Kerala SET Exam: December 2013

ZOOLOGY

(Original Solved Question Paper)

14235

120 MINUTES

1.	The biotechnological discovery that helps the body heal itself through the delivery of therapeutic cells									
	A)	Xenotransplantation	B)	Tissue engineering						
	C)	Gene therapy	D)	Both A& B	Ans. B					
2.	Whie	ch RNA molecules inside cells	can tu	rn off the activity of specific genes?						
	A)	RNAi	B)	dsRNA						
	C)	microRNA	D)	RNAg	Ans. A					
3.	How solut	How many micrograms of DNA are needed to make 100 μ L of a 100 μ g/ml solutions?								
	A)	0.1µg	B)	1.0ug						
	C)	10µg	D)	100µg	Ans. C					
4.	Elect techi A) B)	trophoresis is the separation nique is used to determine The length of DNA fragmen The molecular weight of sp	of chan nts ecific p	rged molecules in an electric field	, this					
	C)	The isoelectric point of a protein								
	D)	All the above			Ans. D					
5.	Measurement of hippuric acid synthesis is an ideal test for assessing the									
	A)	Utilization of galactose	B)	Detoxification function of liver						
	C)	Water depletion in the body	y D)	None of the above	Ans. B					
6.	Isoh	Isohvet are the lines								
	A)	A) Joining areas of equal rainfall								
	B)	Joining areas of equal snow	fall							
	Ć	Joining areas of equal heigh	nt							
	D)	Joining areas of equal sea le	evel		Ans. A					
7.	Duri	ng the conversion of nitrate to	ammo	onia by the plants, reduction of nitr	ate to					
	nitrit	E takes place in the first step in	the pr	Nitrate un de sta se						
	A)	Flarin adenine dinucleotide	B)	Nitrate reductase						
	0)	Sucro-phosphorase	D)	Inulase	Ans. B					
8.	Burk	kitt's lymphoma is a type of car	ncer of							
	A)	RBC	B)	WBC						
	C)	Platelet	D)	Dentrite cells	Ans. B					
9.	The	organ used to detect pheromor	nes, che	emical messengers that carry inform	nation					
	betw	een individuals of the same sp	ecies, 1	s called						
	A)	Kinestnetic sense organ	B)	vomeronasai organ						

Proprioceptive organ D) C) Nociceptive organ Ans. B 10. The maternal tissue which participates in the formation of placenta and which are expelled at birth are collectively called

Decidua

- A) Amniotic endoderm B)
- C) Allantoic membrane D) Extra embryonic coelom

Ans. B

11. The following are some of the common diseases and their causes in humans. Which of them are correctly matched?

i.	Polio –	RNA	virus		
ii.	Histosomamansoni	_	Nem	atode	
iii.	Clostridium tetani	_	Firm	icutes	
iv.	Hepatitis B	_	DNA	virus	
A)	(i) & (ii)		B)	(i), (ii) & (iv)	
C)	(i), (iii) & (iv)		D)	(ii), (iii) & (iv)	Ans. C
What	are all the chances	of colo	ur blin	d daughters and sons bei	ing born in a
marria	age of normal man ma	rrying a	norma	l woman whose father was	colour blind?
A)	All sons are normal	and all c	laughte	ers are colour blind	
B)	Both the sons and da	ughters	are ph	entypically normal	
C)	All the sons are colo	ur blind	and al	I the daughters are normal	
D)	50% sons are colour	blind ar	ad all t	a daughters are phenotypi	cally normal

D) 50% sons are colour blind and all the daughters are phenotypically normal Ans. D

13.	An er	docrine gland with ectodermal	l and m	esodermal origin	
	A)	Adrenal	B)	Epiphysis	
	C)	Thyroid	D)	Parathyroid	Ans. A
14.	Grow	th due to the activity of reserve	e cells i	5	
	A)	Multiplicative growth	B)	Auxetic growth	
	C)	Accretionary growth	D)	Exponential growth	Ans. C
15.	Genet plants	tically dwarf plant is treated v and if it is then crossed to a g	vith gib enetical	berllic acid to make it equal to the ta ly dwarf plant, the progeny will be	ıll
	A)	All tall plants	B)	All dwarf plants	
	C)	3:1 ratio	D)	1:1 ratio	Ans. B
16.	Cyani	ide is a very poisonous subs	tance w	which inhibits the enzyme cytochron	ne
	oxida	se by binding with the metal co	ofactor.	This process is	
	A)	Allosteric inhibition	B)	Competitive inhibition	
	C)	Non competitive inhibition	D)	Feedback inhibition	
					Ans. C
17.	Chara	cter which is not ofPlatyhelm	inthes		
	A)	Triploblastic acoelomates			

- B) Unsegmented body
- C) Flattened body with anterior-posterior ends and dorsal ventral sides
- D) Alimentary canal with mouth and anus

Ans. D

12.

