PAGE NO.
DATE : / / 20

Reproduction in Plants

Sec-A

A. Oral Questions

1. What is meant by reproduction?

Ans) The production of new individuals from their parents is known as reproduction.

2. Which part of flower produces a) male b) female gametes?

Ans) Part of flower which produces:
a) male gametes ⇒ stamen
b) female gametes ⇒ pistil

3. What is the name of yellow powdery substance present in the anther of a flower?

Ans) Pollen grains is the name of yellow powdery substance present in the anther of a flower.

4. What is fertilisation?

Ans) The fusion of male gamete with female gamete to produce zygote is called fertilisation.

Signature

PAGE NO.
DATE : / / 20

Sec-B

Very Short Ans + Que

1. Name any two plants which are reproduced by asexual method of reproduction.

Ans. Two plants which are reproduced by asexual method of reproduction are: fungus, spirogyra.

2. Name two types of pollination.

Ans. Two types of pollination are:
1. Self-Pollination 2. Cross-pollination

3. Name two types of methods of reproduction in plants.

Ans. Two types of methods of reproduction in plants:
1. Sexual Reproduction 2. Asexual Reproduction

4. Name any two plants which are reproduced by Sexual method of reproduction.

Ans. Two plants which are reproduced by sexual method of reproduction are: mango & rose.

PAGE NO.
DATE : / /20

Short Ans+Que - I

1. What is pollination?

Ans) The transfer of pollen grains from the anther to the stigma of a flower is called pollination.

2. Name two plants pollinated by the following agents:
a) insects b) wind c) water.

Ans) Two plants pollinated by the following agents are:
a) insects - rose, sunflower
b) grass - grass, wheat
c) water - hydrila, vallisneria

3) Name any two seeds on fruits which are dispersed by water.

Ans) Two seeds on fruits which are dispersed by water are fibrous fruit of ~~cocont~~ coconut and seeds of lotus & waterlily.

4) Name two plants whose seeds are dispersed when their fruits burst with a sudden jerk.

Ans) Two plants whose seeds are dispersed when their fruits burst with a sudden jerk are Urena & gokhru.

Signature

PAGE NO.
DATE : / / 20

Short Ans + Que – II

1. Explain the differences between self-pollination & Cross-pollination.

Ans)

Self - Pollination	Cross - Pollination
1. The pollen grains from the anther of a flower are transferred to the stigma of the same flower (or another flower on the same plant)	1. The pollen grains from the anther of a flower of one plant are transferred to the stigma of another plant of the same kind.
2. Self pollination occurs in complete flowers.	2. Cross-pollination occurs in incomplete flowers.
3. External pollinating agents are required.	3. No agents are required.
4. Variations can't be observed	4. Variations can be observed

2. Why is dispersal of seeds essential for plants?

Ans) Dispersal of seeds is beneficial for the plants because it provides the following advantages to the plants:

Signature

PAGE NO.
DATE : / / 20

i) It prevents overcrowding of plants in an area
ii) ~~Dispe~~ It prevents the competition for water, minerals & sunlight.
iii) It helps the plants grow in new places or new areas

3. What is meant by germination of seeds? What are the necessary conditions for germination of seeds?

Ans) The process in which a seed begins to grow into a baby plant when favourable conditions are available is called germination of seed.

