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No.	

Total No. of Pages: 20

P.G. Entrance (Faculty Science) Examination, May - 2023 M.Sc. ZOOLOGY

				Sub. Cod	de: 5871	19
Day	and	Dat	e : Mo	nday, 08 - 05 - 2023		Total Marks: 100
Tin	ne : 3.	30 p	.m. to	5.00 p.m.		
Inst	ructio	ns:	1)	All questions are comp	oulsory.	
			2)	Each question carries	1 mark.	
			3)	Answers should be n darkening the appropr		the given OMR answer sheet by
			4)	Follow the instruction	s given on	OMR sheet.
			5)	Rough work shall be d paper.	one on the	sheet provided at the end of question
1)	Sol	gel	theor	y refers to		
	A)	Re	spirat	ion	B)	Locomotion
	C)	Ex	cretio	n	D)	Reproduction
2)	Med	dusa	ı stage	e is absent in		
	A)	Ну	droze	oa	B)	Scyphozoa
	C)	Ar	nthozo	a	D)	Demospongia
3)	Nat	ural	select	tion theory of evolution	on was pi	roposed by
	A)	La	mark		B)	Darwin
	C)	Ηι	igo de	Vries	D)	Mendel
4)	The	ear	ly cell	types which were for	rmed on e	earth, were
	A)	Αe	erobic,	autotrophic	B)	Anaerobic, autotrophic
	C)	Aı	naerob	ic, heterotrophic	D)	Aerobic, heterotrophic

5)	Nuc	leosome does not contain		protein.
	A)	H_1	B)	H_2A
	C)	H_3	D)	H_5
6)	Nuc	lei were first discovered by		·
	A)	Strasburger	B)	Fontana
	C)	Robert Brown	D)	Robert Koch
7)	The	haploid set of the chromosome is	called	l
	A)	Proteome	B)	Genomics
	C)	Genome	D)	Genes
8)	In s	upplementary interaction ratio obtai	ned i	s
	A)	9:3:4	B)	9:7
	C)	9:3:3:1	D)	3:1
9)	Cri-	du-chat syndrome is due to		_•
	A)	nullisomy		duplication
	C)	deletion	D)	inversion
10)	The	larva of Bonellia, when settles on p	orobo	scis, develops into
	A)	female	B)	intersex
	C)	male	D)	bisexual individual
11)	Whi	ch of the following is distinguishing	char	acter of Mammals?
4 1 <i>1</i>	A)	Body Hairs	B)	External Ear Pinna
	(C)	Mammary Glands	D)	

12)	Wh	ile biting of snake, opening of n	nouth	takes place by contraction of			
	A)	Temporalis muscles	B)	Digastrics muscles			
	C)	Sphenopterygoid muscles	D)	Masseter muscles			
13)	Wh	ere does oxygen difufuse take place	in fis	shes?			
	A)	Gill arch	B)	Operculum			
	C)	Gill lamellae	D)	Gill comb			
14)	The	e enzyme arginase is found only in	the	cells.			
	A)	liver	B)	kidney			
	C)	heart	D)	brain			
15)	Lock and Key Hypothesis was put forward by						
	A)	Edward Buchner	B)	F.W. Kuhne			
	C)	James Sumner	D)	Emil Fischer			
16)	Cor	pus luteum produces					
	A)	Leutinizing hormone	B)	Progesterone			
	C)	Luteotrophic hormone	D)	Inhibin			
17)		is permanent method of co	ontrac	eption for relatively long period			
	A)	Foam tablets	B)	Diaphragm			
	C)	Cervical Caps	D)	Copper T			
18)	Ovi	ılation can be evaluated by					
	A)	Basal body temperature charting					
	C)	Colour dropler	D)	Urine analysis			