18.	The d A) C)	istance between the genes and Equal Directly proportional	l freque B) D)	ncy of linkage are Complementing Inversely proportional	Ans. D
19.	Gaucl A) B) C) D)	her's disease is associated with Abnormal protein metabolis Abnormal carbohydrate met Abnormal fat metabolism Vitamin deficiency	h sm tabolism	1	Ans. A
20.	Whic	h type of cartilage forms the	e whole	of the adult skeleton of cartil	aginous
	A) C)	Fibrous cartilage Elastic cartilage	B) D)	Hyaline cartilage None of the above	Ans. B
21.	In ho sperm	w many cells the meiotic natids produced are 32	divisior	n takes place, if the total nur	nber of
	A) C)	32 8	B) D)	16 4	Ans. C
22.	A sho numb A) C)	ort length of DNA molecule h er of nucleotide in the DNA fi 80 320	nas 80 th ragment B) D)	hymine and 80 guanine bases. T is 160 640	`he total
23.	In hea the su A) C)	avy smokers the alveoli of the irface area for the exchange of Asthma Anosmia	lungs a f respira B) D)	re enlarged and damaged which tory gases. This condition is call Emphysema Bronchitis	Ans. C reduces ed
24.	In a	population, the condition at v	which t	he rate of addition of new mer	Ans. B nbers is
	more A) C)	than the rate of individuals los Zero population growth Fluctuating growth	st indica B) D)	ttes, Declining growth None of the above	Ans. D
25.	Whic: while	h law explains the reason for the same species in warm wa	larger si ters is si	ize acquired by a species in cold maller in size?	waters,
	A) C)	Jorden's rule Allen's rule	B) D)	Bergman's rule Gloger's rule	Ans. B
26.	The f	ormation of Acetyl co-A from	pyruvio	c acid is the result of	
	A) C)	Oxidative decarboxilation Reduction	B) D)	Phosphorylation Decarboxilation	Ans. B

27.	Michaelis constant (Km) of	an enzyme is			
	A) The substrate concervelocity	ntration at which	ch the reaction attains	its maximum	
	B) The substrate concer	ntration at which	ch the reaction attains	half its maximu	m
	velocity	function			
	D) Related to negative f	feedback of rea	action	4	C
	,			Ans.	C
28.	A diet rich in protein leads t	to the formation	n of more Minorals		
	A) Salt and water C) Urea	B)	Amino acida		
	C) Olea	D)	Annio acius	A	ns. A
29.	The mutation occur in the amino acid sequence is	wobble base	of a codon which has	s no change in	the
	A) Same sense mutation	n B)	Non sense mutation	1	
	C) Mis sense mutation	D)	Frame shift mutation	n Ans	R
20	There are three genes a h	a Daraantaga a	f arassing over betwe	$\mathbf{A}\mathbf{B}$	D 0/2
50.	h and c is 28 % and a and c	is 8 % What is	s the sequence of gene	s on chromosou	' 70, me?
	A) $a b c$	B)	h a c	s on enomosor	ne :
	$\begin{array}{c} c) \\ c) \\ c, b \\ c, b \end{array}$	D)	None of these	Ans.	A
0.1				DILLO	
31.	DNA sequence is ATGCTT	AG. What will	be the sequence of m	-RNA?	
	$\begin{array}{c} A \end{pmatrix} \qquad \bigcup A \bigcup G A A \bigcup C \\ C \end{pmatrix} \qquad \bigcup A \bigcup G A A \bigcup C \\ A \top A \bigcup G C A \top \\ \end{array}$	Б) D)	LAGGUUTC		
	C) CATAGOAT	D)	UAUUUUIC	Ans. A	l
32.	Lobmann's scheme of react	ions are associ	ated with		
	A) Neural transmission	B)	Muscle contraction		
	C) Eye vision	D)	None of these	Ans. B	
33.	Molecular events occurred of	luring capacita	tion includes		
	A) Lipid composition c	hange in sperm	membrane		
	B) Lowering of membr	ane potential			
	C) cAMP production is	s increased			
	D) All of the above			Ans. D	
34	A local population adapted	genetically to i	ts particular environm	ent is termed as	3
0	A) Ecesis	B)	Ecotype	••••••••••••••••	
	C) Edge effect	D)	None of these		
2.5			1 1 1 . 0 . 1 . 1	Ans. B	1.0
35.	In a family of seven children girls?	en, what is the	probability of there	being 4 boys an	id 3
	A) 21/128 B)	7/128	C) 1/128	D) 35/12	28
26				Ans. 1	0
36.	Which of the following bon $A = C O = D$	d may be most	difficult to break?		
	A) C-O B)	U-N	() (-()	D) C-S	
				Ans. A	

