

Board – ICSE

Class – 10

Topic – Structure of Chromosome

1. How does colchicine act as mitotic poison? Is there any advantage of it?
2. Explain the significance of mitosis.
3. Why is meiosis referred to as reduction division?
4. What is the importance of meiosis in creating variations?
5. State how meiosis maintains chromosome number in a species.
6. What is the importance of meiosis?
7. Give Reason. Gametes must be produced by meiosis for sexual reproduction.
8. Give Reason. Chromosomes are the carriers of heredity.
9. Differentiate between Anaphase of Mitosis and Anaphase of Meiosis-I.
10. Draw a duplicate chromosome and label its part.
11. Why is meiosis referred to as reduction division?
12. State how meiosis maintains chromosome number in a species.
13. Draw a labeled schematic representation of mitosis cell division.
14. (i) Draw a neat labeled diagram to show the metaphase stage of mitosis in an animal cell having '6' chromosome.
(ii) How many daughter cells are formed at the end of mitosis and at the end of meiosis?
(iii) With reference to cell division explain the following terms: (Chromatid, Centromere, and Haploid).
(iv) Name the type of cell division that occurs during:
 1. Growth of shoot
 2. Formation of pollen grains.
 3. Repair of worn out tissues.
15. Draw a well labeled diagram to show the anaphase stage of mitosis in a plant cell having four chromosomes.
16. Differentiate between cell division in gametes and zygote.
17. In the given diagram name the parts labeled 1, 2, 3, 4 and 5 and describe about them in short.