19)	The	term	include both hos	st and	parasite.
	A)	Parasitism		B)	Dermatology
	C)	Ecology		D)	Phylogeny
20)		is only o	lamaging stag of	life cy	vcle of <i>Papilio demoleus</i> .
	A)	Larval		B)	Butterfly
	C)	Pupal		D)	Nymphal
21)	The	crop present in b	oirds is a modific	ation (of
	A)	Pharynx		B)	Oesophagus
	C)	Stomach		D)	Intestine
22)					OR In between
	A)	herbivorous	OR		_ April to June
	B)	carnivorous	OR	1	August to September
	C)	omnivorous	OR		January to March
	D)	insectivorous	OR		October to December
23)		•	In fishes		accessory respiratory organ is ler having a pneumatic duct is
	A)	skin	OR	Phys	oclistous
	B)	Gill	OR	Physo	ogaseous
	C)	cloacal bursae	OR _		Physostomous
	D)	air sacs	OR		None of the above

24)		<u> </u>				n as scoliodon is of respiratory organ in	
		ir sac.		1100	25501	respiratory organism	
	A)	pronephrous		OR		_ Clarius	
	B)	metanephrous _		_ OR _		Anabas	
	C)	ophisthonephro	us	0	R	Saccobranchus	
	D)	archinephros		OR		None of these	
25)	The	valve located bet	ween the	left auric	cle and	left ventricle is called	
	A)	mitral valve			B)	Eustachian	
	C)	thebesian			D)	tricuspid valve	
26)						the integument	_ OR
		Dipnoi					
	A)B)	Glands Scales				•	
	C)				_	Primitive fishes	
	D)					None of these	
25 \	7 21	1		•			
27)		e duct of Parotid	gland is	known			
	ĺ	Bartholins duct				Wilson's duct	
	C)	Stensen's duct			D)	Wharton's duct	
28)		is the firs	t vertebr	a of Cerv	vical re	egion.	
	A)	Atlas			B)	Axis	
	C)	Typical			D)	Free thoracic vertebra	
29)		types of	scales a	re preser	ıt only	in Cartilaginous fishes.	
,	A)	Placoid		1	B)	Cosmoid	
		Cycloid			,	Ctenoid	

30)		is a cor	mective tissue	e of ne	ervous system.	
	A)	adipose		B)	areolar	
	C)	neuroglia		D)	cartilage	
31)	-	rotein synthesis, trans The stud				
	A)	dipeptidyl tRNA fro	m A-site to P-	site	OR _	Limnology
	B)	tRNA from A-site	to P-site		OR	Ecology
	C)	tRNA from P-site t	to E-site		OR	Geology
	D)	tRNA from P-site t	o the A-site _		OR	Cytology
32)	This	s elongation factor is	known as trar	nslocas	se	
	A)	EFG		B)	EF2	
	C)	both A) and B)		D)	EF-Tu and E	F-
33)		version of messages of OR an runoff, faces etc.	A water	r body	, with the ad	sequences is called dition of sewage,
	A)	Replication				
	B)	DNA repair	OR		_ Monomicti	
	C)	Translation	OR		_ Eutrophic	
	D)	Transcription	OR		Oligotrop	hic
34)	Wh	at is the size of the pr	okarvotic ribo	osome	?	
)	A)	80S	J	B)	70S	
	C)	40S		D)	60S	
35)		ne the inhibitor whic aryotes?	h blocks tran	slation	in both prok	aryotes as well as
	A)	Chlorophenicol		B)	Tetracycline	
	C)	Puromycin		D)	Streptomycin	1