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Ans. D

Ans. B

Ans. C

37. Which of the following statement(s) is/are correct regarding vitamin C?

- i. Also known as ascorbic acid
- ii. Is an antioxidant
- iii. Is a melanin synthesis retardant
- A) i only B) i and ii only
- C) i and iii only D) i, ii and iii
- 38. PCR based DNA amplification is an essential feature of which of the following combination of molecular marker?
 - A) RFLP, AFLP and SSR
 - B) AFLP, SSR and RAPD
 - C) RFLP, RAPD and SSR
 - D) RAPD, RFLP and SSR
- 39. Counter current mechanism of urine formation occurs in
 - A) Bowman's capsule
 - B) Proximate convoluted tubule
 - C) Loop of Henle
 - D) Distal convoluted tube
- 40. Two enzymes of TCA cycle catalyse reactions that result in the release of CO_2 . They are
 - A) Aconitase and malic dehydrogenase
 - B) Fumarase and succinate dehydrogenase
 - C) Isocitrate dehydrogenase and α -ketoglutarate dehydrogenase
 - D) Malic dehydrogenase and succinyl co-A synthase
- 41. The sarcoplasmic reticulum must have integral membrane proteins that can
 - A) Release and pump Ca^{2+}
 - B) Bind to tropomyosin and troponin
 - C) Undergo action potentials
 - D) Contract
- 42. Upon shearing, some highly repetitive DNA sequences break into fragments that show a unique migration pattern on sedimentation in a CsCl density gradient. What are these fragments called?
 - A)Alu sequenceB)Nucleosomes
 - C) Polysomes D) Satellite DNA
- 43. A bacterium divides in every 35 minutes. If a culture containing 10⁵ cells/ml is grown for 175 minutes, what will be the cell concentration per ml after 175 minutes?
 - A) 32×10^5 cellsB) 35×10^5 cellsC) 5×10^5 cellsD) 175×10^5 cellsAns. A

44. In which organelle is NADP+ the final electron acceptor?

A)ChloroplastB)MitochondriaC)Chloroplast & mitochondriaD)LysosomeAns. C

5

Ans.A

Ans. D

Ans.C

45.	 What happens to the A A) Both cyclin A B) Only Cdk is d C) Only cyclin A D) Both cyclin A 	Cdk-cyclinA comp and Cdk remain u egraded is degraded and Cdk are degra	lex at metaphase? ndegraded ded	Ans. C
46.	 The absence of sigma A) Affects elonga B) Blocks initiati C) Affect both in D) Does not affect 	a factor in RNA pol ation only ion itiation and elonga et trasnscription	lymerase	Ans. C
47.	Which structural geneA) β-GalactosidaC) Transacetylas	e does Z represent i se B) e D)	in a lactase operon? Permiase Lactase	Ans. A
48.	The law state that the the fibres constituting force of heart beat A) Starling Law C) Thorson's Law	e force of heartbea g its muscular wall, B) w D)	at is determined primaril ie.,an increase in diasto Gloger's law None of the above	ly by the length of lic filling increases
49.	Reflex action is compA)Pituitary corteC)Cerebral corte	paratively more rap ex B) ex D)	id because it has to pass All along spinal cor Olfactory lobes	through [.] d <i>Ans. B</i>
50.	The prosthetic group A) Retinal C) Quinone	of the light absorbi B) D)	ing pigment bacterio rho Ferredoxin None of these	dopsin Ans. A
51.	 All of the following a A) Populations o B) It is a concept population ap C) The genetic van D) The key factor 	apply to the concep f the species entering developed by cons proach." ariation of the spec r driving the extinc	t of the extinction vortex ng it are small. servation biologists who ies' population decreases tion vortex is intraspecif	adopt the "small adopt the "small a. ic competition.
52.	If a person lives excl from	usively on a diet o	f milk, egg and bread, h	<i>Ans. D</i> e is likely to suffer
	A) RicketsC) Scurvy	B) D)	Beri-beri None of the above	Ans.C
53.	Individuals with trisoA)Patau syndromC)Down syndrom	my 13 is ne B) me D)	Edward syndrome Jacob syndrome	Ans. A

