



Yakeen NEET 2.0 2026
Cell Cycle and Cell Division

Duration : 30 Min.

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1. The sequence of events by which cells duplicate their genome, synthesize the other components of cell which eventually distribute into two daughter cells is called
 (1) Quiescent stage (2) Generation time
 (3) Cell cycle (4) Kinetochore
2. A biosynthetic phase where cell organelle duplicate itself is
 (1) Interphase (2) Anaphase
 (3) Prophase (4) Telophase
3. Yeast can progress through the cell cycle in about
 (1) 90 sec (2) 90 min
 (3) 90 hrs (4) 90 yrs
4. _____ represents the most active stage of the cell cycle.
 (1) Metaphase (2) Anaphase
 (3) Telophase (4) Interphase
5. Interphase is called the resting phase because
 (1) It is the most active phase of the cell cycle
 (2) There is no apparent activity related to cell division
 (3) It does not prepare cell for cell division
 (4) It is the phase where cell rests before entering into mitosis
6. _____ phase synthesizes enzymes required during S phase.
 (1) G₂ (2) M
 (3) S (4) G₁
7. Non-dividing cells enter the
 (1) G₂ phase (2) M phase
 (3) G₀ phase (4) S phase
8. The cells which enter _____ phase start differentiating into specific types of cell.
 (1) G₁ (2) G₂
 (3) S (4) G₀
9. If the initial amount of DNA is 8 C, then after S phase the amount of DNA would be
 (1) 4 C (2) 8 C
 (3) 64 C (4) 16 C
10. The number of chromosomes in G₁ phase is 36, the number of chromosomes in S phase is
 (1) 36 (2) 18
 (3) 22 (4) 37
11. A phase of the cell cycle which lasts more than 95% of the total duration is
 (1) Prophase (2) Interphase
 (3) Anaphase (4) Telophase
12. Most dramatic period of cell cycle is
 (1) G₁ phase (2) G₂ phase
 (3) S phase (4) M phase
13. Select the phase from the following where actual cell division occurs.
 (1) Quiescent stage (2) Interphase
 (3) G₁ phase (4) Mitosis phase
14. Which of the following cell does not divide?
 (1) Nerve cell
 (2) Yeast
 (3) Apical meristematic cell
 (4) E.coli
15. Which of the following is incorrect?
 (1) The cells in G₁ phase are metabolically active
 (2) The length of G₁ phase remains constant in different organisms
 (3) Interphase is a period of intense growth
 (4) Mitosis is the phase where actual cell division occurs
16. Centrioles duplicate in the
 (1) Nucleus (2) Endoplasmic reticulum
 (3) Cytoplasm (4) Mitochondria



- 17.** If the initial amount of DNA is denoted by $2C$, then the amount of DNA present after S phase will be
(1) $4C$ (2) $8C$
(3) $2C$ (4) $5C$
- 18.** If 46 chromosomes are present at G_1 phase, then the number of chromosomes after S phase would be
(1) 23 (2) 92
(3) 47 (4) 46
- 19.** M phase in humans lasts _____ of the duration of cell cycle.
(1) 90% (2) 60%
(3) 96% (4) <5%
- 20.** Cell organelles replicate in/during
(1) M phase (2) Interphase
(3) G_0 phase (4) Cytokinesis
- 21.** Which one of the following statement is incorrect for interphase stage?
(1) Period of great metabolic activity
(2) Also called preparatory phase
(3) Absence of replication of DNA
(4) It covers over 95% of the total duration of cell cycle
- 22.** Post-mitotic gap phase is characterised by all, except
(1) Synthesis of histone proteins
(2) Synthesis of RNA and nucleotides
(3) Most-variable in length
(4) No change in DNA contents
- 23.** Duplication of DNA occurs in a phase which is also associated with synthesis of
(1) RNA (2) Histone
(3) Cyclins (4) ATP
- 24.** Which of the following duplicates in cytoplasm in S-phase?
(1) Chromosome
(2) Centrioles
(3) Chromatid
(4) DNA
- 25.** Identify the phase at which most organelles duplicates
(1) M-phase
(2) G_1 phase
(3) G_0 phase
(4) G_2 phase



ANSWER KEY

1. (3)
2. (1)
3. (2)
4. (4)
5. (2)
6. (4)
7. (3)
8. (4)
9. (4)
10. (1)
11. (2)
12. (4)
13. (4)

14. (1)
15. (2)
16. (3)
17. (1)
18. (4)
19. (4)
20. (2)
21. (3)
22. (1)
23. (2)
24. (2)
25. (2)



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