36)	Wh	ich of the following i	s not true to the natu	re of the genetic code?	
	A)	Codon is triplet	B)	Codons are commaless	
	C)	Codons are overlap	pping D)	Codons are universal	
37)	Wh		g is considered as is also called as	a start codon?	OR
	A)	AUGO	R Ghagria	jal	
	B)	GUG O	R Kharra	jal	
	C)	UAG O	R Hela	njal	
	D)	AGGOR	Khors	ılajal	
38)	Nar	ne the drug which inh	iibits the initiation st	ep of translation.	
	A)	Cyclohexamine	B)	Tetracycline	
	C)	Ricin	D)	Streptomycin	
39)	Wh	ich position of a code	on is said to wobble	.7	
0)	A)	Third	B)	Second	
	C)	First	D)	Fourth	
40)		odon contains how m		OR Nu	rsery
	A)	1 OR _	Fingerling	gs	
	B)	2 OR _	Adult fish		
	C)	3 OR _	Fry		
	D)	4 OR	Hatchling		
41)		netically engineered g			
		Vitamin A and nicot			
	,	B-Carotene, vitamin			
	C)	B- carotene and iron	n		
	D)	Vitamin A and niaci	n		

42)		nsplantation of living cells, tiss	ues or orga	ns from one speci	ies to another is
			B)	Xenograft	
	C)	Allograft	D)	Syngeneic graft	
43)		is prepared by inoculat	ing directl	y from the tissue	of an organism
	to c	culture media OR _ own as	-	-	_
	A)	Cell linesOR	Hypol	limnion	
	B)	Secondary cell culture	OR	Metalimn	ion
	C)	Primary cell culture	OR	Epilimnion	
	D)	Transformed cell culture	OR_	Thermo	ocline
44)		calculate the median, all the ite			rranged in a/an
	A)	Descending order	OR	Tilapia m	noosambica
	B)	Ascending order	_ OR	Chinese	carp
	C)	Ascending or descending of mrigala	order	OR	Cirrhina
	D)	None of the above	OR _	Cyprini	us carpio
45)	Star	ndard deviation is the square of	of		
	A)	Mode	B)	Variance	
	C)	Standard error	D)	Correlation	
46)		A is microinfected into the ferti ease occurs due to release of _			Minimata
	A)	After the fusion of male and Human organic waste in wate		nuclei(OR
	B)	Before the fusion of male an Mercury into fishing water	d female n	uclei	OR
	C)	At the time of fusion of n Oil spills into sea		female nuclei _	OR
	D)	Any time, it can be infected above		OR	_ None of the

47)		is the application of son	natic cell	nuclear transfer technology				
	A)	Production of bio-larvicides						
	B)	Reproductive cloning of animal						
	C)	Manufacture of biodegradable p	plastics					
	D)	Production of organisms free o	of disease	es				
48)	For	a histogram based on a frequency	distribu	tion with unequal class intervals,				
	the	frequency of a class should be p	proportio	nal to				
	A)	The height of the rectangle	B)	The area of the rectangle				
	C)	The width of the rectangle	D)	The perimeter of the rectangle				
49)	Eml	bryonic stem cells are derived fr	om					
	A)	Undifferentiated inner cell mass	s of embr	yo				
	B)	Differentiated inner cell mass of	f embryo					
	C)	Undifferentiated trophoblast cel	lls					
	D)	Differentiated trophoblast cells						
50)	If the value of correlation coefficient is positive, then the points in a scatter							
	diag	gram tend to cluster	·	-				
	A)	From lower left corner to lower	right co	rner				
	B)	From lower left corner to upper	r right co	rner				
	C)	From lower right corner to upper	er left co	rner				
	D)	From lower right corner to upper	er right c	orner				
51)		glands are having the du	ucts thro	ugh which their secretions are				
	dep	osited into the proper region of t	he body.	-				
	A)	Endocrine	B)	Exocrine				
	C)	Thyroid	D)	None of the above				
52)		glands are without duc	ets which	deposit their secretions directly				
	in to	o the blood OR	Size	e of rearing pond is				
	A)	Exocrine OR	50'	x50'x4'				
	B)	Salivary OR	8'x4'	x2'				
	C)	Endocrine OR	90'x	30'x4'				
	D)	None of above OR		300'x80'x6'				

