	PART – 1 SECTION – A: APTITUDE			(a) 1 μg/L	<mark>(b) 10 μg/L</mark>
Q1.	The most abunda	nt element found in		(c) 100 μg/L	(d) 0.1 µg/L
	Earth's mass is		Q9.	The effect of splitting	ng a spectral line into
	(a) Ca	<mark>(b) Fe</mark>		several components	in the presence of a
	(c) Al	(d) Mg		static magnetic field	is called
Q2.	Haemophilia, an ir	nherited disorder that		(a) Stark Effect	C
	affects only males is:			<mark>(b) Zeeman Effect</mark>	
	<mark>(a) Recessive X-linke</mark>	<mark>d</mark>		(c) Planck Phenomen	ion
	(b) Dominant X-linke	ed		(d) Bohr phenomeno	n
	(c) Y-linked		Q10.	Most common btood	l group among Indian
	(d) Dominant autoso	omal		population:	
Q3.	A camera setting that	at allows the camera to		(a) O+	(b) A+
	choose the correct fo	cus distance for you		<mark>(c) B+</mark>	(d) AB+
	<mark>(a) Autofocus</mark>	(b) Zoom Lens	Q11.	The women scientist	who won Nobel prize
	(c) Framing	(d) Aperture		in 2015 for her d	iscovery on a novel
Q4.	The molecular weig	ht of NaCI is 58. How		therapy against mala	ria is
	many mg is in 50 μm	ol of NaCI?		<mark>(a) Youyou Tu</mark>	
	(a) 290 mg	(b) 29 mg		(b) Svetlana Alexievi	ch
	<mark>(c) 2.9 mg</mark>	(d) 29 g		(c) Malala Yousafzai	
Q5.	Which of the followi	ng is non-mutagenic?		(d) Alice Munro	
	(a) UV	(b) Acridine	Q12.	All are basic types of	melanin except
	(c) IR	(d) X-ray		(a) Eumelanin	(b) Pheomelanm
Q6.	Which of the followi	ng is not a lichen?		(c) Neuromelanin	<mark>(d) Cystomeianin</mark>
	(a) Lobario oregano		Q13.	One of the following	ng diseases is due to
	(b) Rhizocarpon geog	graphicum		protein deficiency:	
	(c) Reindeer moss			(a) Scurvy	<mark>(b) Marasmus</mark>
	(d) Cladophialophor	<mark>o bantiana</mark>		(c) Beriberi	(d) Rickets
Q7.	Which one of the	following is a super	Q14.	All are true about Ty	vpe -2 diabetes mellitus
	fluid?			except:	
	<mark>(a) ⁴He</mark>	(b) ⁵He		(a) It is a genetic dise	ase
	(c) 5Li	(d) <sup>4</sup> Li		(b) Disease of life sty	le
Q8.	The WHO specified	provisional guideline		(c) Caused due to	<mark>o increase in insulin</mark>
	limit for Arsenic con	ncentrations in potable		production	
	water, is			(d) Caused due to	inability of cells to

	respond to normal levels of insulin		hospitalisation
			(b) Due to vaccination
Q15.	Following are the types of active transport		(c) Due to mosquito bite
	through cell membrane except:		(d) Due to rat bite
	(a) Sodium -Potassium pump	Q23.	Which one of the following is a comma
	(b) Endocytosis		shaped motile bacteria?
	(c) Osmosis		(a) Yersinia pestis
	(d) Exocytosis		(b) Brucella melitensis
Q16.	International day for preservation of the		(c) Vibrio cholera
	Ozone layer is:		(d) Bacillus Anthrocis
	(a) 16 September (b) 2 October	Q24.	The resolution of human eye is
	(c) 31 October (d) 27 November		(a) 12 megapixels (b) 50 gigapixes
Q17.	An instrument used to measure humidity is		<mark>(c) 576 megapixels</mark> (d) 500 pixels
	(a) Anemometer (b) Hygrometer	Q25.	What do you mean by LTE in relation to
	(c) Thermometer (d) Pyrhellometer		telecommunication
Q18.	Which gas is safe and effective extinguisher		(a) Long term evolution
	for all confined fires		(b) Light term evolution
	(a) Nitrogen dioxide (b) Carbon dioxide		(c) Long term enhancement
	(c) Sulphur dioxide (d) Nitrous Oxide		(d) Light term enhancement
Q19.	The country that has regulations relating to	Q26.	Rain gauge is the instrument for
	the trans fats in foodstuffs is		determining:
	(a) India		(a) The depth of precipitation in millimetre
	(b) South Africa		over one-meter square area.
