Biology (New Book) - 9th Class Biology Urdu Medium Chapter 4 Preparation

Q1. Difference between Chromatin and Chromosome

Ans 1: Chromatin
In the beginning of prophase. The chromosome are not visibel as they are in the form of fine thread like structures called chromatin

Ans 2: Chromosome:
During prophase the chromatin begins to shorten, thicken and coil by a process called condensation. It results in the appearence of chromosmes.

Q2. What is the role of spindle fibres in mitosis.

Ans 1: During mitosis, spindle fibres ensure the accurate separation of sister chromatids of chromosoemes attache dwith spindle fibres in telephase.

Q3. What is the function of the centrosome during cell division.

Ans 1: During cell division the centrosome of cell duplicates into two these wo centrosomes migrate to the opposite side of the nucleus and make netwrok of microtubules called spindle fibres These spidle fibre ensure accurate separation of chromosomes.

Q4. Difference between Cytokinesis and Karyokinesis.

Ans 1: Cytokineis:
The process of cytoplasmic division to called cytokinesis

Ans 2: Karyokinesis:
The process of nuclear division is called karyokinesis

Q5. Difference chrosomes and chromatids

Ans 1: Chrosome:
The chromatin begins to shorten, tickne and coil by a process called condensatin. It resuts in the appearance of chrosomes it consists of two chromatids.Two chromatids of a chromosome is joined by centromere

Ans 2: Chromatids:
Unseparated reliea of a chromosome is called chromatids

Q6. What are teh key events of anaphase in mitosis.

Ans 1: i. Constrictio of spindle fibers towards their respective poles.

ii. Equal separation of sister chromatids of chromosoems.

Q7. During which phase of mitosis sister chromatides separate?

Ans 1: During anaphase spidnle fibres attached with chromosoems pull towards teh poles, making the sister chromatids for chromosomes separated.

Q8. What is the mian purpose of the S Phase in the cell cycle.

Ans 1: During this phase the DNA of each chromosome is replicated . It results in the duplication of chromosoems chromosomes consists of two sister The totla number of chromosomes in celll remains the same.

Q9. How is mitosis related to the process of regeneration.

Ans 1: Some animals can regenerate parts of the body For this purpose, they form new cells by carrying out mitosis in the cells of remaning parts.

Q10. How does meiosis differe from mitosis in terms of chromosomes number.

Ans 1: The number of chromosoems remains the same duirng mitosis.
Example:
A diplid (2n) parent cell will produce two diploid(2n) daughter cells. While during Meiosis the numebr of chromosomes remain half as compare to parent cell
Example: A diploid (2n) parente cell produces four haploid (n) daughter cells.