53)		fundal zone is also call rating wide range of sa							
	A)	Aphotic zone	•						
	B)	Photic zone	OR		Stenohaline				
	C)	Littoral zone	OR		Eurythermal				
	D)	Limnetic zone	OR		Stenotherr	nal			
54)	At t	he bottom of the wate	r body		zone is locate	d.			
	A)	Photic	В	3)	Aphotic				
	C)	Benthic	D))	Littoral				
55)		is the running w	vater system whi	ch	includes rivers	, streams, springs			
	etc.								
	A)	Lentic habitat	В	3)	Lotic habitat				
	C)	Semilotic habitat	Γ))	None of the a	bove			
56)	are small, shallow and standing water bodies.								
	A)	Lakes	В	3)	Rivers				
	C)	Rivulets	Ε))	Ponds				
57)		is the stu	dy of water b	ası	ed ecosystems	s OR			
		The ideal topogain of wide valley.	graphy of the fisl	h f	arm site is a ge	ntly			
	A)	Terrestrial ecology _	OR		Deep				
	B)	Grassland ecology _			_				
	C)	Desert ecology							
	D)	Aquatic ecology				g			
58)		is the standing	ng water system	ı v	which includes	ponds, lakes and			
		reservoirs.	- •			-			
	A)	Lentic habitat	В	B)	Lotic habitat				
	\mathbf{C}	Semilotic habitat	Γ))	None of the a	hove			

59)		is a charac		m hill fishes site is called as			
	A)	Bulky body					
	B)	Very big body					
	C)	Streamline body	OR	Topography			
	D)	None of the above	OR	Geology			
60)		is a physical j	parameter of the	water.			
		Temperature		O_2			
	C)	CO_2	D)	Hardness			
61)		ighly telolecithal egg the ne of Sea lies over contin		-			
	A)	equal holoblastic					
	B)	unequal holoblastic		_			
	C)				e		
	D)	superficial meroblastic	e OR _	Aphotic zo	one		
62)	Wh	ich gland plays importan	nt role in metamor	rphosis of frog's tadpol	e?		
	A)	thymus	B)	adrenal			
	C)	pancrease	D)	thyroid			
63)	Relative to the primitive streak and Henson's node, somite formation is chick embryo occurs OR There is virtually total dark in zone.						
	A)	Anterior to Henson's rethat point C	-		cted past		
	B)	Posterior to Henson's epiblast move in through OR	ugh the primitive	rom the lateral portion e streak to become me			
	C)	Adjacent to Henson's ranterior of the embryo	-	itive streak migrates to Mesopelagi			
	D)	Somite formation occur node has fully retracte	•	y along the axis, after I Epipelagic	Henson's		

64)		Structure which remain pole is	s unchange	d dui	ring the metamorphosis of frog
	A)	heart		B)	lung
	C)	intestine		D)	nervous system
65)	Whi	ch part of the egg lies cl	ose to the a	nima	l pole
	A)	centriole		B)	mitochondria
	C)	Nucleus		D)	cytoplasm
66)		OR	Pelagio		during gastrulation is called tion of sea is further divided
		zontally into			
	A)	invagination	OR]	Euphotic
	B)	involution	OR		_Disphotic
	C)	ingression C	OR	N	Teritic & oceanic
	D)	epiboly OR		Apho	otic
67)	Clea	avage in Frog is			
	A)	Holoblatic and equal			
	B)	Holoblatic and unequal			
	C)	Meroblatic and unequal			
	D)	Meroblatic and unequal			
68)	The	process in which the thre	ee germ laye	ers fo	rm is called:
	A)	fertilization	_	B)	cleavage
	C)	gastrulation		D)	organogenesis