54.	Whick	h of the following biome is kn	own as	Mediterranian scrub fores	t?
	A)	Chapparal	B)	Steppes	
	C)	Tundra	D)	Savannah	
					Ans. A
55.	Polys	accharides present in the exos	keleton	of crab	
	A)	Pectin	B)	Inulin	
	C)	Dextrin	D)	Chitin	Ans. B
- (р. 11				
56.	Failur	re of testes to descend into scre	otum	0 1:1 /	
	A)	Cryptorchidism	B)	Orchidectomy	
	C)	Inguinal hernia	D)	Prostatectomy	Ans. A
57	The g	lycoprotein molecule of zonar	ellucid	a which binds to sperm in	males?
	A)	ZP1	B)	ZP2	
	C)	ZP3	D)	All of the above	
	0)	210	2)		Ans. C
58.	When	a person thinks and solve	s prob	lems, which area of the	cerebrum is
	involv	ved?			
	A)	Frontal lobe	B)	Parietal lobe	
	C)	Occipital lobe	D)	Temporal lobe	Ans A
50	T 1			C	11100 11
39.	I he so	egment of myofibril that is cal	led a sa	cromere runs from	
	A)	One H zone to the next H zo	one		
	B)	One Z line to the next Z line O_{res} A hand to the next Z line			
	C)	One A band to the next A ba	ina	annasita and	
	D)	One end of a skeletal muscle	e to the	opposite end	Ans. B
60	The s	ecretion of which of these h	ormone	s would be increased in	a person with
00.	enden	nic goiter?	011110110	s would be increased in	a person with
	A)	TSH	B)	Thyroxine	
	C)	Trijodothvromine	D)	All of these	
	0)	Theathyrennine	2)		Ans. A
61.	Sea p	en is a			
	A)	Mollusc	B)	Echinoderm	
	C)	Sponge	D)	Coelenterate	
	(\circ)		,		Ans. D
62.	Scans	orial adaptation is that found i	in terres	trial animals which:	
	A)	Lives in burrows	B)	Fly in the air	
	C)	Climb the walls, rocks etc	D)	Are fast runners	Ame C
					Ans. C
63.	Ineuc	aryotes, the interaction of enh	ancer a	ind promoter elements is	brought closer
	by	— : •	D)		
	A)	Zinc finger	B)	DNA looping	
	C)	Helix turn helix	D)	Palindrome	Ans. B

