

Class: XIth
Date:
Subject: BIOLOGY
DPP No.: 3

	Topic :- Cell Cycle and Cell Division
1.	Which type of chromosomes segregate when a cell undergoes meiosis? a) Homologous chromosomes b) Non- homologous chromosomes c) Both (a) and (b) d) Centric and acentric chromosomes
2.	Term 'meiosis' was proposed by a) Farmer and Moore b) Flemming c) Strasburger d) Darlington
3.	Meiosis can be observed in a) tapetal cells b) Megaspores c) Micropores d) Spore mother cells
4.	Crossing over that results in genetic recombination in higher organisms occurs between a) Sister chromatids of bivalent b) Non-Sister chromatids of a bivalent c) Two daughter nuclei d) Two different bivalents
5.	In which of the following stage of the cell cycle, the attachment of spindle fibres to kinetochores of chromosomes occurs? a) Prophase b) Metaphase c) Anaphase d) Telophase
6.	The sequence of events by which a cell duplicates its genome, synthesizes the other constituents of the cell and eventually divides into two daughter cells is termed as a) Cell division b) Cell cycle c) Cell growth d) Cell duplication
7.	In animal cell has, cytokinesis involves a) The separation of sister chromatids b) The contraction of the contractile ring of micro filament c) Depolymerization of kinetochore microtubules
8.	 d) A protein kinase that phosphorylaes other enzymes Which is correct for meiotic metaphase-I? a) Bivalents are arranged at equator b) Univalents are arranged at equator c) Non-homologous chromosomes forms pair d) Spindle fibres are attached at chromomere

Crossing over is the exchange of genetic material between



a) Non-sister chromatids of the homologous chromosomes

Smart DPPs

	b) Sister chromatids of the homologous chromosomec) Chromatids of non-homologous chromosomesd) The genes those are completely linked						
10.	Which of the following pa) S	ohase of the cell cycle is no b) M	ot a part of interphase? c) G_0	d)	G_1		
11.	Colchicine arrests which a) Prophase	of the following stage of b) Anaphase	cell division? c) Telophase	d) Metaphase			
12.	Select the correct option with respect to mitosis. a) Chromatids start moving towards opposite poles in telophase b) Golgi complex and endoplasmic reticulum are still visible at the end of prophase c) Chromosomes move to the spindle equator and get aligned along equatorial plate in metaphase d) Chromatids separate but remains in the centre of the cell in anaphase						
13.	Small disc-shaped struct a) Kinetochores	tures at the s <mark>urface of the</mark> b) Metaphase plate	centromeres that appear of c) Spindle fibres	during metap d) Chromat			
14.	Cell division can not be s a) G ₁ -phase	stopped i <mark>n which phase of</mark> b) G ₂ -phase	the cell cycle? c) S-phase	d) Prophase	9		
15.	Meiosis in AaBb will pro a) AB, aB, Ab, ab	oduce gametes b) AB, ab	c) Aa, bb	d) Aa, Bb			
16.	The stage between two a a) Interphase	meiotic division is called b) Cytokinesis	c) Interkinesis	d) Karyokir	nesis		
17.	If we ignore the effect of cell having $2n = 12$? a) 8	f crossing over, how many b) 16	different haploid cells ari	se by meiosis d) 64	in a diploid		
18.	Which of the following (a) CdK ₄ / Cyclin D	CdKs and cyclins comes un b) CdK ₆ / Cyclin D	nder G ₁ check point? c) Both (a) and (b)	d) CdK ₂ / Cy	yclin B		
19.	Crossing over occurs at a) Single strand stage b) Two strand stage c) Four strand stage d) Eight strand stage						
20.	Chromosome number ca a) Indole acetic acid b) GA c) Zeatin d) Colchicines	an be doubled by using wh	nich of the following?				