	(c) Australia		(b) The depth of precipitation in centimetre
	(d) United States of America		over one-meter square area.
Q20.	Pregnancy can be terminated medically up		(c) The depth of precipitation in millimetre
	to:		over one- inch square area.
4	(a) 12 weeks (b) 20 weeks		(d) The depth of precipitation in inches
	(c) 18 weeks (d) 24 weeks		ever one-millimetre square area
Q21.	HLA matching is done during:	Q27.	The Indian government generally spends
	(a) Blood transfusion		about% of GDP on healthcare
	(b) Platelet transfusion		(a) 12.2 (b) 8.2
	(c) Total parenteral nutrition		(c) 4.2 (d) 1.2
	(d) Organ transplantation	Q28.	The reason for choosing mice for the
Q22.	Nosocomial infections are:		science experiments are all except:
	(a) Acquired during the course of		(a) They are small

	(b) They have long life span		(c) 3 (d) 45
	(c) They don't cause damage when	n <b>Q34</b> .	In a normally distributed population,
	provoked		number of the observations falling within
	(d) We share many of our genes with mice		the range Mean ± S.D. is approximately
Q29.	Biological clock refers to all except:		(a) 50% (b) 68%
	l) Ageing (b) Death clock		(c) 87% (d) 95%
	(c) Circadian rhythm (d) Molecular'clock	Q35.	For comparing variability in different
Q30.	If an engine has a capacity of 1000cc that	ı	parameters recorded in different units, the
	the capacity of that engine is		most appropriate measure is
	(a) One millilire (b) One Litre		(a) Range
	(d) Two Litre (d) Two millilitres		(b) Mean Deviation
Q31.	The type of Laser used in Laser Printers?		(c) Standard Deviation
	(a) Semiconductor laser		(d) Coefficient of Variation
	(b) Excimer Laser	Q36.	Geometric mean of 3,4 and 18 is
	(c) Dye Laser		(a) 8.33 (b) 8.0
	(d) Gas Laser		(c) 7.5 (d) 6.0
Q32.	Aluminium is getting popular worldwid	e Q37.	If we wish to study the mutual
	today as a "Green Metal". Which among th		interdependence between systolic blood
	fallowing properties of Aluminium make	5	pressure and blood sugar in a sample of 25
	it a Green Metal?		patients, then the type of analysis required
	(a) Aluminium has been providing	a	to be performed is
	replacement of wood for saving forests and	1	(a) Correlation Analysis
	contributes in environment protection		(b) Regression Analysis
	(b) Aluminium is a light metal and it i	5	(c) Salt Analysis
	resistant to corrosion		(d) Analysis of Variance
	(c) Aluminium has high rate of recycling	g Q38.	The most appropriate measure of central
	and it can be re-used repeatedly without it	<mark>3</mark>	tendency when data are contaminated by
	quality deteriorating.		outliers is:
	(d) The lands after the Bauxite mining car	ı	(a) Mode (b) Arithmetic mean
	be restored very quickly and easily		(c) Geometric mean <mark>(d) Median</mark>
Q33.	The variance of a data set is 2.25. if w	e <b>Q39</b> .	If a distribution is negatively skewed, then
	multiply each data value by 2 then th	9	(a) Mean = Median = Mode
	standard deviation will be:		<mark>(b) Mean &lt; Median &lt; Mode</mark>
	(a) 1.5 (b) 3.5		(c) Mean > Median > Mode

	(d) Mean < Mode < Median	Q45.	An appropriate measure of association
Q40.	A random sample of expenditure on 20		between two attributes, each at two levels,
	patients from PGI and another random		is:
	sample of expenditure on 25 patients from		(a) Karl Pearson's correlation coefficient
	Fortis Hospital was selected. If our interest		(b) Spearman's rank correlation coefficient
	was to know whether, on an average,		(c) Kendall's tau coefficient
	expenditure incurred per patient in the two		(d) Yule's coefficient of association
	hospitals was comparable or not, then the	Q46.	A test of significance to test the
	appropriate test procedure would be		independence of two attributes is:
	(a) Z-test		(a) t-test (b) F-test
	(b) Paired t-test		(c) Z-test (d) Chi-square test
