.

function - Carpels produce ovules for reproduction



Dear students with this I am ending today's discussion. Kindly go through the given explanation and with reference to the detailed explanation you are required to answer the following home assignment questions -

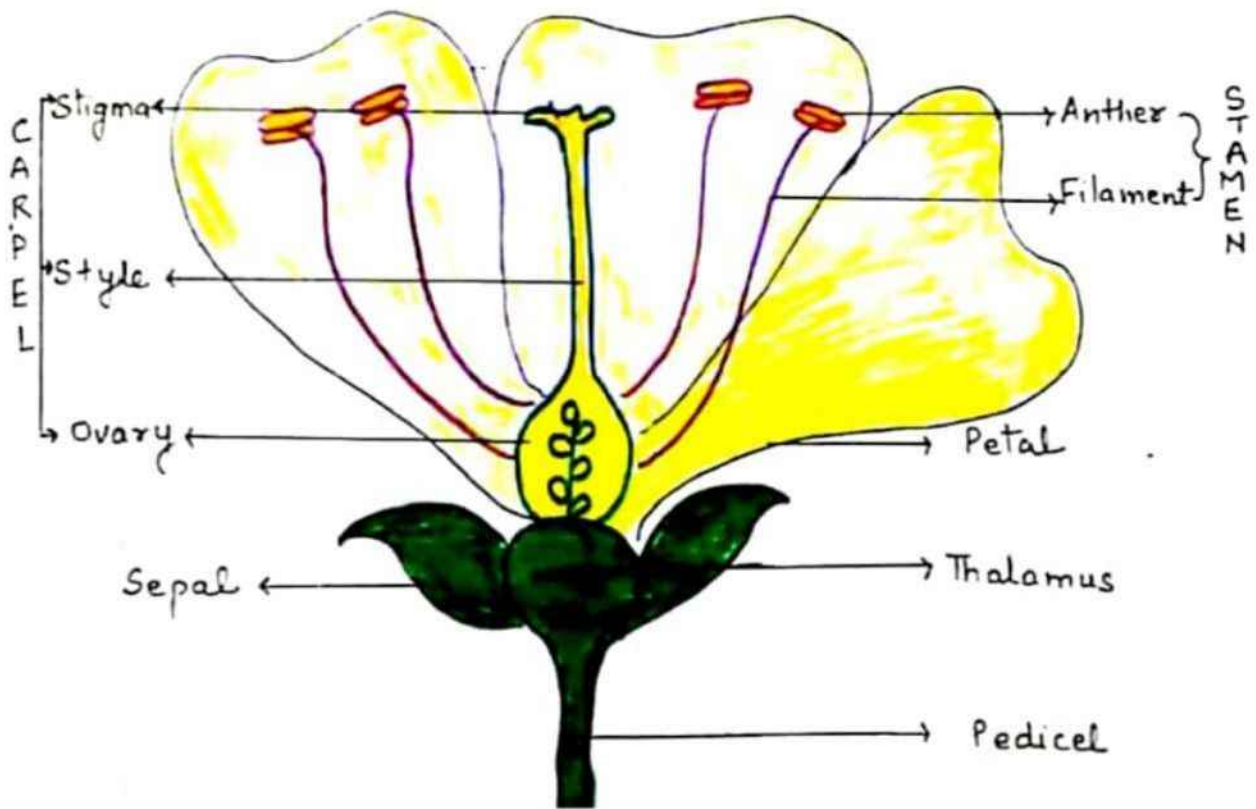
Home assignment

Q-1 Draw a well labelled diagram of
a) a typical - 'structure of a flower'.

Q2. Answer the following Review questions given at the back of the Chapter 4.

C Short Answer type

Q No 3



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Lily flower (*Lilium*) - A sample flower with its various parts

