

1. Answer the following questions.

i. What is germination?

ii. What is fertilization?

iii. Brightly coloured petals attract insect pollinators. How are the flowers that do not have brightly coloured petals, like grasses, pollinated?

iv. What is a flower and what is its function?

2. Answer the following question in detail.

i. Define the following terms:

a. Cross pollination:

b. Self-pollination:

ii. How is a flower fertilized? Explain in steps starting from the landing of pollen onto the stigma, to the formation of seeds and fruits?

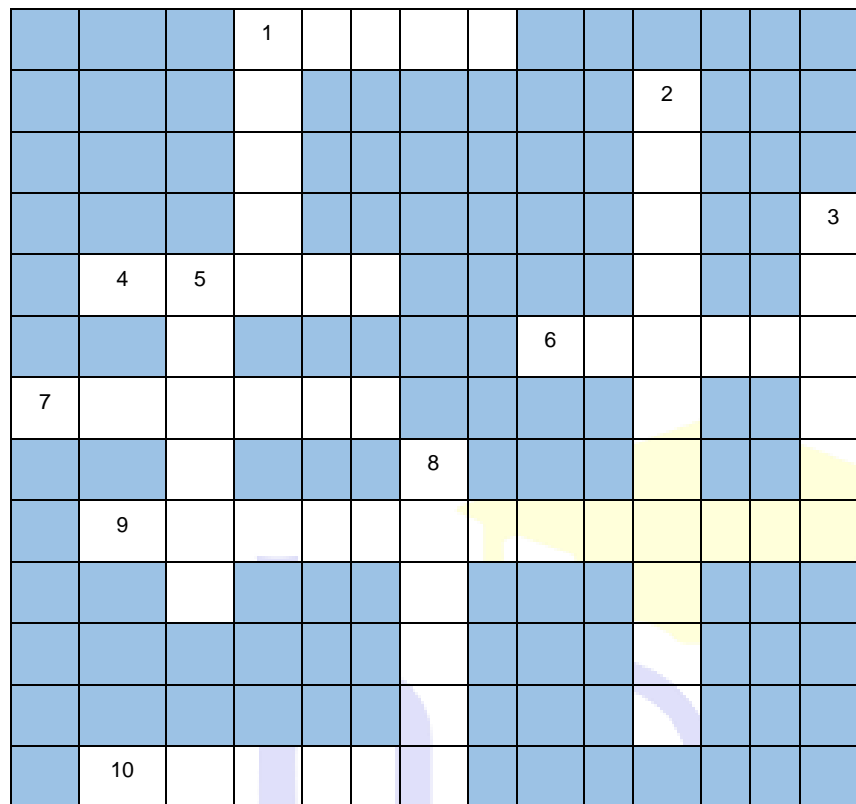
3. Tick the right option.

- i. Which part of the flower is sticky and traps pollen grains?**
 - a. petals
 - b. style
 - c. stigma
 - d. ovary
- ii. Plants need following conditions to grow:**
 - a. fresh air
 - b. water
 - c. sunlight
 - d. all of these
- iii. Which of the following parts of a plant attract insects and birds to the flower?**
 - a. sepal
 - b. stigma
 - c. petals
 - d. stalk
- iv. If the pollen of a flower falls onto the stigma of the same flower, it is called:**
 - a. self-pollination
 - b. cross-pollination
 - c. pollination by wind
 - d. pollinator pollination
- v. The stamens consists of:**
 - a. anther and filament
 - b. pollen and pistil
 - c. calyx and anther
 - d. stigma and style

4. Write “T” for the true and “F” for the false statement.

- i. All the sepals of a flower are together called calyx.
- ii. The swollen part of the carpel is called stigma.
- iii. Gram and chickpeas are dicot seeds.
- iv. Seed leaves or cotyledons contain stored food for the new plant.
- v. Underground stem that contains a lot of stored food is called tuber.