	(c) Unpaired t-test	Q47.	A bottle contains 4 underweight, 3 over
	(d) Kendall's Concordance analysis		weight and 5 normal weight tablets. A
Q41.	The mean and median of a data set are 24		person draws randomly one tablet from the
	and 22, respectively. The mode of the data		bottle. The chance of drawn tablet not being
	set will be:		under weight is:
	(a) 23 (b) 18		(a) .67 (b) 3
	(c) 2 (d) -2		(c) .42 (d) .58
Q42.	The mean, mode and standard deviation of	Q48.	The appropriate measure of dispersion of
	a data set are 10, 13 and 1.5, respectively.		an open-end class data is:
	The value of coefficient of skewness is:		(a) Range
	(a) 2 (b) -3		(b) Mean deviation
	(c) 3 (d) -2		<mark>(c) Quartile deviation</mark>
Q43.	The mean, median, mode of a data set is		(d) Standard deviation
	135, 133 and 130, respectively. The	Q49.	ANOVA technique is most appropriate for
	distribution of the data set is:		testing statistical significance of
	(a) symmetric		(a) Mean of single random sample
4	(b) Negatively skewed		(b) Difference between means of two
	(c) Positively skewed		independent random samples
	(d) Normal		(c) Difference between means of two paired
Q44.	A pharmaceutical company produces 8 %		samples
	defective tablets. The expected number of		(d) Difference between means of more than
	non-defective tablets in a batch of 175		two (independent or related) samples
	tablets is:	Q50.	If p-value of a test-statistic is 0.0023, then
	(a) 14 (b) 28		our inference would be:
	(c) 161 (d) 147		(a) The findings are statistically

	nonsignificant	Q56.	Toxin which blocks release			of	
	(b) The findings are significant at 5%		acetylcholine is				
	probability level		(a) Diphth	ieria toxin			
	(c) The findings are significant at 1%		<mark>(b) Botulir</mark>	<mark>num toxin</mark>			
	probability level		(c) Staphy	lococcal to	xin		
	(d) The findings are significant at 0.1%		(d) Tetano	ospasmin			
	probability level	Q57.	Which of	the follow	wing bac	terial ger	ome
1	PART II - SECTION-B: LIFE SCIENCE		was seque	enced first?			
Q51.	All of the following pathogenic bacteria		(a) Escher	ichia coli			
	fulfil Koch's postulates except		(b) Strepto	ococcus pro	eumonia	e	
	(a) Treponema pallidum		<mark>(c) Haemo</mark>	o <mark>philus infl</mark>	<mark>uenzae</mark>		
	(b) Yersinia pestis		(d) Sporot	ricum ther	mophile		
	(c) Bacillus anthracis	Q58.	Organic i	on necessa	ry in Na-	K ATPase	!
	(d) Helicobacter pylori		<mark>(a) Mg+2</mark>		(b) PO4	-	
Q52.	Category A bioterrorism agents are		(c) SO <sub>4</sub> <sup>-2</sup>		(d) Ca+	2	
	(a) Clostridium botulinum	Q59.	Surfactant	t:			
	(b) Vibrio cholerae		(a) Is com	monly defi	cient in t	erm neona	ates
	(c) Pseudomonas aeruginosa		(b) Acts lil	ke detergeı	nt in wat	er	
	(d) E. Coli		(c) Redu	ices the	amount	of neg	ative
Q53.	Holding time for sterilization by dry heat at		intrapleur	al pressure	2		
	temperature of 160°C is		<mark>(d) Increa</mark> s	ses pulmor	<mark>nary com</mark>	<mark>pliance</mark>	
	(a) 5 minutes (b) 15 minutes	Q60.	Sleep cent	er is locate	d in		
	(c) 60 minutes (d) 45 minutes		(a) basal g	anglia	<mark>(b) hyp</mark>	othalamu	<mark>S</mark>
Q54.	Which human infection spreads through		(c) medull	la	(d) cere	ebellum	
	urine	Q61.	Most activ	ve form of v	vitamin I	)	
	(a) Leptospirosis (b) Legionellosis		(a) Vitami	n D <sub>3</sub>			
4	(c) Plague (d) Diphtheria		<mark>(b) Calcitr</mark>	iol			
Q55.	Louis Pasteur is not associated with		(c) Calcefe	edial			
	(a) Introduction of complex media		(d) 7-dehy	drocholeca	alciferal		
	(b) Discovery of rabies vaccine	Q62.	Function of	of the thala	mus is-		
	(c) Discovery of phenomenon of		(a) Relay o	<mark>entre</mark>			
	phagocytosis		(b) Arousa	al			
	(d) Disproving spontaneous regression		(c) Pain pe	erception			
	theory the		(d) Pain lo	ocalisation			