64.	Both	the Luria- Delbruck experimentation	ment and t	the Lede	erberg and Led	erberg	experiment
		Pre-selection mutation	B)	Post-	selection mutat	tion	
	(\mathbf{C})	Directed mutation	D)	Adan	tive mutation	.1011	
	0)	Directed induction	D)	ruup	tive indiation	A	ns. A
65.	In wł	nich phase does segregation	take place	e if reco	mbination has	not take	n place?
	A)	Prophase I	B)	Anap	hase I		
	C)	Metaphase I	D)	Telop	ohase I		
						A	ns. B
66.	Whic	h of the following peptides	has the m	ost nega	tive charge at	PH 7.52	2
	A)	A-A-G-A-P-C-V	B)	A-E-	D-K-K-V-M		
	C)	E-V-D-V-E-A-F	D)	Y-Y-	K-N-R-H-G	An	ıs. C
67.	COP	II coated vesicles move ma	terials from	m			
	A)	ER to ERGIC and Golgi	complex				
	B)	ERGIC to ER and Golgi	complex				
	C)	TGN to endosomes and ly	ysosomes				
	D)	Trans Golgi cisternae to C	Cisgolgi ci	isternae		Ans	s. A
68	Gene	tic equilibrium is disturbed	in natural	populat	ions by		
00.	A)	Recurring mutation	B)	Rand	om genetic dri	ft	
	C)	Migration	D)	All th	e above		D
	0)	ingration	2)			Ans.	D
69.	Orga	ns of urogenital system in m	nammals a	re deriv	red from		
	A)	Ectoderm B) Me	esoderm	C)	Endoderm	D)	A and B
						An	s. B
70.	Whic	h is the ring shaped sub u	nit of DN	IA poly	merase holoen	zyme t	hat clamps
	replic	cating polymerase to DNA i	n eukaryo	tes?			
	A)	PCNA B) FE	N1	C)	RFC	D)	RPA
			0			An	s. A
71.	What	is the molarity of pure wate	er at 25°C	?		- :	
	A)	58.5M B) 55.	.5M	C)	18M	D)	36M
72	Arthu	onada diffar fram annalida	in having	the felle			
12.	Alun A)	External accompatition m	in naving	the fond	owing		
	A)	Ventral perus cord with n	ai keu	-11. orro	mand concline	nd dora	alaarahral
	В)	ventral nerve cord with h	netamerica	any arra	inged gangna a	ind dors	al cerebral
	()	A heapage of cilia					
	D)	Absence of chia	of muscla	a		Δ.	nc R
	D)	Segmental arrangements	of muscles	5		A	ns. D
73.	A pro	otein is poorly produced in	a diseased	tissue.	To determine	whether	the defect
	is at t	the level of transcription or	translatior	n, which	of the followi	ng meth	nods would
	you u			с -1	0 1	11	
	A)	Southern blotting	B)	South	hern & northern	n blottin	g
	C)	Northern & western blott	ing D)	West	ern blotting		

Ans.C

- 74. The amount of energy entering a food chain depends on the
 - A) Direction of energy flow in the system
 - B) Efficiency of energy recycling in the system
 - C) Biomass of carnivores and their efficiency in locating and capturing animal prey
 - D) Biomass of autotrophs and their efficiency in transforming solar energy into chemical energy *Ans. C*
- 75. Which of the cytokines listed below induces TH1 cells?
 - IL-7 B) IFN-γ
 - C) IL-4 D) IL-12 Ans. B

76. Which of the following is NOT a hypothesis explaining the advantages of group living?

- A)Vigilance effectB)Dilution effect
- C) Group foraging D) Parasite avoidance Ans. D

77. The method used to localize a specific protein in intact cells

A) Western blotting

A)

- B) Solid phase assay
- C) Immunosorbant assay D) Immuno electron microscopy
 Ans. D

78. If a species is a keystone predator, then its removal from a community should

- A) Decrease population size of predator's preferred prey
- B) Decrease species diversity in the prey community
- C) Decrease productivity of the predator's preferred prey
- D) Increase species diversity in the prey community
- 79. Acid rain damage depends on the buffering capacity of the soils in a given region. Damage has been greatest where the soil layer is
 - A) Thin and contains little Ca and Mg
 - B) Thin and contains abundant Ca and Mg
 - C) Thin and contains abundant Ca but little Mg
 - D) Thick and contains abundant Ca and Mg

Ans. B

Ans. B

80. Diethyl amino ethyl cellulose columns can be used to separate ------

- A) Positively charged proteins
- B) Negatively charged proteins
- C) Uncharged proteins
- D) Low molecular weight proteins
- 81. When exposed to a cold environment for several weeks, many small mammals dramatically increase their capacity for heat production primarily by means of
 - A) Decreased insulation
 - B) Increased insulation
 - C) Shivering thermogenesis
 - D) Non shivering thermogenesis

