

QB365 Question Bank Software Study Materials

Botany - Asexual and Sexual Reproduction in Plants Important 2 Marks Questions With Answers (Book Back and Creative)

12th Standard

Biology

Total Marks : 40

2 Marks

20 x 2 = 40

1) What is reproduction?

Answer : Reproduction is a biological process in which an organism give rise to offsprings. This helps to maintain continuity of its species.

2) List out two sub-aerial stem modifications with example.

Answer : Sucker - chrysanthemum
Stolon - jasmine

3) What is layering?

Answer : The stem of a parent plant is allowed to develop roots. After formation of roots, the rooted part is cut and separated and planted to grow into a new plant (eg) Ixora and Jasminum.

4) What are clones?

Answer : Individuals formed by asexual reproductive methods are morphologically and genitically identical and are called clones.

5) "Tissue culture is the best method for propagating rare and endangered plant species"- Discuss.

Answer : A single cell from a rare and endangered plant can be grown into a an entire plant. So it is considered as the best method.

6) What is Cantharophily.

Answer : Pollination carried out by beetle is called cantharophily.

7) List any two strategy adopted by bisexual flowers to prevent self-pollination.

Answer : Dichogamy stames and stigmas mature at different times (protandry, Protagyny) Herkogamy - Stamens and stigmas are arranged in such a way, self pollination become impossible.

8) "The endosperm of angiosperm is different from gymnosperm". Do you agree. Justify your answer.

Answer : The endosperm in gymnosperms is haploid because it is formed from the haploid megaspore. In angiosperm the endosperm is triploid, a product of triple fusion.

9) Define the term Diplospory

Answer : A diploid embryosac is formed from megaspore mother cell without a regular meiotic division

Example:

Eupatorium, Aerva

10) What is Mellitophily?

Answer : Pollination by bees is called melitophily.

11) 'Pollination in Gymnosperms is different from Angiosperms' – Give reasons.

Answer : Gymnosperms - Pollination is said to be direct as the pollen are deposited directly on the exposed ovules
Angiosperms - Pollination is said to be indirect as the pollen are deposited on the stigma of the pistil.

12) What do you mean by terms 'stock' and 'scion' in grafting technique?

Answer : In Grafting, parts of two different plants are joined so that they continue to grow as one plant. Of the two plants, the plant which is in contact with the soil is called stock and the plant used for grafting is called Scion.

13) How the pollen grains of Vallisneria protect themselves?

Answer : Vallisneria is an aquatic plant. Pollen grains of Vallisneria are covered by mucilage coating which protects them from wetting.

14) What are the major post fertilization events in a flower?

Answer : Endosperm development, embryo development, seed formation, and fruit formation

15) What is psychophily?

Answer : Pollination carried out by biotic agents such as butterflies is called psychophily.

16) Name the types of endosperm based on development.

Answer : (i) Nuclear endosperm
(ii) Cellular endosperm
(iii) Helobial endosperm.

17) What is a pollinium?

Answer : A pollinium is a coherent mass of pollen grains of an anther.

Example:

Calotropis.

18) What is a flower according to morphologist?

Answer : Flower is a highly condensed shoot meant for reproduction.

19) Give correct answers for the given questions below.



a. Identify the vegetative propagules

b: Label the part

c. Can offspring produced be considered as clone?

d. Write as the binomial of the above.

Answer : a - Tuber

b - Bud from eye

c - Yes

d - Solanum tuberosum.

20) Write the practical application of activation of nucellar tissue.

Answer : (i)The seedlings formed from the nucellar tissue in Citrus are found

(ii) better clones for Orchards.

(iii) Embryos derived through polyembryony are found virus free.