Q63.	Angiotensinogen is synthesized in the			abundantly in collagen protein		
	<mark>(a) Liver</mark>	(b) Kidney		(a) Lysine	(b) Alanine	
	(c) Lungs	(d) Adrenals		<mark>(c) Glycine</mark>	(d) Leucine	
Q64.	The organ	with maximum	Q72.	Alu sequences are		
	consumption per m	inute		(a) Promoter seque	nce	
	<mark>(a) Liver</mark>	(b) Heart		<mark>(b) Repetitive DNA</mark>	sequence	
	(c) Brain	(d) Skeletal muscle		(c) Transcription in	itiation sequence	
Q65.	The enzyme respon	sible for the synthesis of		(d) Telomeric seque	ence	
	RNA primer in euk	aryotes	Q73.	Difference between	a DNA and RNA	
	<mark>(a) DMA polymeras</mark>	se alpha		(a) Sugar and phos	ohate	
	(b) DNA polymeras	se beta		(b) Sugar and purir	les	
	(c) DNA polymeras	e gamma		(c) Purines and pho	sphate	
	(d) Topoisomerase			<mark>(d) Sugar and pyrir</mark>	nidines	
Q66.	Which of the foll	lowing does not have	Q74.	Inhibition of succ	inic dehydrogenase by	
	phosphate?			maionic acid is		
	<mark>(a) A nucleoside</mark>	(b) A nucleotide		(a) Non-competitiv	e inhibition	
	(c) DNA	(d) RNA		(b) Competitive inh	ibition	
Q67.	Which of the follow	ing is a purine?		(c) Un-competitive	inhibition	
	<mark>(a) Adenine</mark>	(b) Thymine		(d) Feedback inhibi	tion	
	(c) Uracil	(d) Cytosine	Q75.	How many genes a	re there in E. coli K-12	
Q68.	'RNAi' stands for w	hich of the following?		genome		
	(a) RNA inducer.			<mark>(a) 4377</mark>	(b) 5467	
	(b) RNA insertion.			(c) 2498	(d) 3000	
	(c) RNA interferenc	<mark>e</mark>	Q76.	Genes which are ac	tive all the time in cell	
	(d) RNA intron.			are known as		
Q69.	Which of the follow	ing is not required for		(a) Cellular luxury	genes	
	a PCR reaction?			(b) Metabolic genes		
	(a) A DNA polymer	ase		<mark>(c) Housekeeping g</mark>	<mark>enes</mark>	
	(b) Dideoxy-dNTPs			(d) Control genes		
	(c) Primers		Q77.	What is the key	event that leads to	
	(d) Template DNA			association of a pro	tein with a proteosome?	
Q70.	Which of the follo	owing is a non-natural		(a) Phosphorylatior	n (b) Acetylation	
	amino acid?			(c) Ubiquitination	(d) Methylation	
	(a) Arginine	(b) β-alanine	Q78.	Which of these	restriction enzymes	
	(c) Proline	(d) Tryptophan		produce blunt ends	?	
Q71.	Which of the follow	wing amino acid found		(a) Sail	(b) EcoRV	

	(c) Xhol	(d) HindllI		(a) Chromosome co	ndensation
Q79.	Autonomously repli	icating sequence (ARS)		(b) Spindle formation	on
	is a feature of			(c) Division of cytop	olasm
	(a) E. coli vector	(b) Phage vector		(d) Separation of ch	romatids
	<mark>(c) Yeast vector</mark>	(d) Plasmid vector	Q86.	A cross in which p	parents differ in a single
Q80.	What is not co	mmon between an		pair of contrasting of	character is called
	expression vector an	d cloning vector		(a) tetrahybrid cross	5
	(a) Origin of replicat	ion		(b) dihybrid cross	$\sim$
	(b) Restriction sites			(c) monohybrid cros	ss
	(c) Marker genes			(d) trihybrid cross	
	(d) Promoter		Q87.	Phenotype of an org	ganism is a result of
Q81.	From prenatal life t	to puberty the primary		(a) mutations and li	nkages
	oocyte remains in			(b) environmental	changes and sexual
	<mark>(a) Prophase</mark>	(b) Metaphase		dimorphism	
	(c) Anaphase	(d) Telophase		(c) genotype	and environmental
Q82.	Total time taken f	rom the beginning of	<mark>intera</mark>	ctions	
	meiosis to the f	formation of mature		(d) cytoplasmic effe	ects 3nd nutrition
	spermatozoa is abou	ıt 🔨	Q88.	The total number	of phalanges present in
	<mark>(a) 64 days</mark>	(b) 74 days		each hand are	
	(c) 65 days	(d) 75 days		(a) 12	(b) 15
Q83.	Which of the chrom	nosomal abnormality is		<mark>(c) 14</mark>	(d) 24
	responsible for Edwa	ard's syndrome?	Q89.	The movement of	the sole of the foot
	<mark>(a) Trisomy-18</mark>	(b) Trisomy-21		inward or medially	is
	(c) Trisomy-8	(d) Trisomy-13		(a) inversion	(b) eversion
Q84.	Transcription is the p	process		(c) pronation	(d) supination.