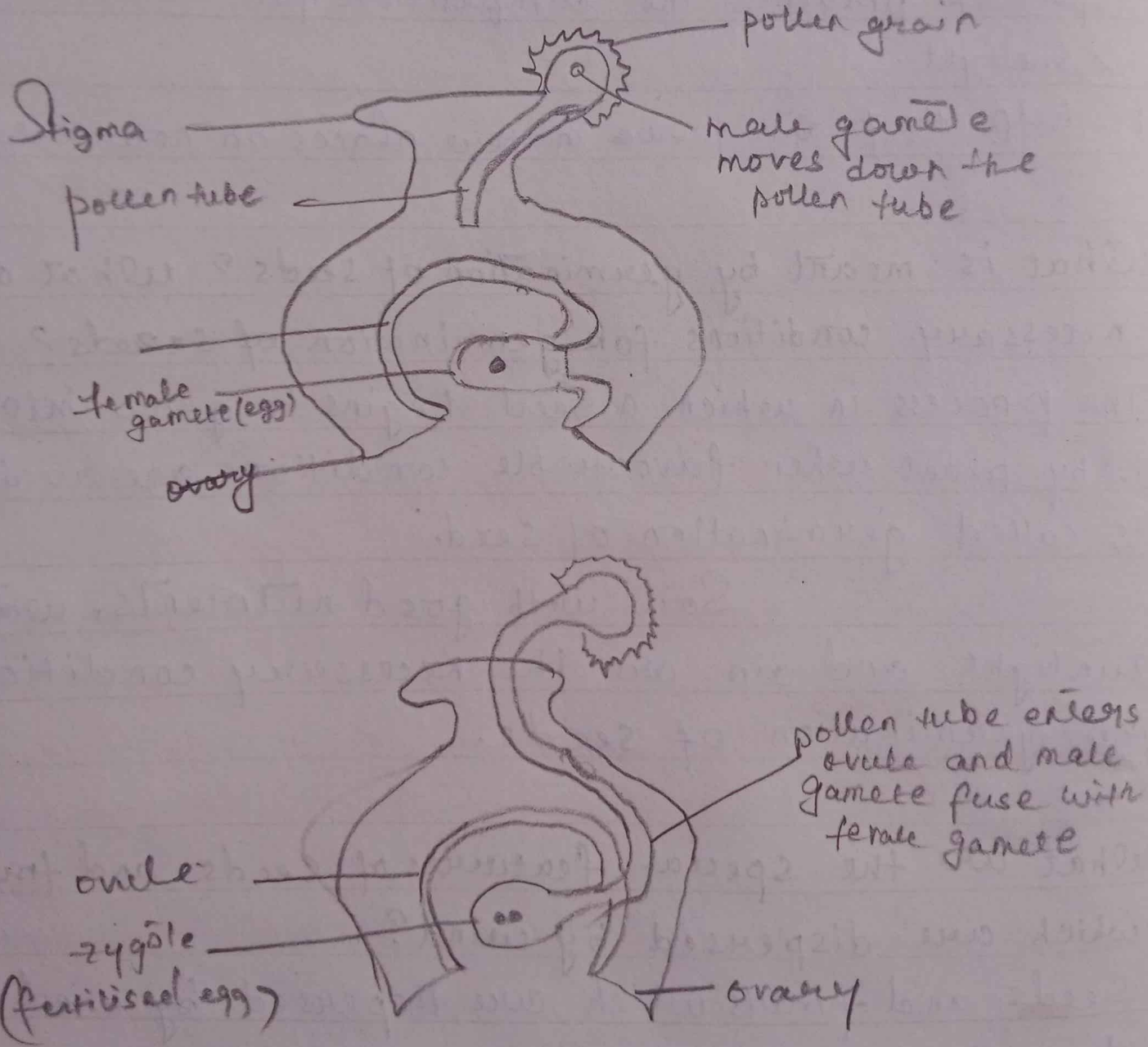
Soil with good nutrients, water, sunlight and air are the necessary conditions for germination of seeds.

4. What are the special features of seeds and fruits which are dispersed by wind?

Ans) Seeds and fruits which are dispersed by wind have the following special features:

1. have wings attached to them
2. have hairs around them
3. have very small and lightweight seeds

5


pollen grain
Stigma
male gamete moves down the pollen tube
pollen tube
female gamete (egg)
ovary
pollen tube enters ovule and male gamete fuse with female gamete
ovule
zygote (fertilised egg)
ovary

PAGE NO.
DATE : / /20

E. Long Answers + Ques

1. Explain how fertilisation takes place in a flower.

Ans) When a pollen grains falls on the stigma of a flower, it grows as a thin pollen tube which moves downwards. This pollen tube penetrates the stigma, passes through the style and enters into the ovule. The male gamete moves down to the ovule through the pollen tube. The tip of the pollen tube bursts open and male gamete comes out of the pollen tube. The male gamete fuses with the female gamete present in the ovule to form a fertilised egg cell called zygote. Therefore, the fusion of male gamete with the female gamete to produce zygote is called fertilisation.

2. Distinguish between sexual and asexual reproduction

Ans)

Sexual Reproduction	Asexual Reproduction
1. Both parents (male & female) are involved.	1. Only one parent is involved
2. Gametes are involved	2. No Gametes are involved
3. Plants are obtained from	3. Plants are obtained without

Signature _____

PAGE NO.
DATE : / /20

existing parents through Seeds.	the production of seeds.
4. Newborn plants are not ~~exactly~~ identical to the parent plant.	4. Newborn plants are exactly identical to the parent plant.

4. a) what are these greenish-black patches on the bread called? How do they reproduce?
b) what value do you learn from Riya?

Ans) a) These greenish-black patches found on the bread is called bread mould. They reproduce through Spores.

b) The values which we learn from Riya are kindness, helpful attitude, worried about other people's health.

PAGE NO.
DATE : / /20

F. HOTS

1. What would happen if all the seeds of a plant were to fall at the same place below the plant and grow there?

Ans) If all the seeds of a plant were to fall at the same place below the plant and grow there then there will be overcrowding and the plants would have to struggle for space water & minerals, sunlight which is required for them to grow.

2. Why are flowers generally so colourful and fragrant? If flowers are not so colourful and sweet smelling will fruit formation be seen in these plants?

Ans) Flowers are generally so colourful and fragrant because they attract insects and other animals for pollination.

Yes because pollination also occurs through wind and water.

3. Which flowers are more attractive — insect pollinated or wind-pollinated? Why?

Signature

PAGE NO.
DATE : / / 20

Ans) Insect pollinated; Because these flowers attract insects through their colourful petals and fragrance

4. Why are methods of artificial vegetative reproduction so commonly used now-a-days.

Ans) Methods of artificial vegetative reproduction are so commonly used nowadays because it can help varieties of crops having desired characteristics like higher yield, better quality of flower and seeds, disease resistance and high nutritional value.