A Division of Aggarwal Educare
Aggarwal CLASSES™

Daily Practice Problems

NEET BIOLOGY

Topic: Cell Cycle & Cell Division

01. Growth of multicellular organisms is initiated by

(a) Cell division (b) Cell enlargement

(c) Cell differentiation (d) Morphogenesis

02. Cell cycle includes

(a) Duplication of genome

(b) Duplication of other cell constituents

(c) Cell division

(d) All

03. Human cells in culture divide approximately for every

(a) 90 minutes (b) 19 minutes

(c) 24 hours (d) One hour

04. Yeast cells can progress through the cell cycle in about

(a) 90 minutes (b) 19 minutes

(c) 90 seconds (d) 19 seconds

05. In human cell cycle, interphase lasts for about

(a) 70% (b) 95% (c) 80% (d) 25%

06. M phase of cell cycle starts with

(a) Duplication of DNA

(b) Karyokinesis

(c) Cytokinesis

(d) Division of chromosomes

07. During this phase of cell cycle, cell is metabolically active without duplication of DNA

(a) M-phase (b) S-phase

(c) G_1 phase (d) G_2 phase

08. The amount of DNA per cell remains same during

(a) S, G_2 and metaphase

(b) G_1, G_2, M phase

(c) Anaphase, Telophase, G_1 phase

(d) (a) and (c)

09. The amount of DNA in a cell in G_1 phase is

(a) Half that of S-phase

(b) Half that of G_2 phase

(c) Half that of prophase

(d) All

10. In animal cell-cycle, centriole duplicates during

(a) G_1 phase (b) G_2 phase

(c) S-phase (d) M-phase

11. Proteins and RNA synthesis occurs during

(a) S phase and G_1 phase

(b) G_1 and G_2 phase

(c) G_1 and M-phase

(d) S and G_2 phase

12. Cells in this stage can enter into G_0 stage

(a) S-phase (b) G_2 phase

(c) G_1 phase (d) M-phase

13. These cells of adult animals don't divide

(a) Liver Cells (b) Heart cells

(c) Nerve cells (d) 'b' and 'c'

14. In animals, mitotic cell division is only seen in

(a) Haploid somatic cells

(b) Diploid somatic cells

(c) Diploid meiocytes

(d) a and c

15. Mitotic division is also called equational division because

(a) Chromosome number in daughter cells is same

(b) Chromosome number in daughter cells and parental cell is same

(c) Amount of DNA is same is both the daughter cells

(d) Amount of DNA is same is both daughter and parental cell

16. Two DNA molecules in a cell are observed but not distinct is these phases

(a) S and G_2

(b) G_2, prophase

(c) Metaphase and anaphase

(d) G_1 and G_2 phases

17. Condensation of chromosomal material is initiated during

(a) Prophase (b) Metaphase

(c) Anaphase (d) Telophase

18. Prophase is chracterised by

(a) Condensation of chromosomal material

(b) Centrioles move towards opposite poles of the cell

(c) Initiation of assembly of mitoticspindle

(d) All

19. Spindle fibres are chemically

(a) Carbohydrates

(b) Proteins

(c) Proteins and carbohydrates

(d) Proteins and fats

20. The following disappear at the end of prophase

(a) Nucleolus (b) Nuclear envelope

(c) Golgi and ER (d) All

21. Chromosomes are scattered in the cytoplasm during

(a) Early metaphase (b) Late metaphase

(c) Early anaphase (d) Late anaphase

22. Condensation of chromosomes is completed and can be observed clearly under microscope during

(a) Prophase (b) Metaphase

(c) Anaphase (d) Telophase

23. Kinetochores are disc shaped structures associated with

(a) Telomeres

(b) Centromeres

(c) Chromomeres

(d) Secondary constriction

24. Spindle fibres are attached to kinetochores of chromosomes in

(a) Metaphase (b) Anaphase

(c)Telophase (d) a and b

25. Chromatids of each chromosome are separated during

(a) Anaphase (b) Anaphase-I

(c)Anaphase-II (d) a and c

26. Chromosomes with one chromatid move towards the poles of the spindle during

(a) Anaphase-I (b) Anaphase

(c) Metaphase (d) Metaphase-I

27. Chromosomes with two chromatids move towards poles during

(a) Anaphase-I (b) Anaphse

(c) Anaphase-II (d) Metaphase

28. Chromosomes with two chromatids move towards equator of spindle during

(a) Anaphase (b) Anaphase-I

(c) Anaphase-II (d) Metaphase

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29. The following character is not observed during Anaphase

(a) Centromere splits

(b) Chromatids move towards equator

(c) Chromatids move towards poles

(d) Centromeres of chromatids are oriented towards poles

30. Chromosomes decondense and loose their individuality during

(a) Prophase (b) Metaphase

(c) Anaphase (d) Telophase

ANSWER KEY

Que.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Ans.	A	D	C	A	B	B	C	D	D	C
Que.	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Ans.	B	C	D	B	B	A	A	D	B	D
Que.	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Ans.	A	B	B	D	D	B	A	D	B	D