	(a) By which info	rmation is transferred	Q90.	Shoulder joint is an	example of
from	DNA to the transfer	RNA		(a) primary cartilag	inous joint
	(b) By which info	rmation is transferred		(b) secondary cartila	aginous joint
from	RNA to the DNA			<mark>(c) ball ana socket jo</mark>	<mark>oint</mark>
	(c) By which infor	rmation is transferred		(d) syndesmosis	
from	nuclear DNA to the	mitochondrial DNA	Q91.	Hormone insulin o	f Pancreas is secreted by
	<mark>(d) By which info</mark>	rmation is transferred		(a) alpha cells	(b) pancreatic acinus
from (	DNA to the messeng	ver RNA		(c) beta cells	(d) gamma cells
	L. L	<u></u>			

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	<mark>(a) testes</mark>	(b) penis		enzyme-substrate reaction tells us
	(c) seminal vesicles	(d) prostate		(a) Inhibitor binds already formed enzyme-
Q93.	Valency of carbon is			substrate complex
	(a) One	<mark>(b) Two</mark>		(b) Inhibitor binds to another site than the
	(c) Three	(d) Four		active site of enzyme
Q94.	Coenzyme A is a der	ivative of		(c) Inhibitor competes with the substrate in
	(a) Thiamine	(b) Riboflavin		binding the active site of enzyme
	<mark>(c) Pantothenate</mark>	(d) Niacin		(d) Inhibitor does not participate in the
Q95.	Which of the follow:	ing reduces oxygen to		enzyme-substrate reaction
	water?		Q101.	Which among the following absorbs more
	(a) Q-cytochrome c re	eductase		UV radiation at 260 nm
	(b) ATP synthase			(a) Double stranded DNA .
	(c) TCA cycle			(b) Single stranded DNA
	<mark>(d) Cytochrome c oxi</mark>	dase		(c) Single stranded RNA
Q96.	Water transportation	n across lipid bilayers		(d) Protein complex
	of the cell is probably	r mediated by		
	(a) Hydrotransferrins	3	Q102.	The main role of an enzyme in a chemical
	<mark>(b) Aquaporins</mark>	A		reaction is to
	() TT 1 ·			
	(c) Hydroporins			(a) Reduce the energy of a reaction
	(c) Hydroporins (d) Aquatransferrins	$\sim$		(a) Reduce the energy of a reaction (b) Increase the energy of a reaction
Q97.	(c) Hydroporins (d) Aquatransferrins Which of the follow	wing is wrong about		<ul><li>(a) Reduce the energy of a reaction</li><li>(b) Increase the energy of a reaction</li><li>(c) Reaction goes to completion without</li></ul>
Q97.	(c) Hydroporins (d) Aquatransferrins Which of the follow Hemoglobin	wing is wrong about		<ul><li>(a) Reduce the energy of a reaction</li><li>(b) Increase the energy of a reaction</li><li>(c) Reaction goes to completion without changing energy</li></ul>
Q97.	<ul><li>(c) Hydroporins</li><li>(d) Aquatransferrins</li><li>Which of the follow</li><li>Hemoglobin</li><li>(a) It displays quatern</li></ul>	wing is wrong about nary structure		<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding</li> </ul>
Q97.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quatern</li> <li>(b) It binds oxygen</li> </ul>	wing is wrong about nary structure		<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> </ul>
Q97.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quaters</li> <li>(b) It binds oxygen</li> <li>(c) It contains Heme r</li> </ul>	wing is wrong about nary structure moiety	Q103.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the</li> </ul>
Q97.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quatera</li> <li>(b) It binds oxygen</li> <li>(c) It contains Heme a</li> <li>(d) It has proteolytic a</li> </ul>	wing is wrong about nary structure moiety activity	Q103.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> </ul>
Q97. Q98.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quatern</li> <li>(b) It binds oxygen</li> <li>(c) It contains Heme n</li> <li>(d) It has proteolytic a</li> <li>Acid phosphatase is a</li> </ul>	wing is wrong about nary structure moiety activity a marker of	Q103.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> </ul>
Q97. Q98.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quatern</li> <li>(b) It binds oxygen</li> <li>(c) It contains Heme n</li> <li>(d) It has proteolytic a</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membrane</li> </ul>	wing is wrong about nary structure moiety activity a marker of	Q103.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> </ul>
