

BIOLOGY

BOOKS - ICSE

THE FLOWER

Exercises Tick The Most Appropriate Answer

1. Flowers are generally attached to the stem through a stalk called the

A. petiole.	
B. filament.	
C. pedicel.	
D. plumule.	
Answer:	
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2. The calyx consists of	

- B. stamens.
- C. anthers.
- D. petals.



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3. Which of the following consists of petals that are usually large, scented and brightly coloured?

- A. plumule
- B. petiole
- C. radicle
- D. corolla



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4. Which of the following contains small, round egg-like structures called ovules?

- A. corolla
- B. ovary
- C. androecium
- D. plumule



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5. Which part of a flower gives rise to the seeds?

B. ovary
C. ovules
D. stigma
Answer:
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6. The gynoecium consists of
A. stigma and anthers.

A. pollen grains

- B. anthers and filaments.
- C. stigma, pollen grains and ovary.
- D. stigma, style and ovary.



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Exercises Fill In The Blanks

1. The_____is the outermost whorl of a flower.



2. Plants with brightly coloured flowers are usually pollinated by



3. ____contains male reproductive units called stamens.



4. The anther consists of fine particles called which take part in reproduction.



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5. Transfer of pollen grain from anther to stigma of another flower of the same plant is called as



1. Match the following columns

- 1. part of the flower that produces pollen grains
- 2. green leaf-like structure protecting the inner parts of the flower
- 3. seeds such as rice and wheat, which have only one cotyledon
- 4. fusion of the male reproductive cell with the egg cell
- 5. parts of a flower that develops into seeds
- 6. the outer thin and leathery part of a seed

- a. petiole
- b. anther
- c. ovules
- d. calyx
- e. fertilization
- f. monocot seeds
- g. epicarp



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Exercises Find The Odd One Out Give Reasons

1. sunflower, hibiscus, pea, grass



2. rose, marigold, vallisneria, hibiscus



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3. leaf, stigma, style, ovary



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Exercises State The Agents Of Pollination For Each Of The Following

1. State the agents of pollination for the following .

silk cotton tree



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2. State the agents of pollination for the following .

Rice



3. State the agents of pollination for the following .

Rafflesia



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4. State the agents of pollination for the following .

Maize



5. State the agents of pollination for the following.



Jasmine

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6. State the agents of pollination for the following.

Hydrilla



Exercises Differentiate Between

1. Differentiate between androecium and gynoecium.



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2. complete and incomplete flowers.



3. cross pollination and self pollination.



4. Differentiate between wind-pollinated flowers and insect-pollinated flowers.



Exercises Answer The Following In Short

1. List the main parts of a flower.



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2. Write one function of sepals.



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3. What are pollen grains? Where are they produced?



4. why are pollen grains produced in large quantity in wind -pollinated flowers?



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5. Define pollination.



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6. What is fertillization?



Exercises Answer The Following In Detail

1. Explain the different parts of a carpel.



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2. State four features of flowers pollinated by insects.



3. Describe the process of fertilization with a well-labelled diagram.



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4. What is a fruit? State its function.



5. What is germination? List the conditions necessary for germination.



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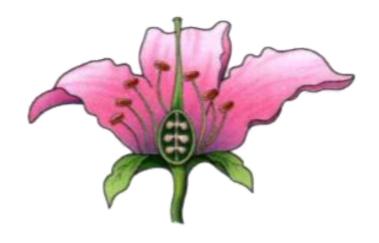
6. Differentiate between epigeal and hypogeal germination.





1. Label the following parts in the given diagram.

thalamus , style , stigma , sepals , petals , stamens





1. Wind-pollinated flowers produce light and dry pollen grains. Why?



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2. Insect-pollinated flowers have brightly coloured petals and have sticky pollen grains.
Why?



3. A tomato and cucumber are fruits. Why?



Check Your Progress True Or False

1. The four whorls of a typical flower arise from the tip of the pedicel.



2. Anther, style and stigma are the parts of a carpel.



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3. A stamen has a long stalk called style.