Ans. D

Ans. B

82.	Whiel	n of the following i	is the cleavage si	ite of cyanogens bro	mide in a polypeptide?
	A)	Asparagin glycin	e bond	1	
	B)	Carboxyl side of	tryptophan resic	lue	
	C)	Carboxyl side of	methionine resid	due	
	D)	Carboxyl side of	lysine and argin	ine residue	Ans. C
83	The g	lucagon hormone o	of nancreas is see	creted by	
00.	A)	Alpha cells	B)	Beta cells	
	$\hat{\mathbf{C}}$	Gamma cells	D)	Delta cells	
	0)	Gamma cens	D)	Dena cens	Ans. A
84.	Hepai	in, the anticoagula	nt present in blo	od, is secreted by	
	A)	Plasma cells	B)	Mast cells	
	C)	Macrophages	D)	Endothelial cell	s Ans. B
85	Water	retention in renal	collecting duct i	s the function of	
00.	A)	AOP 1	B)	AOP 2	
	C)	AQP 3	D)	AQP 4	Ans. C
97	X 71- : - 1		- 1.1		1 f 1
80.	stoma	ch to liver?	g blood vessel	carries the digeste	a lood directly from
	A)	Mesenteric artery	B)	Phrenic artery	
	C)	Hepatic portal ve	ein D)	Renal portal vei	n Ans C
	0)	inepune pontar ve		iteliai portai ver	
87.	A vita	min used in the for	rmation of red b	lood cells is	
	A)	Vitamin B1	B)	Vitamin B2	
	C)	Vitamin B6	D)	Vitamin B12	Ans. D
88.	Whiel	n of the following i	is NOT a part of	RNA processing in	eukaryotes?
	A)	Splicing of exons	s B)	Reverse transcri	ption
	C)	Addition of 5'car	os D)	Addition of a po	olv A tail Amp
	0)				Ans. B
89.	Stand	ard free energy of l	hydrolysis of AT	TP (to ADP)	
	A)	-30.51 kJ/mol	B)	-7.3 kJ/mol	
	C)	-43.2 kJ/mol	D)	-61.9 kJ/mol	Ans. A
90.	A fan	nily tree construction	on using phyloge	enetic classification i	s called
	A)	Dendrogram	B)	Cladogram	
	C)	Hologram	 D)	Histogram	Ans. B
	~~ +		· · ·		
91.	CD4	helper T cells bind	to processed an	itigen when expresse	d in association with
	A)	Class I MHC mo	lecule B)	Class II MHC n	nolecule
	C)	Both A and B	D)	IL-2 receptor	Aug D
02	10	11 1 · · 1	11 11 1	11 1 / 1	Ans. B
92.		cell has no rigid (cell wall, has n then the sell $\frac{1}{2}$	o chioroplast or pl	astids, and the stored
	(A)	Plant R	i, men me cell is Filmous	C) Bacteria	D) Animals
			, 1 411540	c) Buctoriu	Anc D
					Alls. D

93.	The co A) B) C)	ondition albinism in n Arginase Thyrosinase Glucose 6- phospha	nan is link te dehvdro	xed to	the deficien	cy of the enz	yme
	D)	Xanthine oxidase		0.001100			Ans. B
94.	A prot A)	ein structure of eukar Telomere	ryotic chro	omoso B)	mes to which Centrome	ch spindle fib ere	res bind is?
	C)	Kinetochore		D)	Centriole		Ans. C
95.	Which inverte	of the following ebrates?	reproduc	ctive	strategies	is characteris	stic of marine
	A) B)	Long generation tim Short generation tim	ne, small o ne, small o	clutch : clutch	size size		
	C) D)	Short generation tim	ne, large c	lutch s	size		Ans. D
96.	Huma	n respiration follows					
	A) C)	Boyle's law Allan's law		B) D)	Beer's lay Charles la	W NW	Ans. A
97.	Which embry	of the following an onic germ layers?	nimal phy	yla is	diploblastic	e, that is, exl	hibits only two
	A)	Rotifera		B)	Mollusca		
	C)	Nematode		D)	Chidaria		Ans. D
98.	Insulii tempe A)	n solution is known to ratures. The presence Native PAGE	o form hi of such a	gher o ggrega	order aggrig ates could b	ates when ex e resolved by	posed to higher
	B)	SDS PAGE	no monto omo				
	C) D)	Anion exchange chr	omatogra	phy phy			Ans. A
99.	MHC A) B)	class I molecules are Binding of CD4 mo Binding of CD8 mo	important lecules or lecules or	t for w n T cel n T cel	which of the ls ls	following?	
	C) D)	Presenting intact vir Binding to Ig on B o	al protein cells	to T c	cells		Ans. B
100.	Darwi A)	n finches in Galapago Ecological equivale	os island i nce	s an ex B)	xample of Ecologica	ıl Guild	
	C)	Ecological dominan	ce	D)	None of t	he above	Ans. B
101.	α-am A) C)	anitin inhibits Only RNA polymer Only RNA polymer	ase I ase III	B) D)	Only RN All RNA	A polymerase polymerase	II
							Ans. B