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Q97. Q98.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quatern</li> <li>(b) It binds oxygen</li> <li>(c) It contains Heme n</li> <li>(d) It has proteolytic a</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membrane</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> </ul>	wing is wrong about nary structure moiety activity a marker of	Q103. Q104.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> </ul>
Q97. Q98.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quateries</li> <li>(b) It binds oxygen</li> <li>(c) It contains Hemeries</li> <li>(d) It has proteolytics</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membrane</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> <li>(d) Endoplasmic retice</li> </ul>	wing is wrong about nary structure moiety activity a marker of e	Q103. Q104.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> <li>(b) Mitochondria</li> </ul>
Q97. Q98. Q99.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quateries</li> <li>(b) It binds oxygen</li> <li>(c) It contains Hemeries</li> <li>(d) It has proteolytics</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membranes</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> <li>(d) Endoplasmic retics</li> </ul>	wing is wrong about mary structure moiety activity a marker of e	Q103. Q104.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> <li>(b) Mitochondria</li> <li>(c) Golgi complex</li> </ul>
Q97. Q98. Q99.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quateries</li> <li>(b) It binds oxygen</li> <li>(c) It contains Hemeries</li> <li>(d) It has proteolytics</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membrane</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> <li>(d) Endoplasmic retics</li> <li>The amino acid involution</li> <li>nitric oxide is</li> </ul>	wing is wrong about mary structure moiety activity a marker of e culum lved in the synthesis of	Q103. Q104.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> <li>(b) Mitochondria</li> <li>(c) Golgi complex</li> <li>(d) Lysosomes</li> </ul>
Q97. Q98. Q99.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quateries</li> <li>(b) It binds oxygen</li> <li>(c) It contains Hemeries</li> <li>(d) It has proteolytics</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membrane</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> <li>(d) Endoplasmic retics</li> <li>The amino acid involunitric oxide is</li> <li>(a) Alanine</li> </ul>	wing is wrong about mary structure moiety activity a marker of e culum lved in the synthesis of (b) Asparagine	Q103. Q104. Q105.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> <li>(b) Mitochondria</li> <li>(c) Golgi complex</li> <li>(d) Lysosomes</li> <li>The tertiary structure of protein is</li> </ul>
Q97. Q98. Q99.	<ul> <li>(c) Hydroporins</li> <li>(d) Aquatransferrins</li> <li>Which of the follow</li> <li>Hemoglobin</li> <li>(a) It displays quateries</li> <li>(b) It binds oxygen</li> <li>(c) It contains Hemeries</li> <li>(d) It has proteolytics</li> <li>Acid phosphatase is a</li> <li>(a) Plasma membranes</li> <li>(b) Lysosome</li> <li>(c) Mitochondria</li> <li>(d) Endoplasmic retics</li> <li>The amino acid involunitric oxide is</li> <li>(a) Alanine</li> <li>(c) Asparticacid</li> </ul>	wing is wrong about mary structure moiety activity a marker of e culum lved in the synthesis of (b) Asparagine (d) Arginine	Q103. Q104. Q105.	<ul> <li>(a) Reduce the energy of a reaction</li> <li>(b) Increase the energy of a reaction</li> <li>(c) Reaction goes to completion without changing energy</li> <li>(d) Reduce the substrate binding characteristics</li> <li>The energy producing groups in the Adenosine triphosphate</li> <li>(a) Purine groups (b) Sugar groups</li> <li>(c) Phosphate groups (d) Nitrogen groups</li> <li>The cellular organelle with acidic pH</li> <li>(a) Nucleus</li> <li>(b) Mitochondria</li> <li>(c) Golgi complex</li> <li>(d) Lysosomes</li> <li>The tertiary structure of protein is governed mainly by the</li> </ul>

	groups of polypeptide	<mark>e chains</mark>		<mark>(a) Can</mark>	also be	called	an	expres	ssed
	(b) Intermolecular	interactions of the	<mark>sequer</mark>	nce taş	<mark>g (EST) li</mark> t	orary.			
