

Class XII

TOPIC:-SEXUAL REPRODUCTION IN FLOWERING PLANTS

ONE MARK QUESTIONS

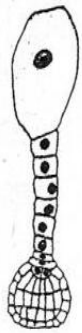
1. The microscopic pollen grains of the past are obtained as fossils. Mention the characteristic of the pollen grains that makes it happen.
2. Name the type of flower which favours cross pollination.
3. Why is bagging of the emasculated flowers essential during hybridization experiments?
4. The meiocyte of rice has 24 chromosomes. How many chromosomes are present in its endosperm?
5. Why is a coconut plant referred to a monoecious?
6. A bilobed, dithecal anther has 100 microspore mother cells per microsporangium. How many male gametophytes this anther can produce?

TWO MARKS QUESTIONS

7. The flower of brinjal is referred to as chasmogamous while that of beans is cleistogamous. How are they different from each other?
8. Banana is a parthenocarpic fruit whereas oranges show polyembryony. How are they different from each other with respect to seeds .
9. Draw a vertical section of a maize grain and label i) pericarp ii) scutellum c) coleoptile and iv) radicle.
10. How many haploid cells are present in a mature female gametophyte of a flowering plant? Name them.
11.
 - i) Write the characteristic features of anther, pollen and stigma of wind pollinated flowers.
 - ii) How do flowers reward their insect pollinators? Explain.

THREE MARKS QUESTIONS

12.



- a) Identify the figure.
 - b) Name the initial cell from which this structure has developed.
 - c) Draw the next mature stage and label the parts.
13. Draw a longitudinal section of post pollinated pistil showing entry of pollen tube into a mature embryo-sac. Label filiform apparatus, chalazal end, hilum, antipodals, male gametes and secondary nucleus.
14.
 - a) Mention any four strategies adopted by flowering plants to prevent self-pollination.
 - b) Why is geitonogamy also referred to as genetical autogamy?

VALUE BASED QUESTION

- 16 Your younger sister has seen a banana tree in backyard of a house. She could see the fruits but no seeds. She wants to know how a new plant of banana will be produced without seed. What will you explain to your sister?