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4. The transfer of the pollen grains from the anther to the stigma of a flower is called

fertilization. **Watch Video Solution** 5. Most insect-pollinated flowers produce nectar. **Watch Video Solution Test Yourself Multiple Choice Questions** 1. The carpel consists of

B. Style, stigma, ovary C. Ovary, anther female gamete D. Ovary stigma, anther **Answer: Watch Video Solution** 2. Pollen grains are product in A. Flower

A. Anthers and filaments

- B. Ovaries
- C. Anthers
- D. Fruits



- **3.** Calxy consists of
 - A. Stamens
 - B. Petals

- C. Sepals
- D. Gynoecium



- **4.** Flowers having both male and female reproductive parts are called
 - A. Bisexual
 - B. Complete

- C. Unisexual
- D. Incomplete



- **5.** Seeds are produced from the
 - A. Ovules
 - B. Ovary
 - C. Stigma

D. Pollen grains

Answer:



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6. Conditions necessary for seed germination are

A. water, oxygen and suitable temperature

B. water and oxygen

C. water and suitable temperature

D. oxygen and warmth

Answer:



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7. Transfer of pollen grains from the ripe anther to the stigma is termed

A. pollination

B. fertilisation

C. reproduction

D. none of these

Answer:



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8. A seed consists of

A. embryo

B. seed coat, embryo and cotyledons

C. embryo and seed coat

D. seed coat and endospe



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- 9. An embryo of a seed consists of
 - A. plumule
 - B. radicle, plumule and cotyledons
 - C. plumule and radicle
 - D. radicle and cotyledons

Answer:



Test Yourself Fill In The Blanks

1. The four whorls of a flower are



2. Pollen grains are produced in _____



3. The ovary contains
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4. The root system arises from _____ in the embryo.



5. Ovules grow into _____ and ovaries into after fertilisation.



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6. During germination, plumule gives rise to the _____ and radicle gives rise to the



7. Fruit is a ovary.
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8. A mature seed consists of
and
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9. In bean seed, germination is
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10. Name the following:

Three conditions necessary for germination of a seed.



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Test Yourself Answer The Following Questions

1. Why is flower important to a plant? Give its functions.



2. Name the different parts of a flower from outside to the centre.



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3. Name the parts of a pistil.



4. Name the parts of a stamen.



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5. Draw a labelled diagram of complete flower.



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6. Define the following terms and also give two examples in each case:

(i) Complete flower



7. Define the following terms and also give two examples in each case:

(ii) Bisexual flower



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8. Define the following terms and also give two examples in each case:

Incomplete flower





9. Define the following terms and also give two examples in each case:

Unisexual flower



Test Yourself Find The Odd One Out Give Reason In Support Of Your Answer

1. Style, ovary, filament, stigma



2. Find the odd one out:

Root, petals, sepals, ovary



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Test Yourself

1. Find the odd one out, giving reason:

cross pollination, self pollination, water

\pollination, wind pollination. **Watch Video Solution** 2. Differentiate between epigeal and hypogeal germination. **Watch Video Solution** 3. Differentiate between the following: Dicot seed and Monocot seed **Watch Video Solution**

4. Differentiate between the following:

Seed coat and Embryo



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5. EMBRYO



6. Define the following:

Seed germination



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7. Mention the functions of the following:

Radicle



8. Mention the functions of the following:

Plumule



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9. Mention the functions of the following:

Cotyledons



10. Mention the functions of the following:

Endosperm



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11. Mention the functions of the following:

Seed coat



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Test Yourself Answer The Following Questions

1. Where does sexual reproduction take place in plants?



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2. What part is played by stamens and carpels in reproduction?



3. Define: (i) Pollination (ii) Fertilisation (iii)

Gamete (iv) Zygote (v) Fruit (vi) Seed (vii) Plumule.



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4. Name three agents of pollination.



5. Describe the parts of a fruit. Draw a well labelled diagram showing the different parts of a fruit.



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6. Name the different parts of a seed.



