



**ST. LAWRENCE HIGH SCHOOL**  
**A JESUIT CHRISTIAN MINORITY INSTITUTION**



**SOLUTION – 8**

**Class: X**

**Sub: Life Science**

**Date: 09.07.2021**

**Topic: Ch 2 Continuity of Life: Meiosis**

**F.M. : 15**

**Choose the correct option:**

**(1x15=15)**

- Meiosis produces \_\_\_\_\_ sex cells or gametes from \_\_\_\_\_ cells.  
a) haploid, haploid b) diploid, diploid **c) haploid, diploid** d) diploid, haploid
- The cells undergoing meiosis are called \_\_\_\_\_.  
**a) meiocytes** b) cancer cells c) germ cells d) somatic cells
- The site of meiosis in plants are -  
a) microsporocytes b) megasporocytes **c) a and b** d) none of these
- The end product of a meiosis are \_\_\_\_ haploid daughter cells  
a) two **b) four** c) six d) eight
- The process of pairing of \_\_\_\_\_ chromosomes is known as synapsis.  
a) non-homologous b) partially homologous **c) homologous** d) none of these
- Sister chromatids are two \_\_\_\_\_ of a chromatid.  
a) different sets b) variable sets c) constants sets **d) identical copies**
- What are the characteristics of homologous chromosome pairs?  
a) Same length and staining pattern b) Same centromere position and characteristics of genes at particular loci **c) a and b** d) none of these
- A tetrad is made up of \_\_\_\_ chromatids.  
a) one b) two c) three **d) four**
- Crossing over occurs during \_\_\_\_\_ of meiosis I.  
**a) prophase I** b) metaphase I c) anaphase I d) telophase I
- Crossing over occurs between \_\_\_\_\_ chromatids of homologous chromosomes.  
a) sister **b) non-sister** c) both of these d) none of these
- What are the significances of meiosis?  
a) Causes alternation of generation b) Constancy in chromosome number c) Genetic variation within the species **d) All of these**
- \_\_\_\_\_ is a necessary part in the life cycle of sexually reproducing animals as it forms gametes.  
a) Mitosis b) Amitosis **c) Meiosis** d) None of these
- The nature of chromosomal division in meiosis is -  
a) reductional b) daughter cells receive half number of chromosomes than their mother cells  
c) diploid mother cells produce haploid daughter cells **d) all of these**

14. How does meiosis perform genetic variation within species?  
a) **Breakage and exchange of chromatids between male and female parents** b) Mixing of chromatids between male and female parents c) Both of these d) None of these
15. What is the longest phase in meiosis?  
a) Metaphase I b) Anaphase II c) **Prophase I** d) telophase II

**Shreya Basu**