# CLASS V (A+B+C+D) SUBJECT:- SCIENCE CHAPTER 4 – POLLINATION

### **Exercises (Answers)**

### A. Tick the correct option:-

1. iii. Pedicel 2.i. thalamus 3.ii. calyx 4.i.style 5.i. anther 6.iii. Hibiscus

### B. Fill in the blanks:-

1. Sepals 2. Ovules 3. Stigma 4. Ovary 5. Seed

## C. Write 'T' for True and 'F' for False:-

1. T 2. F 3. F 4. T 5. T 6. T

## D. Give two examples each:-

- 1. <u>Watermelon</u> Pumpkin
- 2. <u>Hibiscus</u> <u>Rose</u>
- 3. <u>Peanut</u> Orchid
- 4. <u>Apple</u>
- E. Name the following:-
- 1. Calyx 2. Corolla 3. Androecium 4. Gynoecium 5. Bisexual flower

## F. Differentiate between:-

## 1. Bisexual flowers and monosexual flowers.

**Tulips** 

## **Bisexual flowers**

Some flowers have both stamen (male reproductive part) and pistil (female reproductive part) are called **bisexual flowers.** 

Examples of bisexual flowers are – Hibiscus, Rose, Lily etc.

### **Monosexual flowers**

Some flowers have only one reproductive part either stamen (male reproductive part) or pistil (female reproductive part) are called **monosexual flowers.** 

Examples of monosexual flowers are – Watermelon, Pumpkin, Cucumber etc.

# 2. Self pollination and Cross pollination

# **Self Pollination**

- Transfer of pollen grains from anther of one flower to the stigma of the same flower or of another flower present on the same plant is called self pollination.

- This type of pollination does not require carriers such as bees and butterflies.
- Self pollination is seen in peanuts, orchids and peas.

# **Cross Pollination**

- Transfer of pollen grains from anther of one flower to the stigma of another flower present on a different plant of the same kind is called cross pollination.

- This type of pollination requires carriers such as insects, bird's, wind and water.
- Cross pollination is seen in apples, maples and tulips.

# G. Answer the following:-

Ans1. A flower is generally supported by a part of stem (or stalk) is called pedicel.

**Ans2**. Draw the diagram of 'Parts of Flower' from book, page number 52. And also label it as given in book.

**Ans3**. Petals produce different scents to attract insects towards the flower. These insects then help in the process of pollination.

**Ans4**. Parts of androecium are – Filament and Anther.

Parts of gynoecium are – Stigma, style and ovary.

Ans5. The male gametes are present in pollen grains placed inside the anther.

The female gametes are present in ovules placed inside the ovary.

**Ans6**. (i) *Stamen* – Draw the diagram of 'Androecium' from book, page number 53. And also label it as given in book.

(ii) *Pistil* – Draw the diagram of '**Gynoecium'** from book, page number 53. And also label it as given in book.

Ans7. The transfer of pollen grains from the anther to the stigma of flowers is called **pollination**.

# **Process of Pollination**

The male gametes are present in the pollen grains placed inside the anther. When the anther matures, they split open and pollen grains are set free. The pollen grains fall on female gamete stigma and reach the ovule which is present in the ovary. In this way the male and female gametes come in contact with each other for reproduction.

#### QUESTIONNAIRE

Class V (A+B+C+D) Subject:- Science Chapter 4 – Pollination

#### A. Fill in the blanks

- 1. A flower has \_\_\_\_\_ main parts.
- 2. \_\_\_\_\_ is the outermost whorl of a flower.
- 3. \_\_\_\_\_ produce different scents to attract insects.
- 4. The long, slender stalk of the stamen \_\_\_\_\_.
- 5. Anther produces dust like particles called \_\_\_\_\_.
- 6. The other name of androecium \_\_\_\_\_.
- 7. Tulips is an example of \_\_\_\_\_ pollination.
- 8. Lily is an example of \_\_\_\_\_ flowers.
- 9. The other name of gynoecium \_\_\_\_\_.
- 10. Pollination is essential for the production of \_\_\_\_\_.

#### B. Answer the following questions:-

- 1. Write different parts of flowers.
- 2. What is bisexual flower?
- 3. What is self pollination?
- 4. Write difference between bisexual and monosexual flowers.

------xxxxxxxxxxxxx