69)	The period immediately after birth to four weeks of age is called							
	OR	The	e main salinity-ca	ausing ic	on in sea is			
	A)	Senescent	OR	soc	lium			
	B)	Adolescent	OR _		sulphate			
	C)	Infancy	OR	phosp	phate			
	D)	Neonatal	OR	cl	hloride.			
70)	Port	tion of placenta	contributed by the	he embry	yo in human is tl	he		
	A)	Chorion		B)	Yolk sac			
	C)	Amnion		D)	Allantois			
71)	Plas	sma cells are						
	A)							
	B)							
	C)							
	D)	Natural killer c	ells					
72)		of th	ne following is	not an	example of inr	nate immunity.		
			is the subd		-	•		
	A)	Skin and secret zone	etion of sebaceou	us gland	OR	Oceanic		
	B)	Mucous, lysoz Neritic zone	syme, HC1 in gas	tric juice	secretion	_OR		
	C)	C) IgG transferred to the foetus through the placenta OR Abyssal zone						
	D)	Phagocytosis a	and inflammation	n	OR	_Littoral zone		
73)		is the	e thymus-depend	ent area	of a lymph node	eOR		
		All water beyond edge of continental self is included in						
	zon							
	A)		OR					
	B)	Paracortex	OR		oceanic			
			OR	-	_			
	D)	Both A and B	OR		benthic			

74)	Mat	ch the following		
	i)	Histocytes	a)	Brain
	ii)	Kupffer cells	b)	Connective tissue
	iii)	Mesangial cells	c)	Liver
	iv)	Microglial cells	d)	Kidney
	A)	i-c, ii-b, iii-a, iv-d	B)	i-b, ii-c, iii-d, iv-a
	C)	i-d, ii-c, iii-b, iv-d	D)	i-d, ii-c, iii-b, iv-a
75)	Lon	g form of MHC is		
	A)	Major histocompatibility complex		
	B)	Molecular histochemistry		
	C)	Major histochemical complex		
	D)	Micro histocompatibility complex		
76)	Тсе	ells recognizing self antigen-MHC c	ompl	lex are subjected to apoptosis in
	A)	Lymph node	B)	Spleen
	C)	Bone Marrow	D)	Thymus
77)	in c	produce a large number of irculationOR		
	A)	B cells OR	_ sub	littoral zone
	B)	T cells OR	_ suł	otidal zone
	C)	Plasma cells OR		eulittoral zone
	D)	Natural killer cells OR		supra littoral zone

78)	Hybridoma for the production of monoclonal antibodies is formed by the fusion of And								
	A)	A) Antibody-producing B cell and T cell							
	B)	B) Antibody-producing B cell and Plasma cell							
	C)	C) Antibody-producing B cell and stem cell							
	D)	Antibody-producing B cell a	and Myelom	a cell					
79)	Arra	ange the following from highe	st antigenici	ty to lowest an	tigenicity.				
	A)	A) Carbohydrates < Protein < Lipid							
	B)	Lipid < Carbohydrate < Pro	tein						
	C)	Protein < Carbohydrate <li< th=""><th>pid</th><th></th><th></th></li<>	pid						
	D)	Protein < Lipid < Carbohyd	rate						
80)		is the pentameric antibody.							
		IgG	B)	IgM					
		IgA	D)	IgE					
81)		is the fresh water sp	pecies of pr	awn	OR				
	Study of physico chemical aspects of sea is called								
	A)	Macrobrachium rosenburgi		OR	oceanography				
	B)	Panaeus idicus	_ OR	geolog	S y				
	C)	Metapeeus monoceros	OR _	geo	graphy				
	D)	Parapenaeopsis stylifera _		OR	zoogeography				
82)		is the largest size	d honey bee	e found in Indi	a				
	A)	Apis indica	B)	Apis dorsata					
	C)	Apis mellifera	D)	Apis florae					
83)	Indu	uced breeding technique is us	sed in						
		Capture fishery		Marine fisher	y				
	C)	Culture fishery	D)	Inland fishery	7				

