1. Fill in the blanks:
(a) Production of new individuals from the vegetative part of parent is called _____.
(b) A flower may have either male or female reproductive parts. Such a flower is called _____.
(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 _____.
(d) The fusion of male and female gametes is termed as _____ .
(e) Seed dispersal takes place by means of _____ and _____.
Answer:
(a) vegetative reproduction
(b) unisexual flower
(c) pollination
(d) fertilization
(e) wind, water

2. Describe the different methods of asexual reproduction. Give examples.
Answer: Different methods of asexual reproduction are:
(a) Binary Fission: This process takes place in unicellular organisms. Parent cell elongates and gets divided into two identical daughter cells. Each daughter cell grows into an independent adult.
(b) Endospore Formation: In this method the spore wall is formed around a bacterial cell to form an endospore. This endospore germinates to form an active bacterium under favourable conditions.
(c) Fragmentation: In this process, body of the organism breaks up into two parts. Then each part grows into a new filament thus forming two organisms from a single one.
(d) Spore Formation: The spores are tiny spherical unicellular structures protected by thick wall. The spores are stored in a hard outer covering and this is called sporangium. Under favourable conditions the hard cover breaks and spores spread for germination.
(e) Budding: In yeast, new organisms are produced by the bud formation from the parent organism. After growing to full size, the bud gets detached and forms a new independent individual.
(f) Vegetative propagation: When vegetative parts of a plant like stems, leaves and root etc., give rise to new ones, it is.called vegetative propagation.

3. Explain what you understand by sexual reproduction.
Answer: Sexual reproduction means involvement of two parents in the process of reproduction. It is found mainly in higher plants where male gamete and female gamete fuse to form a zygote. These zygotes develop into individuals which are not identical. Offsprings inherit the characteristics of both the parents. In sexual reproduction both parents survive after the process of reproduction.

4. State the main difference between asexual and sexual reproduction.
Answer:

Asexual reproduction	*Sexual reproduction*
(*a*) Only one parent plant is involved.	(*a*) Both male and female parents are involved.
(*b*) Occurs in unisexual plants.	(*b*) Occurs in bisexual plants.
(*c*) Occurs in lower plants.	(*c*) Occurs in higher plants.
(*d*) Reproductive organs are not present.	(*d*) Fully developed reproductive parts are present.
(*e*) In most of the methods the original parent disappears.	(*e*) Original parents remain alive after process of reproduction.
(*f*) Process like gamete formation or fertilization is not seen.	(*f*) Fertilization of gametes give rises to zygote.
(*g*) Characteristics of only one parent is inherited.	(*g*) Characteristics of both parents are inherited.
(*h*) No need of seeds.	(*h*) Seeds are used to get new plants from a flower.

5.Sketch the reproductive parts of a flower.
Answer:

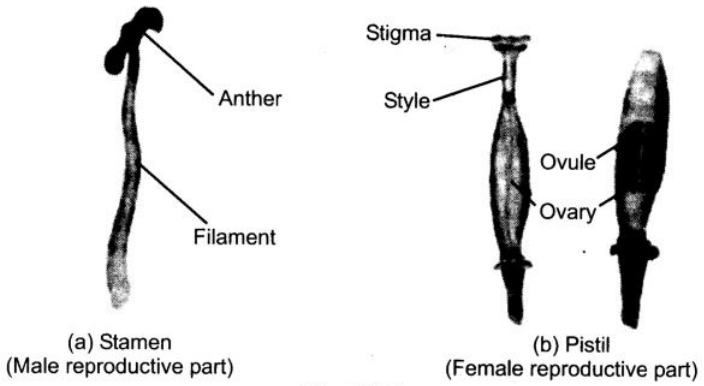

Fig. 12.6

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