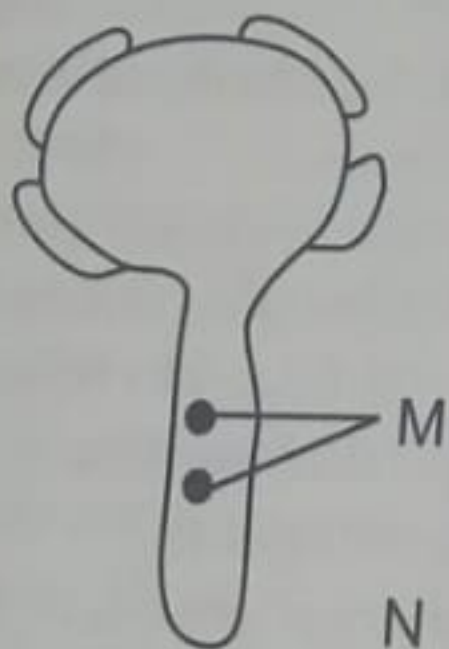


10. The diagram below represents a mature fruit from a dicotyledonous plant, observe it and answer questions that follow.



- (a) To what group of fruits does the specimen belong? (1mk)  
 (b) Suggest the possible agent of dispersal of the fruit. (1mk)

11. The diagram below shows a pollen tube as it develops down the style. Study it and answer the questions that follow.



- (a) Name the parts labelled M and N.  
 (b) State the function of the part labelled M. (1mk)

12. (a) Why is sexual reproduction important in evolution of plants and animals? (1mk)

- (b) The calyx cells of a certain plant has 22 chromosomes. State the number of chromosomes present in the plants.

- (i) Endosperm (1mk)  
 (ii) Ovule cell (1mk)

13. State one feature present in the flower that can be used to distinguish between a monocotyledonous flower and dicotyledonous flower. (1mk)

14. What is meant by the following terms.

- (a) Epigynous flower. (1mk)  
 (b) Staminate flower. (1mk)

15. Identify the agent of dispersal of the following. (2mks)

- (a) Fruits which split open along sutures when dry, hauling their seeds away from the parent plant. (1mk)  
 (b) Light seeds with hairy extensions. (1mk)

16. State the role of centrioles during cell division. (1mk)

17. (a) At what stage of meiosis is the chiasmata formed? (1mk)

- (b) What is the significance of the above part in living organisms? (1mk)

- (c) State two importance of meiosis in living organisms? (1mk)

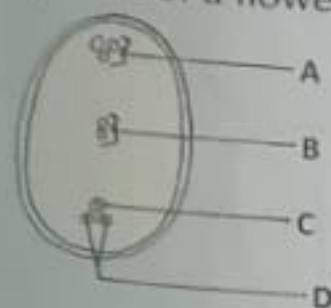
18. (a) State two ways in which the male parts of a wind pollinated flower are adapted to their mode of pollination. (2mks)

- (b) Differentiate between monoecious and dioecious plants. (2mks)

19. List four differences between mitosis and meiosis. (4mks)



4. Explain why cells of an endosperm are triploid and not haploid. (2mks)
5. The diagram below shows a mature embryo sac of a flowering plant.



- (a) Name the parts labeled A and D. (2mks)
- (b) What is the function of the structure labeled B. (1mk)
- (c) Why is cross pollination more advantageous to a plant species than self-pollination? (2mks)
6. (a) What do you understand by the term double fertilization? (1mk)
- (b) State two adaptations of animal dispersed fruits. (1mk)
7. In what two ways is self-pollination not possible in some plants. (2mks)
8. A flower was found to have the following characteristics.
- Inconspicuous petals
  - Long feathery stigma
  - Small light pollen grains.
- (a) What is the likely agent of pollination of the flower? (1mk)
- (b) What is the significance of the long feathery stigma?
9. Name the type of placentation described below.
- (a) Placenta appears as one ridge on the ovary wall. (1mk)
- (b) Placenta appears at the centre of the ovary with ovules on it and the dividing walls of carpels disappear. (1mk)

### Revision Exercise 12 A

1. (a) Name the part of an ovule that develops into each of the following parts of a seed after fertilization. (2mks)
- (i) Testa
  - (ii) Endosperm
- (b) What is parthenocarpy? (1mk)
2. Name the hormone that causes leaf, flowers and fruit abscission. (1mk)
3. Name the mechanisms that hinder self-fertilization in flowering plants. (1mk)