102.	Which one of the following	is the first	event in eukaryotic tran	nslation process				
	A) The hinding of the m-RNA leader to the smaller ribosomal sub-unit							
	B) The binding of the m-RNA leader to the larger ribosomal sub-unit							
	C) The binding of the m-F	NA leader t	to the polysomal core	lo unit				
	D) The binding of the m-F	RNA leader t	to t-RNA					
	_ ,			Ans. A				
103.	The anticoagulant found in ute	erine wall wh	nich prevents clotting of	menstrual blood				
	inside the uterus							
	A) Warfarin	B)	Heparin					
	C) Citrate salt	D)	Plasmin					
				Ans. D				
104.	Humans originated in the epoc	h known as	_					
	A) Pleistocene	B)	Eocene					
	C) Holocene	D)	Miocene	Ans. A				
105	The structure of ideal 7 DNA	hac a						
105.	A) Mononucleotide repeat	B)	Dinucleotide repeat					
	C) Trinucleotide repeat	, D)	Tetranucleotide repeat					
	c)	2)	i on analos of a stop on	Ans. B				
106.	The valency of iron in hemogl	obin is						
	A) +1	B)	+2					
	C) +3	D)	+4	Ans. B				
107		11	•. •					
107.	Association between sea anem	one and heri	mit crab is					
	A) Symbiosis	B)	Parasitism					
	C) Commensatism	D)	None of the above	Ans. C				
108	The counter current exchange	in the vasa r	ecta					
1001	A) Removes Na+ from the	extra cellul	ar fluid					
	B) Maintains high concentrations of NaCl in the extra cellular fluid							
	C) Raises the concentration of Na+ in the blood leaving the kidneys							
	D) Causes large quantities	of Na+ to e	nter the filtrate	Ame R				
				Alls. D				
109.	When adenylcyclase is activate	ed						
	A) cAMP is formed	B)	cAMP is broken	.1 11				
	C) G-protein binds to cAN	AP D)	Steroid hormone enter	s the cells Ans. A				
110	Use of alkaline phosphate in c	loning exper	iment is to					
110.	A) Remove phosphate gro	un from inse	ert DNA at 5'end					
	B) Remove phosphate gro	up from inse	ert DNA at 3'end					
	C) Remove phosphate gro	up from vec	tor DNA at 5'end					
	D) Remove phosphate gro	up from vec	tor DNA at3' end	Ans. C				
		• • • •	a 1					
111.	Which of the following will be	e best to test	tor non coding viruses co	oding DNA?				
	A) Northern blotting C) Zee blot	B)	DOL DIOL					
		U)	All the above					

112.	Which	h of the following elements pla	iys an i	mportant role in nitrogen fix	xation?
	A) C)	Z	в) D)	Cu	Ans. B
113.	Whicl A) B) C) D)	h of the following enzymes act Phosphoenolpyruvate carbox Pyruvate carboxylase Glucose 6- phosphatases Phosphoglyceratemutase	ts at the cylase	first step of gluconeogenes	is? Ans. B
114.	Vitam light?	in D is derived from which o	f the fo	llowing precursors by the a	action of UV
	A) C)	Lanosterol Glycocholate	B) D)	7-dehydrocholesterol Squanlene epoxide	Ans. B
115.	What A) C)	is the phenotypic ratio in a mo 1:2:1 & 1:1:1 3:1 & 9:3:3:1	onohybi B) D)	rid cross and dihybrid cross 3:1 & 1:2:1 1:1 & 1:1:1	? Ans. C
116.	Whicl A) C)	h of the following acts as a hor Oxygen Carbon dioxide	rmone i B) D)	n vertebrates? Nitrous oxide Ammonia	Ans. B
117.	BLAS A) C)	ST is an algorithm for compari Sequences Texts	ng B) D)	Structures Both A and B	Ans. A
118.	Lacto A) C)	se is converted to allolactose in β-Galactosidase Transacetylase	n an op B) D)	eron by Permiase Lactase	Ans. A
119.	Whicl A) C)	h of the following is called a ri 23s rRNA 80s rRNA	bozym B) D)	e? 40srRNA 60s rRNA	Ans. A
120.	Which during A) B)	h one of the following is the g the binding of the m-RNA le The binding of the m-RNA l The binding of the m-RNA l	e first ader se eader to eader to	event in eukaryotic transla quences? the smaller ribosomal sub- the larger ribosomal sub-u	tion process -unit nit

- The binding of the m-RNA leader to the larger ribosomal sub The binding of the m-RNA leader to the polysomal core The binding of the m-RNA leader to t-RNA C)
- D)

Ans. A
