

CBSE Test Paper 05
Ch-1 Reproduction in Organisms

1. Statement I: Asexual reproduction involves fusion of gametes.
Statement II: Asexually produced offspring are genetically identical.
Statement III: Asexual reproduction occurs in unfavorable condition only.
 - a. Only statement I is correct.
 - b. Only statement II is correct.
 - c. Statement I and II both are correct.
 - d. Only statement III is correct
2. Parrots have life span of about
 - a. 140 years
 - b. 40 years
 - c. 15 years
 - d. 5 years
3. Animals giving birth to young ones are called as
 - a. Ovoviviparous
 - b. Young producer
 - c. Viviparous
 - d. Oviparous
4. When offspring is produced by a single parent with or without the involvement of gametes formation, than the reproduction is
 - a. Vegetative propagation
 - b. Sexual reproduction
 - c. Asexual reproduction
 - d. Artificial propagation
5. Stem cutting is used in the propagation of
 - a. Banana
 - b. Mango
 - c. Cotton
 - d. Sugar cane
6. Name the phenomenon and the cell responsible for the development of a new

individual without fertilization as seen in honey bees.

7. The turkey usually produces females for several generations. How is this possible?
8. Why do internodal segments of sugarcane fail to propagate vegetatively even when they are in contact with damp soil?
9. Name the phase all organisms have to pass through before they can reproduce sexually.
10. What is vegetative propagation? Give two suitable examples.
11. What are spores? Name at least three types of spores.
12. What is a bisexual flower?
13. Mention the unique flowering phenomenon exhibited by *Strobilanthes Kunthiana* (Neela Kuranji).
14. Differentiate between annual and biennial plants. Provide one example of each.
15. Define external fertilization. Mention its disadvantages.

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Answer

1. b. Only statement II is correct, **Explanation:** In asexual reproduction, fusion of gametes do not takes place and asexual reproduction occurs in favorable conditions. As fusion of gametes do not takes place, all the individuals are genetically identical to each other.
2. a. 140 years, **Explanation:** The life span of parrot is about 140 years. It is much more than other common animals living in our surrounding. Even more than human being life span.
3. c. Viviparous, **Explanation:** Animals reproduce sexually either by producing fertilized egg or by giving birth young ones directly. The viviparous (young one producing) is more evolved method of sexual reproduction.
4. c. Asexual reproduction, **Explanation:** During asexual reproduction no gametes formation occurs and involve only single parents. The new individuals produced are clone to each other. Lower plants and unicellular organism follows asexual mode of reproduction in favorable condition.
5. d. Sugar cane, **Explanation:** Stem cutting is a mode of vegetative propagation in which stem is cut into pieces having at least one node. From the node new plantlet emerge out. Mango and cotton are grown by seeds and Banana by root cutting.
6. **Parthenogenesis** is most simply defined as reproduction without fertilization. More specifically, it occurs when a female gamete(unfertilized ovum)develops a new individual without being fertilized by a male gamete.
7. In a turkey, female gametes undergo development without fertilization. This phenomenon is called parthenogenesis.
8. The internodal segments fail to propagate vegetatively because the buds occur on the nodes of stem.
9. **Juvenile phase:** It is the period of growth in an individual organism after its birth and before it reaches reproductive maturity.
10. The process of multiplications, in which parts or fragments of the plant act as

reproductive unit or propagule to form new individuals is called vegetative propagation.

Examples: (i) Buds (eyes) of potato (ii) Rhizome of Ginger

11. Spores are specialised asexually reproducing bodies produced inside the sporangia. They germinate to produce new individuals. The different kinds of spores are- zoospores, sporangiospores and chlamydospores.
12. Bisexual or perfect flowers have both male (androecium) and female (gynoecium) reproductive structures, including stamens and an ovary. Flowers that contain both androecium and gynoecium are called hermaphroditic. Examples. Pea, Mustard, Petunia, tomato, etc.
13. It flowers once in 12 years. These plants flowered during September - October 2006 in hilly areas of Kerala, Karnataka and Tamil Nadu. These plants are known as Perennial monocarpic plants.
- 14.

Annual Plants	Biennial Plants
<ul style="list-style-type: none">These plants complete their life cycle over one year.	<ul style="list-style-type: none">These plants complete their life cycle in two years.
<ul style="list-style-type: none">The vegetative and reproductive phases get completed within a year.	<ul style="list-style-type: none">Flowering occurs during the second year, after a year of vegetative growth.
<ul style="list-style-type: none">They are usually of low maintenance as they are grown over less period of time.	<ul style="list-style-type: none">These plants are usually of comparatively high maintenance type as they grow over a longer time period.
<ul style="list-style-type: none">E.g. Cereals, Legumes, marigold, etc.	<ul style="list-style-type: none">E.g. Shrubs, poppy, foxglove, etc.

15. In most aquatic organisms such as algae, fishes and amphibians, syngamy occurs outside the body of organism in the external medium (water). This type of gametic fusion is called external fertilization.

Disadvantage. Many of the offsprings are not protected from the predators and their survival is threatened upto adulthood.