7. Where does fertilisation take place in a flower?



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8. Differentiate between (i) seed and fruit and(ii) self pollination and cross pollination



9. Name the following:

Three conditions necessary for germination of a seed.



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10. Describe the process of germination in bean and maize seeds.



11. Name the two types of seed germination.



12. What is hypogeal germination?



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13. What is epigeal germination?



Theme Assignment True False

1. Leaves are reduced to spines in a cactus plant. []



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2. Most flowers have colourful sepals. []



3. Plants can carry out photosynthesis without carbon dioxide. []



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4. Stamens make egg cells. []



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5. A fertilised egg becomes a seed. []



6. Insect-pollinated flowers are brightly coloured. []



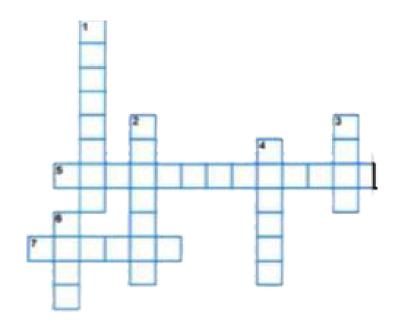
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7. Wind-pollinated flowers produce pollen grains in large quantity. []



- 1. 1. Venation found in monocot plants.
- 2. A plant in which leaf is modified to catch insects.
- 3. Underground part of the plant body which fixes it to the soil.
- 4. Plant that possesses parallel venation.
- 5. Fusion of male gamete with the female gamete
- 6. Part of the plant body which is divided in nodes and internodes.

7. Male part of a flower.





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Review Questions Multiple Choice Questions

1.	ln	а	germinat	ing	seed,	the	roots	develop
fro	m	:						
	A	. R	adicle					
	В	. Pl	umule					
	C.	. Те	egmen					
	D.	. H	ilum					
An	SW	ær	:					
	0) V	Vatch Vide	eo S	olution	า		

2. In a germinating seed, the shoot develops					
from:					
A. Radicle					
B. Plumule					
C. Tegmen					
D. Hilum					
Answer:					
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3. Which one of the following is a monocotyledonous seed ?

A. Bean

B. Pea

C. Maize

D. Gram

Answer:



4. If the cotyledons are pushed above the soil, then such type of germination is called:

- A. Epigeal
- B. Hypogeal
- C. Perigeal
- D. Progeal

Answer:



5. Cotyledons	remain below the soil and	
elongates in _	germination.	

- A. Epigeal
- B. Hypogeal
- C. Perigeal
- D. Progeal

Answer:



A. Filament
B. Style
C. Pistil
D. Anther
Answer:
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7. Reproductive whorls of a flower are :
7. Reproductive whoms of a nower are.

6. Pollen is produced in the

B. Sepals and petals C. Sepals and stamens D. Petals and carpels **Answer: Watch Video Solution** 8. Which one of the following is a false fruit? A. Tomato

A. Stamens and carpels

- B. Apple
- C. Potato
- D. Pea

Answer:



- **9.** In a seed, food is generally stored in :
 - A. Radicle
 - B. Plumule

C. Fruit

D. Cotyledons or endosperms

Answer:



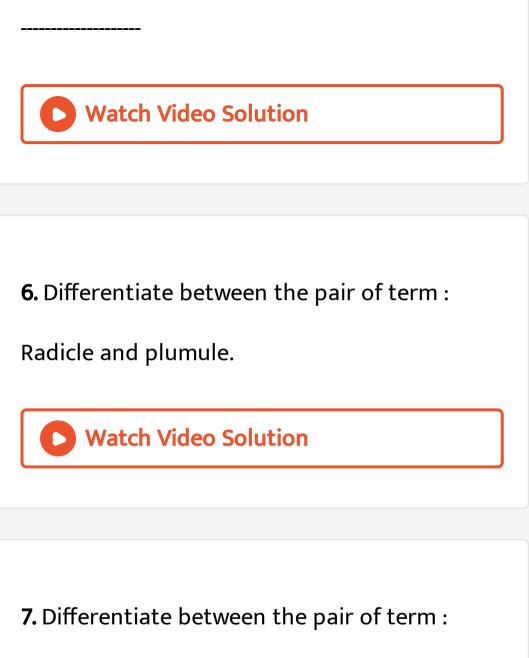
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Review Questions Short Answer Questons

