CELL AND CELL STRUCTURE

1.	The main function of a plasma membrane is to								
	(A) prevent water from e	ntering or leaving	(B) control what goes into and out of the cell						
	(C) act as a sieve, allowin	g only lipids to pass	(D) move the cell from place to place						
2.	A cell has the following molecules and structures: enzymes, DNA, ribosomes, plasma membrane, and mitochondria. It could be a cell from								
	(A) a bacterium		(B) an animal, but not a j	plant					
	(C) a plant, but not an ar	nimal	(D) a plant or an animal						
3.	Cell theory was propoun	ded by							
	(A) Schleiden and Schwa	nn	(B) Watson and Crick						
	(C) Mendel and Morgan		(D) Wallace and Darwin						
4.	The figures of cork cells	as seen by Robert Hooke v	vere published in his book						
	(A) Origin of Species	(B) Plant Kingdom	(C) Genra Plantarum	(D) Micrographia					
5.	Who defined protoplasm	as a physical basis of life?							
	(A) Dujardin	(B) Huxley	(C) Watson	(D) Schwann					
6.	The term 'protoplasm' w	as given by							
	(A) Purkinje	(B) Dujardin	(C) Brown	(D) Fischer					
7.	Which of the following is	a prokaryotic cell?							
	(A) Spirogyra	(B) Amoeba	(C) <i>Rhizopus</i>	(D) Escherichia coli					
8.	Who first coined the wor	d "cell"?							
	(A) Aristotle	(B) Hooke	(C) Schwann	(D) Leeuwenhoek					
9.	Which two organelles are	e thought to have originate	d from free-living prokaryc	otic cells?					
	(A) Mitochondria and ribo	osomes	(B) Chloroplast and nucleus						
	(C) Chloroplast and mitod	chondria	(D) Lysosomes and mitochondria						
10.	Cell wall is								
	(A) permeable	(B) semipermeable	(C) differentially permeable (D) impermeable						
11.	Membranes occur in								
	(A) cytoplasm, chloroplas	sts and mitochondria	(B) cytoplasm, nuclei and	l starch grains					
	(C) chromosomes, chloro	plasts and starch grains	(D) nuclei, chromosomes and mitochondria						
12.	Ribosome was discovered	d by							
	(A) Porter	(B) Palade	(C) Muller	(D) Ochoa					
13.	All are membrane bound	l cell organelles except							
	(A) mitochondria	(B) spherosomes	(C) ribosomes	(D) lysosomes					
14.	The smallest organelles i	n a cell are							
	(A) lysosomes	(B) spherosomes	(C) peroxysomes	(D) ribosomes					
15.	Proteins that are to be used outside the cell are synthesised								
	(A) in the mitochondria		(B) on the rough endoplasmic reticulum						
	(C) on the smooth endop	lasmic reticulum	(D) on tree ribosomes						
16.	If cells are broken up and	d sedimented by centrifuga	tion, the new structure form	med in one of the fractions is					
. –	(A) lysosome	(B) microsome	(C) ribosome	(D) centrosome					
17.	Golgi apparatus is absen	t in							
	(A) liver cells	(B) higher plants	(C) blue green algae	(D) yeast					
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18.	Which of the following is not the correct pairing of structure with function?										
	(A) Golgi complex: breakdown of complex molecules (B) Mitochondrion: production of ATP										
	(C) Endoplasmic reticului	m: synthesis of proteins	(D) Chloroplast: photosynthesis								
19.	Dictyosomes are										
	(A) place of flagellar org	anelle	(B) respiratory particle								
	(C) golgi bodies		(D) class of ribosomes								
20.	Which of the following st	tructure is the functional ur	unit in a Golgi complex?								
	(A) Cisternae	(B) Thylakoid	(C) Archoplasm	(D) Cristae							
21.	Major function of Golgi b	oody is									
	(A) secretion		(B) regulation of cell tem	perature							
	(C) active transport		(D) transportation								
22.	Cellulose and hemicellul	ose are the constituents of	cell wall are synthesised by								
	(A) microbodies		(B) smooth endoplasmic reticulum								
	(C) lysosomes		(D) Golgi apparatus								
23.	The enzymes for Kreb's cycle in mitochondria are located										
	(A) in perimitochondrial	A) in perimitochondrial space (B) on Inner membrane									
	(C) in mitochondrial mat	rix	(D) on the outer membrane								
24.	The presence of DNA in	mitochondria and chlorop	last supports the hypothesi	s that							
	(A) Mitochondria and chl	oroplast both originated as	s independent free-living org	ganisms							
	(B) Glycolysis occurs in b	oth mitochondria and chlor	roplast								
	(C) Chloroplast and mito	chondria undergo meiosis a	and mitosis independent of	nucleus							
