

## Cell Cycle

Sr	Questions	Answers Choice
1	In which phase of cell cycle, the chromosomes duplicate.	A. S Phase B. G1 Phase C. Mitosis D. G2 Phase
2	How does the centrosome contribute to mitosis.	A. Initiates DNA replication B. Make mitotic spindle C. Forms the nuclear envelope D. Duplicates organelles
3	In which phase of cell cycle, maximum growth occurs in cell.	A. M Phase B. S Phase C. G2 Phase D. G1 Phase
4	The longest phase of meiosis is.	A. Prophase I B. Prophase II C. Interphase I D. Interphase II
5	Why is meiosis II necessary after meiosis I?	A. To replicate chromosomes B. To separate sister chromatids C. To ensure genetic recombination D. To reduce chromosome number
6	If you observe a cell in which nuclear membrane is reforming around two sets of chromosomes, what stage of cell cycle is this?	A. Anaphase B. Telophase C. Metaphase D. Prophase
7	Which event is unique to meiosis but not mitosis.	A. DNA Replication B. Crossing over C. Chromosome alignment D. Nuclear division
8	Crossing over results in genetic recombination. It occurs between	A. Two chromatids of homologous chromosomes B. Two chromatids of opposite gametes C. Two chromatids of any two non-homologous chromosomes D. Two chromatids of the same chromosome
9	All of the following events take place both in mitosis and meiosis except.	A. Condensation of chromatin to form chromosomes B. Formation of spindle apparatus C. Nuclear envelope and nucleolus disappear D. Chromosomes pair for crossing over
10	An organism has 4 pairs of chromosomes. After meiosis-I, how many chromosomes and chromatids will be present in each daughter cell.	A. 8 Chromosomes and 16 chromatids B. 4 chromosomes and 8 chromatids C. 4 chromosomes and 4 chromatids D. 8 chromosomes and 8 chromatids
11	Some student of SSC observed a thin cross section from root tip of onion plant under the microscope. They found dividing cells at different stages of their life cycle. One of the students found a cell at late prophase and counted 28 chromosomes in it. The number of chromosomes in daughter cells should be.	A. 14 B. 28 C. 56 D. 09
12	Which one is the feature of mitosis but not of meiosis II?	A. Crossing over B. Separation of sister chromatids C. Daughter cells with same number of chromosomes D. Separation of homologous chromosomes
13	Chromosomal number of fruit fly is 8. The gametes of fruit fly contain.	A. 2 Chromosomes B. 4 Chromosomes C. 8 Chromosomes D. 16 Chromosomes

14	The spindle apparatus of plants differs from that of animals in not having.	A. Microtubules B. Centromere C. Centrioles D. Equator of spindle
15	Substance and energy required for replication for DNA is accumulated in cell during.	A. G1 B. G2 C. S-Phase D. M-Phase
16	Centrosomes make mitotic spindle in.	A. Plant cells B. Animal Cells C. Prokaryotic cells D. All of these
17	What causes the number of chromosomes to reduce to half when a cell divides by meiosis.	A. Separation of homologous chromosomes during meiosis I B. Replication of DNA during interphase I C. Separation of sister chromatids of all the chromosomes during meiosis I D. Crossing over during meiosis I
18	At which stage of mitosis chromosomes line up in the centre.	A. Prophase B. Anaphase C. Metaphase D. Telophase
19	During cell division spindle fibres attach a chromosome at.	A. Telomere B. Centromere C. Upper arm of chromosomes D. Lower arm of chromosome