

VERY SHORT ANSWER Type Questions

|1 Mark|

1. The centriole forms spindle during cell division in cells.
2. What do you mean by sister and non-sister chromatids?
3. What is the necessity of meiosis-II?
4. Name the stage of meiosis in which the paired homologous chromosomes get shortened and thickened.

SHORT ANSWER Type I Questions

|2 Marks|

5. An anther has 1200 pollen grains. How many pollen mother cells must have been there to produce them ?
6. Draw the stage of meiosis when synapsis takes place.
7. What do you mean by heterotypic division ? Explain.
8. Name the condition when cell undergoes meiosis.
9. Give difference in the attachment of chromosomes to the spindle fibres in mitosis and meiosis-I.

SHORT ANSWER Type I Questions

|3 Marks|

10. When and why does reduction in the number of chromosomes take place in meiosis?
11. Describe the prophase of meiosis-II with the help of a diagram .
12. What marked the transition between
 - (i) Zygotene and pachytene
 - (ii) Pachytene and early diplotene
 - (iii) Mitotic metaphase and anaphase.
13. With the help of diagrams, only depict the events that occur during prophase-I of meiotic division.

LONG ANSWER Type Questions

|5 Marks|

14. Anaphase-I of meiosis differs from anaphase of mitosis in one essential way. Describe the difference and explain, how does it affect the daughter cells.
15. Explain cytokinesis. Also with the help of diagram write about cytokinesis in plant cell and animal cell.
16. How does meiosis differ from mitosis? Give any five differences.
17. Describe the subphases of prophase-I of meiosis-I.