	(D) ATP is produced in c	hloroplast as well as mitocl	hondria								
25.	Green pigments capable	of capturing the energy o	f sunlight are located withir	n the							
	(A) endoplasmic reticului	n (B) chloroplasts	(C) cell wall	(D) ribosomes							
26.	Chloroplasts are conside	red as self-replicating units	s as they contain								
	(A) DNA	(B) RNA	(C) both DNA and RNA	(D) neither DNA or RNA							
27.	When green tomatoes tu	ırn red then									
	(A) new chloroplast are r	nade									
	(B) chromoplasts are changed into chloroplasts										
	(C) chloroplasts are disin	tegrated and get converted	l into chromoplasts								
	(D) none of these										
28.	Which of the following p	airs is mismatched?									
	(A) Nucleus; ribosomal R	NA	(B) Nucleus; DNA replication								
	(C) Lysosome; protein sy	nthesis	(D) Cytoskeleton; microtubules								
29.	The filaments that specia	alise in moving organelles a	are								
	(A) micro filaments	(B) intermediate filamen	ts (C) actin	(D) microtubules							
30.	Spindle fibres are made	up of									
	(A) lipids	(B) cellulose	(C) pectin	(D) proteins							
31.	Function of centriole is										
	(A) formation of spindle fibres (B) formation of nucleolus										
	(C) initiation of cell divisio	on	(D) formation of cell plate								
32.	Chromosomes having ed	qual arms are known as									
	(A) telocentric chromoso	me	(B) metacentric chromosome								
	(C) concentric chromosor	ne	(D) acrocentric chromosome								
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33.	Electron microscope has revealed the presence of											
	(A) chloroplasts	(B) leucoplasts	(C) ribosomes	(D) chromosomes								
34.	The term mitosis was giv	en by										
	(A) Farmer	(B) Flemming	(C) Boveri	(D) Moore								
35.	The role of mitosis is not	The role of mitosis is not merely to divide a cell into two daughter cells but to ensure genetic continuity from ell generation. The mechanism ensuring genetic continuity is										
	cell generation to anothe	r cell generation. The mech	nanism ensuring genetic co	ntinuity is								
	(A) formation of cells with	new chromosomes	(B) formation of two daug	hter cells								
	(C) formation of two cells	with identical DNA										
	(D) halving the chromoso	me number between the tw	vo new cells									
36.	Colchicine interferes in											
	(A) chromosome condens	ation	(B) DNA replication									
<u> </u>	(C) organisation and orie	ntation ot spindle elements	(D) none of these									
37.	The main significance of	mitosis is that										
	(A) it causes genetic varia	tion	(B) it causes transformation	on of DNA to RNA								
	(C) it reduces the number	of chromosomes	(D) it ensures genetic hon	nogeneity of cells								
38.	The chronological seque	nce of stages in prophase o	f meiosis is									
	(A) Leptotene, Pachytene, Zygotene, Diakinesis, Diplotene (B) Leptotene, Zygotene, Pachytene, Diplotene, Diakinesis											
	 (B) Leptotene, Zygotene, Pachytene, Diplotene, Diakinesis (C) Zygotene; Leptotene, Pachytene, Diakinesis, Diplotene (D) Diplotene, Diplotene, Zygotene, Leptotene, Diplotene 											
	(C) Zygotene; Leptotene	, Pachytene, Diakinesis, Dij	olotene									
	(D) Diplotene, Diakinesis	, Pachytene, Zygotene, Lej	ototene									
39.	Mitochondria are more in cells where											
	(A) There is least cellular	activity	(B) There is maximum ce	llular activity.								
	(C) There is an average a	ctivity	(B) There is maximum cellular activity.(D) They form tissues.									
40.	he cell theory states all the following except that											
	(A) Cells are units of strue	cture in plants and animals	s (B) Cells are units of function									
	(C) Cells arise from pre-e	existing living cells	(D) Cells always mutate.									
41.	The main difference between prokaryotic and eukaryotic cell is that the prokaryotic cell does not have											
	(A) A plasma membrane		(B) A cell wall									
	(C) A genetic system		(D) A well defined nucleus	s with a membrane.								
42.	The sum total of all proc	esses carried out in a cell is	called									
	(A) Symbiosis	(B) Metabolism	(C) Anabolism	(D) Catabolism								
43.	The endoplasmic reticulu	ocesses carried out in a cell is called (B) Metabolism (C) Anabolism (D) Catabolism ulum in a cell probably functions in the (B) Photosynthesis										
	(A) Protein synthesis		(B) Photosynthesis									
	(C) Transport of material	S	(D) Secretory activities of	the cell								
44.	The two acids present in the nucleus are											
	(A) Ribonucleic acid and	citric acid	(B) INitric acid and malic acid									
	(C) Deoxyribonucleic acid	1 and fatty acid	(D) Kibonucleic acid and deoxyribonucleic acid.									
45.	Most cells lacking chloro	plasts do not have										
	(A) Kibosomes	(B) Mitochondria	(C) Cell wall	(D) Cell membrane.								

ANSWER KEY															
Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	В	D	А	D	В	А	D	В	С	А	А	В	С	D	В
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	В	С	А	С	А	А	D	С	А	В	С	С	С	D	D
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	А	В	С	В	С	С	D	В	В	D	D	В	С	D	С
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