	polypeptide chains			(b) Is Con	npulsory l	DNA libr	ary		
	(c) Hydrogen bonding	g		(c) Part of	Protein d	lomain			
	(d) Vanderwalls inter	actions		(d) Only f	ound in p	lants			
Q106.	Many scientists are	e very interested in	Q112.	Which of	these mi	ght be a	in ad	vantag	e to
	studying mitochondr	ial DNA because it		genetic	testing	of in	divid	uals	via
	(a) is only present	in vertebrates closely		microarra	ys?				
	related to humans.			(a) Many	different	potentia	l mut	ations	in a
	(b) replicates by syn	nthesizing an mfiNA		single ger	ne could b	e tested 3	Bt onc	e.	
that	then acts as a DNA po	olymerase.		(b) Expre	ssion pat	terns of	many	y diffe	rent
	(c) contains over 50°	% ofahe genes in the		genes can	be analyz	zed simu	ltaneo	ously.	
	human genome.			(c) Micr	oarray	analysis	can	prov	vide
	(d) mutates rapidly a	nd allows us to study		informatio	on on	sequenc	e le	engths	of
	evolution over short t	<mark>ime scales.</mark>		particular	genes.				
				<mark>(d) A and</mark>	B				
Q107.	Which of the follow	wing is a nucleotide	Q113.	Passive i	immunity	is obt	ainec	l thro	ugh
	sequence data base?			injecting					
	<mark>(a) EMBL</mark>	(b) SWISS PROT		<mark>(a) Antibo</mark>	odies		(b) '	Vaccine	e
	(c) PROSITE	(d) TREMBL		(c) Antibio	otic	(d) A1	ntiger	1	
Q108.	Which of the followi	ng organisms has the	Q114.	Secondary	y Immun	e respon	se is	genera	ated
	largest genome size?	$\mathbf{X}$		due to					
	(a) Mycoplasma genit	alium		(a) Naive	B cells	(b) Na	aive T	cells	
	(b) Escherichia coli			(c) NK cel	lls	<mark>(d) M</mark>	emor	<mark>y cells</mark>	
	<mark>(c) Amoeba dubia</mark>		Q115.	Which of	the follo	wing va	ccines	s does	not
	(d) Homo sapiens			provide li	fe time pr	otection	?		
Q109.	Sequencing 'depth'	is also known by		(a) Polio		(b) DI	PT		
	another term:			<mark>(c) Tetanu</mark>	1 <mark>S</mark>	(d) Sn	nall P	ox	
	(a) Amount	(b) Coverage	Q116.	Newborn	S				
	(c) Trend	(d) Consensus		(a) Receiv	e Materna	al B cells			
Q110.	Taxonomy using 16s	rRNA was defined by:		(b) Respon	nd to anti	gens as g	good a	is adul	ts
	(a) Watson	(b) Huckley		<mark>(c) Have v</mark>	<mark>virtually</mark> a	fully con	npler	<mark>nent of</mark>	
	<mark>(c) Woese</mark>	(d) Crick		maternal	IgG antib	odies			
Q111.	A cDNA library:			(d) Recei	ve IgM a	antibodie	es fro	m mo	ther

through placental transfer Q123. All have the least abuse liability, EXCEPT Q117. The blood group with anti-A antibodies (a) Caffeine (b) Benzodiazepines and anti-B antibodies is (c) Cocaine (d) Aspirin (a) O Q124. The ratio of L D50 to ED50 is (b) A (c) AB (d) B (a) Therapeutic Window Q118. What is the term used to describe white (b) Efficacy blood cell migrating towards bacteria? (c) Therapeutic Index (a) Zeosis (d) Potency (b) Chemotaxis Q125. Serum level of a drug is important to monitor, if patients is on (c) Phototaxis (a) Haloperidol (d) phagocytosis Q119. What is the mechanism that white blood (b) Lithium cells used to kill bacteria, fungi and other (c) Diazepam (d) Acetazolamide invading organisms? (a) Asphyxiation **Q126.** Which of the following is an anticoagulant? (b) oxidative activity (a) Amoxycillin (b) Diltiazene (c) fright <mark>(c) Heparin</mark> (d) drowning (d) Epinephrine Q120. Which drug causes Gynecomastia, except? O127. Drugs that counteract the effects of other (a) Cimetidine drugs, for e.g. in case of poisonings, are (b) Fibrates known as: (c) Spironolactone (a) Antibodies (d) Digitalis (b) Monoclonal antibodies **Q121.