1. Given below is a longitudinal section of a bean seed. Label the parts marked 1 to 5 and

write their functions. **Watch Video Solution** 2. Name the A seed which shows hypogeal germination. ----**Watch Video Solution**

3. Name the
A monocot seed
Watch Video Solution
4. Name the
A dicot seed
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5. Name the A seed which shows epigeal germination
A seed willen shows epigeal gerillilation.



Hilum and micropyle. -----



8. Differentiate between the following pairs on the basis of what is given in the brackets.

Testa and Tegmen (location)



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9. Give two functions of a fruit. -----



Review Questions Match The Columns

1. Match the column

Column A

- (a) Radicle
- (b) Plumule
- (c) Cotyledon
- (d) Testa
- (e) Micropyle

Column B

- (i) Shoot
- (ii) Store food material
- (iii) Root
- (iv) Absorb water needed for germination
- (v) Protection of seed



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2. Radicale emerges out of the seed earlier than plumule. State one advantage served by this.-----



Review Questions True False

1. Some seeds have no cotyledons.



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2. Warmth in necessary for the germination of seeds.



3. All seeds have two cotyledons.

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4. Oxygen is necessary for the germination of seeds.



5. State one function of the following :

(a) Radicle -----

(b) Cotyledons
(c) Endosperm
(d) Micropyle
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Review Questions Tick The Correct Answer

1. Why retroviruses do not follow central

dogma?



2. Name some bacterial disease.



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3. Light, oxygen, and temperature.



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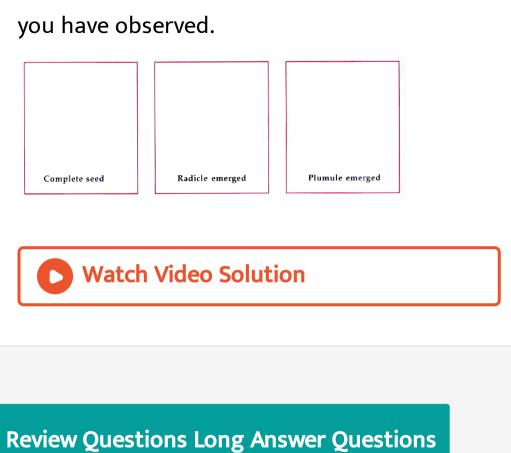
4. Oxygen, carbon dioxide, and light.



5. Name the part of the seed from which the
following are given out:
(a) Roots:
(b) Leaves:



6. In the spaces provided below, draw labelled diagrams to show that three stages in the germination of any seed



1. What is meant by pollination? Name the two types of pollination.



2. Imagine all the seeds produced by a plant happen to fall under the same plant and sprout into new plants. Mention any tro problems that will be faced by the new plants.



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3. What is a flower? Draw a neat labelled diagram showing the L.S. of a typical flower.



4. Draw a neat and wel labelled diagram of dicot seed.



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5. Define germination ? Name the two types of germination. Explain with examples.



6. What is germination? List the conditions necessary for germination.



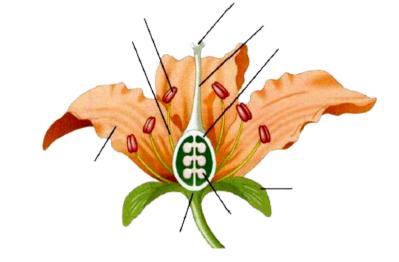
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7. Differentiate between epigeal and hypogeal germination.



8. State the location of the following in a
flower:
(a) Sepals:
(b) Petals:
(c) Anthers:
(d) Stigma:
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9. Given below is the diagram of a typical flower. Label the parts marked by guidelines.





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10. Give the difference in the function between the following parts :

- (a) Ovary and ovule
- (b) Petal and sepal

(c) Filament and style

(d) Pollen grains and ovule

