INDIAN SCHOOL AL WADI AL KABIR		
CLASS: VII	**DEPARTMENT: SCIENCE** **2022 - 2023**	**DATE OF COMPLETION** **8/02/2023**
TEXTBOOK Q & A	**TOPIC: Reproduction in plants**	**NOTE: A4 FILE FORMAT**
NAME OF THE STUDENT:	**CLASS & SEC:**	**ROLL NO.**

Q1. Fill in the blanks:

(a) Production of new individuals from the vegetative part of parent is called **vegetative propagation.**

(b) A flower may have either male or female reproductive parts. Such a flower is called **unisexual flower.**

(c) The transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as **pollination.**

(d) The fusion of male and female gametes is termed as **fertilisation.**

(e) Seed dispersal takes place by means of **wind**, **water** and **animal.**

Q2. Describe the different methods of asexual reproduction. Give examples. **[Hint: Different methods of asexual reproduction are:**

(i) Fragmentation: The parent body divides into two or more fragments. Later, each fragment develops into a new individual.

(ii) Budding: Some organisms develop buds on their body and these buds develop into a new individual, this is known as budding.

(iii)Spore formation: Many non-flowering plants reproduce through spore formation. Spores are tiny cells protected by a thick wall. fungi such as bread moulds reproduce asexually using this method.

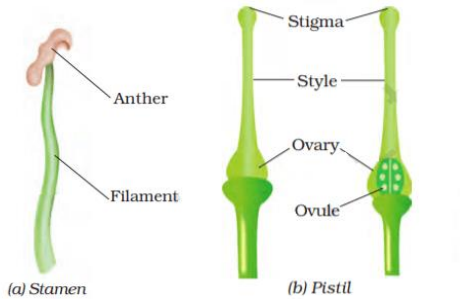
(iv) Vegetative propagation: Reproduction through their vegetative parts such as leaves, roots, buds, and stems and this is known as vegetative propagation.]

Q3. Explain what you understand by sexual reproduction.[**Hint: When two parents are involved in reproduction, the method is called sexual reproduction. Most plants reproduce sexually with the help of flowers. The main function of a flower is to reproduce and therefore develop new seeds that can grow into new plants.]**

Q4. State the main difference between asexual and sexual reproduction. **[Hint: The main differences between asexual and sexual reproduction are:**

S.No.	Asexual reproduction	Sexual reproduction
1.	Only one parent is involved.	Two parents are required i.e., male and female
2.	The offspring formed is similar to the parent.	The offspring formed shows some variation with respect to the parent.
3.	For example, yeast show asexual reproduction.	For example, Papaya

Q5. Sketch the reproductive parts of a flower. **[Hint: The sketch of the reproductive parts of flower is shown below:**



Q6. Explain the difference between self-pollination and cross-pollination. **[Hint: The differences between the self-pollination and the cross-pollination are:**

S.No.	Self-pollination	Cross-pollination
1.	The pollen grains are transferred to the stigma within the same flower.	The pollen grains are transferred to the stigma of a different flower.
2.	Pollinating agents are not required in this type of pollination.	Pollinating agents such as the winds, water, insects, etc. are required in this type of pollination.
3.	For example, sunflower, peanuts, etc.	For example, rose, mango, etc, and most of the flowering plants.

Q7. How does the process of fertilisation take place in flowers? **[Hint: Once the pollen grains spread on the stigma, it produces a pollen tube and this process is called the germination of pollen grains. Then the pollen tube penetrates the style and reaches the ovary where the male gamete is transferred through this pollen tube and finally, the**

fusion of male and female gamete takes place inside the ovary. Thus, this process is called fertilisation.]

Q8. Describe the various ways by which seeds are dispersed.**[Hint: Seeds and fruits of plants are carried away by the wind, water, and animals:**
(i) By wind: Winged seeds such as those of drumstick and maple, light seeds of grasses or hairy seeds of aak (Madar) and hairy fruit of the sunflower, get blown off with the wind to far away places.
(ii) By water: Some seeds are dispersed by water. These fruits or seeds usually develop floating ability in the form of the spongy or fibrous outer coat as in coconut.
(iii) By animals: Some seeds are dispersed by animals, especially spiny seeds with hooks that get attached to the bodies of animals and are carried to distant places. Examples are Xanthium and Urena.
(iv) By bursting: Some seeds are dispersed when the fruits burst with sudden jerks. The seeds are scattered far from the parent plant. This happens in the case of castor and balsam.]

Q9. Match items in Column I with those in Column II:

Column I	**Column II**
(a) Bud	(i) Maple
(b) Eyes	(ii) Spirogyra
(c) Fragmentation	(iii) Yeast
(d) Wings	(iv) Bread mould
(e) Spores	(v) Potato
	(vi) Rose

Hint:

Column I	**Column II**
(a) Bud	**(iii) Yeast**
(b) Eyes	**(v) Potato**
(c) Fragmentation	**(ii) Spirogyra**

(d) Wings	**(i) Maple**
(e) Spores	**(iv) Bread mould**

Q10. Tick the correct answer: (a) The reproductive part of a plant is the
(i) Leaf (ii) stem (iii) root **(iv) flower**

(b) The process of fusion of the male and the female gametes is called
(i) Fertilisation (ii) pollination (iii) reproduction (iv) seed formation.

(c) Mature ovary forms the
(i) Seed (ii) stamen (iii) pistil **(iv) fruit**

(d) A spore producing organism is
(i) Rose **(ii) bread mould** (iii) potato (iv) ginger

(e) Bryophyllum can reproduce by its
(i) Stem **(ii) leaves** (iii) roots (iv) flower

Prepared by Mrs. Preeti Nambiar	Checked by: HOD - SCIENCE