

Vidya Bhawan Balika Vidyapeeth Lakhisarai

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Class 12<sup>th</sup>

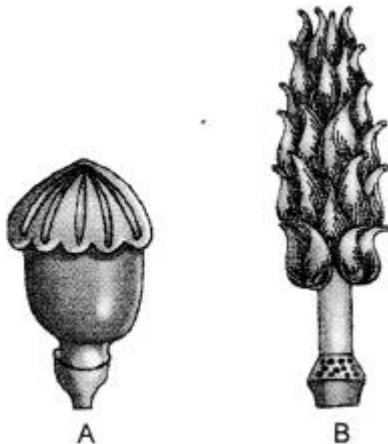
Sub. Biology

Date: 27.07.2020

**Based on NCERT patterns**

**Questions practice for PA 1**

1. A bilobed dithecous anther has 100 microspore mother cells per microsporangium. How many male gametophytes can this anther produce?
2. What are germ pores?
3. Give an example of a plant which came into India as a contaminant and is a cause of pollen allergy.
4. Mention two environmental factors that affect pollen viability.
5. How are different varieties of pollen grains stored for long period of time in pollen banks?  
or  
Mention any one application of a pollen bank
- 6.



These pictures show the gynoecium of (A) Papaver and (B) Michelia flowers. Write the difference in the structure of their ovaries.

7. What represents the (a) basal part and (b) female gametophyte of the ovule?
8. How many megaspore mother cell(s) become(s) differentiated in an ovule?
9. When does cell wall formation start, in the organisation of the embryo sac?
10. Of the eight nuclei formed in the embryo sac, six become organised into cells.
  - (a) What term is given to the other two nuclei?
  - (b) Name the cell in which they are present.
11. What is filiform apparatus?
12. State the function of filiform apparatus found in mature embryo sac of an angiosperm.
13. Describe the structure of the cell (s) that guide (s) the pollen tube to enter the embryo sac.
14. State the significance of pollination.
15. Why are cleistogamous flowers invariably autogamous?
16. How is it possible in Oxalis and Viola plants to produce assured seed-sets even in the absence of pollinators?  
Or  
Pea flowers produce assured seed-sets. Give a reason.
17. Give the technical term for the type of pollination
  - (a) which ensures genetic recombination.
  - (b) between different flowers of the same plant
18. The following statements describe the wind-pollinated plants. Which one of these statements is incorrect?
  - (a) The pollen grains are sticky.
  - (b) Stamens are well-exposed.
  - (c) Flowers often have single ovule.

19. Mention the pollinating agent of an inflorescence of small dull-coloured flowers with well-exposed stamens and large feathery stigmas. Give any one characteristic of pollen grains produced by such flowers.