5. Crosswords



Across:

Down:

- 1. A long hollow tube that connects the stigma to the ovary.
- 4. A group of sepals.
- 6. The top of the pistil which catches the pollen grains.
- 7. The bright scented parts of a flower that attract insects and birds.
- 9. The process in which pollen grains combine with the ovules in the ovary of a plant.
- 10. The sweet juice produced by some flowers.

- 1. A green leaf like structure that protects the bud in it.
- 2. The process by which pollen grains are transferred from anther to stigma.
- 3. The part of a flower which consists of the anther and filament.
- 5. It is a structure at the top of the filament and contains pollen grains.
- 8. The part of the plant that helps the plant to make copies of itself.

6. Words Search

Find the following word in the words search.

ANTHER	LEAF	POLLINATION	GERMINATION
STEM	OVARY	PETAL	POLLEN
SEED	WATER	MOSS	FERN
STYLE	SUNLIGHT	BEE	CHICKPEA
STAMEN	STIGMA		

D	G	K	J	T	A	R	S	I	O	L	L	R	C
P	E	T	A	L	N	P	E	M	F	D	J	G	H
S	S	T	E	M	T	C	L	W	A	T	E	R	S
N	P	A	I	E	H	R	O	R	F	S	C	B	U
O	H	M	M	A	E	P	L	E	E	L	H	R	N
I	A	O	V	A	R	Y	R	O	R	E	I	G	L
T	D	S	B	D	A	E	N	G	N	A	C	H	I
A	L	S	T	I	G	M	A	N	A	F	K	S	G
N	N	D	S	T	E	M	P	E	A	K	P	T	H
I	I	S	T	A	N	F	G	M	J	K	E	Y	T
L	N	E	L	L	O	P	L	A	V	P	A	L	X
L	G	E	R	M	I	N	A	T	I	O	N	E	E
O	Q	W	V	L	M	U	T	S	X	N	Y	A	E
P	R	W	F	K	D	E	E	S	R	Z	W	Q	B

7. Jumbled Words

- | | |
|----------------------|--------------------------|
| i. Lowref _____ | i. Mentas _____ |
| ii. Lastep _____ | ii. Liptis _____ |
| iii. Mentilaf _____ | iii. retflizationi _____ |
| iv. Tenhear _____ | iv. Matgis _____ |
| v. Nationillop _____ | v. Oryav _____ |

8. Columns

Match the column A with column B.

Column A

Column B

- | | |
|----------------------------------------------------------------------|-----------------------------------------|
| The falling of the pollen grains onto the stigma of the same flower. | <input type="radio"/> Cotyledon |
| A leaf-like structure found inside a seed | <input type="radio"/> Nectar |
| A sweet juice produced by some flowers to attract pollinators | <input type="radio"/> Cross-pollination |
| The falling of pollen grains on to the stigma of another flower. | <input type="radio"/> Self-pollination |

9. Fill in the blanks using the given words.

anther	style	nectar	stigma	insects	pollination	sepals
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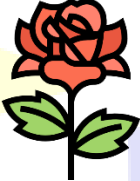
- i. The transfer of pollen grain from anther to stigma is known as _____.
- ii. The leaf-like structure at the base of the flower, which protect the flower when it is in a bud are called _____.
- iii. The top part of the pistil, which is sticky and traps pollen, is called the _____.
- iv. The long hollow tube in a flower's structure that connects the stigma to the ovary is called the _____.
- v. Plants that have bright, scented flowers are pollinated by _____.
- vi. The structure at the top of the filament, which contains pollen grains, is called _____.
- vii. The sweet juice produced by some flowers to attract insects is called _____.

10. Label the diagram.



11. Drag and Drop

Look at the pictures and write their names in the relevant column.

				
Gram seeds	Bean	Wheat	Rice	Peas
				
Maize	Grass	Barley	Mango	Rose

Monocot

Dicot

12. Comprehension

Pollination is a crucial process in the reproduction of flowering plants, where pollen grains are transferred from the male reproductive organs (anther) to the female reproductive organs (pistil) stigma of flowers. There are primarily two types of pollination: self-pollination and cross-pollination.

i. What is pollination?

ii. Write the names of male and female reproductive organs.

iii. What are the two types of pollination?
