

Unit 4 Quiz

True False Questions

Indicate True or False for the following Statements.

1. In binary fission, four daughter cells are produced. (True/False)
2. Mitosis is a process in which the nucleus of a cell divides to produce daughter cells with identical genetic material. (True/False)
3. Cell division is much slower in cancer cells than in normal cells. (True/False)
4. During anaphase of mitosis, sister chromatids separate and move to opposite poles of the cell. (True/False)
5. Gametes are diploid cells. (True/False)
6. Asexual reproduction involves 3 parents. (True/False)
7. Meiosis produces gametes. (True/False)
8. Sperm is a female gamete. (True/False)

Multiple Choice Questions

For each question, four alternative choices are given, of which only one is correct. You have to select the correct alternative and mark it in the appropriate option.

9. If a cell has 12 chromosomes at the beginning of mitosis, how many will it have at the end of mitosis?
 - a. 3
 - b. 6
 - c. 12
 - d. 24
10. What are the two most important goals of interphase?
 - a. division and repair
 - b. growth and division
 - c. growth and DNA replication
 - d. DNA replication and division
11. Chromosomes become visible during
 - a. interphase
 - b. prophase
 - c. metaphase
 - d. anaphase
12. In the process of cell division, the parent cell divides to form the _____.
 - a. Daughter cells
 - b. Twin cells
 - c. Sister cells
 - d. Baby cells
13. Cytokinesis means _____.
 - a. Splitting of the cytoplasm
 - b. Splitting of the nucleus
 - c. Splitting of the DNA
 - d. None of the above

14. Mitosis is the division of the cell _____.
- membrane
 - cytoplasm
 - ribosomes
 - nucleus
15. In mitosis, chromosome number in the daughter cells is _____ as compared to the parent cell.
- the same
 - double
 - half
 - None of the above
16. What is the order of the four stages in mitosis?
- prophase, metaphase, anaphase, telophase
 - anaphase, prophase, metaphase, telophase
 - metaphase, anaphase, telophase, prophase
 - telophase, prophase, anaphase, metaphase
17. In dogs, the chromosome number in somatic (non-gamete) cells is 78. How many chromosomes are present in a dog's gametes?
- 39
 - 78
 - Variable
 - None of the above
18. Sexual reproduction involves _____ parent/parents.
- 4
 - 2
 - 3
 - 1
19. Which of the following is NOT a characteristic of meiosis?
- Involves two divisions
 - Results in the production of genetically identical cells
 - Produces haploid cells
 - Reduces the number of chromosomes
20. In which stage(s) of meiosis does tetrads, or four synapsed chromosomes, form?
- Prophase I
 - Telophase
 - Metaphase
 - All of the above
21. Germ cells of the gonads multiply by mitosis in _____ phase.
- Multiplication
 - Growth
 - Maturation
 - None of the above
22. Formation of gametes is known as _____.

- a. Gametogenesis
- b. Morphogenesis
- c. Both A and B
- d. None of the above