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84)	Which of the following is used for induced breeding in fishes? OR To estimate the degree of transparency of water sample, simple							
	& s	tandard instrument used is						
	A)	MOET OR	Re	eversing Thermometer.				
	B)	ART OR	Wate	r sampling bottle				
	C)	Hypophysation OR		Secchi disk				
	D)	Artificial insemination	_ OR	Grab				
85)		entific name of Pearl oyster is		OR Mackerel is				
	A)	Pinctada vulgaris C	R	Bangda				
	B)	Apis dorsata OR		_ Saranga				
	C)	Bombax mori OR _		Paplet				
	D)	Periplaneta americana	Ol	R Bombil				
86)	Woı	rker bee is a						
	A)	Sterile female	B)	Sterile male				
	C)	Fertile female	D)	Fertile male				
87)	In the artificial insemination in cattle the semen is deposit in							
	A)	Vagina	B)	External OS				
	C)	Body of uterus	D)	Vestibule				
88)	Arti	Artificial insemination involves						
	A)	Super ovulation	B)	Egg collection				
	C)	Semen collection	D)	Embryo collection				

89)	An exotic breed of cattle is the zone that extend to depth of 4000 -			-				
	A)	Ongole	_ OR _		_ Hada	ıl zone		
	B)	Sindhi	OR _		Bat	hyal zone		
	C)	Jersey	O	R		Abyssal		
	D)	Sahiwal	_ OR .		non	ne of the above		
90)	"Blı	ue Revolution" is re	elated w	ith the fo	llowin	g		
	A)	Silk production			B)	Fish production		
	C)	Milk production			D)	Oil seed production		
91)	The	Dengue Virus is t	ransmit	ted by _				
	A)	Aedes sp.			B)	Culex sp.		
	C)	Anopheles sp.			D)	Armiger sp.		
92)	Wuchereria bancrofti cause a disease							
	A)	Filariasis			B)	Malaria		
	C)	Yellow fever			D)	Kala azar		
93)	Hou	use fly transmits _		diseas	se			
	A)	Yellow fever			B)	Dengue		
	C)	Cholera			D)	Elephantiasis		
94)	Which of the following is not a mosquito borne disease? C C							
	A)	Malaria	_ OR .		Tl	nermometer		
	B)	Dengue fever		OR		_ Secchi disk		
	C)	Yellow fever		_ OR		Water sampler bottle		
	D)	Viral fever		OR		Grab		

95)	Lismania donovani cause			dise	disease			
	A)	Kala azhar		B)	Diarrhea			
	C)	Cholera		D)	Jaundice			
96)		is the	layer of ston	nach wall co	ontains gastı	ric glands		
	OR	E	Essential fatty	acids are_	·			
	A)	Serosa	OR	Aracl	nidonic acid			
	B)	Muscularis _	OR _	L	Linoleic acid			
	C)	Sub-mucosa _	(OR	_ Linolenic	acid		
	D)	Mucosa	OR	A	ll the above			
97)	Pres	ence of Payer'	s patches is the	he character	ristic of			
	A)	Oesophagous		B)	Intestine			
	C)	Rectum		D)	Stomach			
98)	End	ocrine unit of j	pancreas is					
	A)	Pancreatic acid	ni	B)	Islets of La	ngerhans		
	C)	Von Ebner gla	nds	D)	Centroacin	ar cells		
99)	Vira	l encephalitis	affects on	org	gan	OR		
	The	standard Secol	ni disk is	in s	hape.			
	A)	Liver	OR	Ov	al			
	B)	Lungs	OR	Reac	ctangular			
	C)	Heart	_ OR	Triang	ular			
	D)	Brain	OR	Circu	lar			
100)Chil	kungunya is	dise	ease	OR	Beta-oxidation		
	of f	attyacids occur	rs in	·				
	A)	Bacterial	OR	Perox	xisome, mito	ochondria and ER		
	B)	Viral	_ OR	Mitoch	ondria			
	C)	Protozoan	OR		Peroxisome	and mitochondria		
	D)	Fungal	$\bigcap \mathbf{R}$	Per	ovisome			

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Rough Work

Rough Work