** What does graph contains (c) Antidotes which substrate concentration verses velocity (d) Vaccines curve indicate? Q128. Some oral medications are designed to (a) Zero order kinetics prevent their dissolution or disintegration (b) Michelis-Mentons equation in the gastric environment. They are known (c) Inverse relation as: (d) All of the above (a) Enteric-coated formulations Q122. All the of (b) Sustained-release formulations are essential roles pharmacovigilance programme, EXCEPT (c) Nano-formulations (a) Detection of ADRs (d) Depot-formulations (b) Treatment of ADRs Q129. Teratogenesis refers to (c) Assessment of ADRs (a) Breeding turtles (d) Protection of ADRs (b) Foetal abnormalities

	(c) Keratinization of skin			(c) genesis of organs
	(d) Treatment of canc	er		(d) Flowering
Q130.	Acetabulum is part of	f	Q138.	Agrobacterium tumefaciens is a
	(a) Sternum	(b) Skull		(a) gram (+) bacteria
	<mark>(c) Pelvic girdle</mark>	(d) Pectoral girdle		(b) gram (-) bacteria
Q131.	Uropygial gland is as	sociated with		(c) a fungus
	(a) Shark	(b) Lizard		(d) a yeast
	<mark>(c) Pigeon</mark>	(d) Frog	Q139.	During photosynthesis, PS II absorbs
Q132.	Which of the scales	are used for fish age		energy at or below:
	and growth studies?			(a) 700 nm (b) 670 nm
	<mark>(a) Cycloid</mark>	(b) Placoid		(c) 680 nm (d) 780 nm
	(c) Ganoid	(d) Rhomboid	Q140.	The Earth day is celebrated on:
Q133.	Halteres are modified	l		(a) 22 <sup>nd</sup> March (b) 5 <sup>th</sup> June
	(a) Forewings	(b) Scales		(c) 22 <sup>nd</sup> April (d) 8 <sup>th</sup> May
	<mark>(c) Hindwings</mark>	(d) Antennae	<b>Q1</b> 41.	Substitute of Chloro Fluoro Carbon (CFCs)
Q134.	Melanocytes are locat	red in		used in refrigerators is:
	(a) Stratum germinati	vum		(a) Hydrofluorocarbon
	(b) Stratum corneum			(b) Methane
	(c) Stratum lucidum	CX		(c) Helium
	<mark>(d) Dermis</mark>			(d) Hydrochlorofluorocarbon
Q135.	Genetic engineering	in crop plants is used	Q142.	What changes in the plant indicate the toxic
	for			effects of SO <sub>2</sub> ?
	(a) Crop improvemen	ıt		(a) Falling of leaves
	(b) Plant propagation			(b) Dropping of leaves
	(c) Crop harvesting			(c) Darkening of leaves
	(d) Recycling			(d) Bleaching of leaves
Q136.	Genetically engineered	ed crop being used in	Q143.	Extination of Dodo was mainly due to:
	India			(a) Pollution
	(a) Cotton	(b) Rice		(b) Introduction of pig
	(c) Wheat	(d) Potato		(c) Hunting
Q137.	What is Organogenes	is?		(d) Habitat Destruction
	(a) Formation of callu	s tissue	Q144.	Which of the following plant/s is
	(b) formation of root	and shoots on callus		commonly used for biodiesel production in
	tissue			India?

	<mark>(a) Jatropha</mark>	(b) Calotropis
	(c) Bamboo	(d) Both (b) and (c)
Q145.	Which of the follow	ving is a bio-remedial
	technique?	
	(a) Composting	(b) Oxidation
	(c) Reduction	(d) Sedimentation
Q146.	Rumen is present Fo	ollowing animals
	(a) Dog	
	<mark>(b) Cow</mark>	
	(c) Horse	
	(d) Poultry	
Q147.	White leghorn is a br	eed of
	(a) Pig	(b) Dog
	(c) Horse	(d) Poultry
Q148.	Principal protein in n	nilk is
	(a) Albumin	(b) Lactalbumin
	<mark>(c) Casein</mark>	(d) Globulin
Q149.	A sheep is called	
	(a) Bovine	(b) Ovine
	(c) Canine	(d) Swine
Q150.	Very muscular organ	n used to grind food in
	birds is called the	
	(a) Crop	(b) Gizzard
	(c) Proventriculus	(d) Beak
	$\gamma$	
	$\mathbf{V}$	
	*	