CEB11 43957

MULTIPLE CHOICE QUESTIONS SUBJECT : BIOLOGY

FULL MARKS: 80

(Each question carries one mark)

		(,		
1.	Glucose and amino acids an A. proximal tubule	re reabsorbed in the B. distal tubule	C. collecting duct	D. loop of He	
2.	The amount of CSF in the cA. 500 ml	eranial cavity B. 140 ml	C. 1 litre	D. 1.5 ml	[Ans. (A)]
3.	Which one is imino acid? A. Pepsin	B. Proline	C. Cysteine	D. Renin	[Ans. (B)]
4.	The main difference between A. Cell membrane	en Gram positive and Gram B. Cell Wall	negative bacteria is C. Ribosome	D. Mitochond	
5.	ACTH is secreted from A. Adrenal cortex	B. Pituitary	C. Adrenal Medulla	D. Thyroid	[Ans. (B)]
6.	Which of the following is the A. SA node → AV node → B. AV node → Bundle of C. SA node → Purkinje file D. Purkinje fibers → AV node → AV node → Bundle of D. Purkinje fibers → AV node → AV node → Purkinje fibers → AV node → AV node → Purkinje fibers → AV node → AV node → AV node → Purkinje fibers → AV node → AV node → AV node → AV node → Bundle of D. Purkinje fibers → AV node → Bundle of D. Purkinje fibers → AV node → Bundle of D. Purkinje fibers → AV node → Bundle of D. Purkinje fibers → AV node →	Bundle of His \rightarrow Purkinje His \rightarrow SA node \rightarrow Purkinje bers \rightarrow AV node \rightarrow Bundle	e fibers e fibers of His	?	[Ans. (B)]
7.	Inner surface of the bronchi				[Ans. (A)]
Q	A. cubical epithelium Electric potential of the bra:	B. columnar epithelium	C. squamous epithelium	D. ciliated epi	thelium [Ans. (D)]
	A. CT Scan	B. Sphygmomanometer	C. ECG	D. EEG	[Ans. (D)]
9.	Which of the following is re A. T-lymphocyte	elated to humoral immunity? B. B-lymphocyte	C. I-lymphocyte	D. P-lymphoo	yte [Ans. (B)]
10.	Fertilization occur in A. Uterus	B. Ureter	C. Vagina	D. Fallopian t	ube [Ans. (D)]
11.	The Gastrin is secreted from A. Intestine	n B. Stomach	C. Pancreas	D. Rectum	[Ans. (B)]

12.	The cause of cretinism is A. Hypothyroidism	B. Hypoparathyroidism	C.	Hyperthyroidism	D.	Hyperparath	
12	Which of the following is a 1	minaralogarticaid?					[Ans. (A)]
13.	A. Testosterone	B. Progesterone	C.	Adrenalin	D.	Aldosterone	2
							[Ans. (D)]
14.	The part of the brain where	the centre for hunge and th	irst	is located is			
	A. Cerebrum	B. Hypothalamus	C.	Cerebellum	D.	Medulla Ob	_
1.5	The meffect one subject is and	do of two manages in languages					[Ans. (B)]
13.	The reflex arc, which is ma A. Monosynsptic reflex arc			Disynaptic reflex arc			
	C. Polysynaptic reflex arc			Asynaptic reflex arc			
	3 3 1			J 1			[Ans. (A)]
16.	The lactase hydrolyzes lactor	ose into					
	A. Glucose	B. Glucose and galactose	C.	Fructose	D.	Glucose and	
17	In 241, 4-4-1-1-11-	C144 C 1 : 1 1.:	1	:_			[Ans. (B)]
1/.	In 24 hours, total glomerula: A. 1.7 litres	B. 7 litres		y is 17 litres	D	170 litres	
	A. 1.7 hues	B. / Ities	С.	17 nucs	D.	1/0111103	[Ans. (D)]
18.	When the oxygen supply to	the tissue is inadequate, the	con	dition is			[(- /]
	A. Dyspnea	B. Hypoxia	C.	Asphyxia	D.	Apnea	
							[Ans. (B)]
19.	Which one of the following	·			Б	C) (D)	
	A. Calcium	B. Sodium	C.	cAMP	D.	cGMP	[Ans (D)]
20	The name of the pace make	er of the heart is					[Ans. (B)]
	A. Lymph node	01 010 110 110 110	В.	S.A. node			
	C. Juxtaglumerular apparat	tus	D.	Semilunar valve			
							[Ans. (B)]
21.	What is a genophore?		_	D. 1. 1. 1. 1. 1.			
	A. DNA in prokaryotes	Iromiatas		DNA and RNA in prok	ary	otes	
	C. DNA and protein in pro	karyotes	υ.	RNA in prokaryotes			[Ans. (A)]
22.	Example of a typical homop	oolysaccharide is					[/11/3- (/1/)]
	A. Ligin	B. Suberin	C.	Inulin	D.	Starch	
							[Ans. (D)]
23.	Who wrote the famous book	• •					
	A. Larmarck	B. Darwin	C.	De Vries	D.	Mendel	[A (D)]
2/1	Polyploid derived from two	different species is called					[Ans. (B)]
Δ-Τ.	A. Autopolyploid	B. Triploid	C.	Allopolyploid	D.	Monoploid	
	1 - 7£ - "	1 "	- •	1 JF - "	•	-T-2-2	[Ans. (C)]

25.	Electrons used in Electron A. 0.05 Å	Microscop B. 0.15		_	9th 0.25 Å	D.	0.30 Å	[Ans. (A)]
26.	Biolistic technique is used in A. Tissue culture process C. Hybridization process	n			Gene transfer process Germplasm conservation	on p	rocess	
27	Example of water soluble p	lant niome	ent ic					[Ans. (B)]
21.	A. Chlorophyll-a	B. Chlor		C.	Anthocyanin	D.	Xanthophyll	[Ans. (C)]
28.	Structure element of Chrom	natin is						
	A. Histone	B. Acid	protein and DNA	C.	Nuclear matrix	D.	Nucleosome	es [Ans. (D)]
29.	Inulin is a polymer of A. Glucose	B. Galac	ctose	C.	Fructose	D.	Arabinose	[Ans. (C)]
30.	Mannitol is A. Amino acid	B. Amin	no alcohol	C.	Sugar alcohol	D.	Sugar acid	[(-)]
31.	A flower which can be divid A. Zygomorphic		vo equal halves by nomorphic		y one plane is Regular	D.	Perfect	[Ans. (C)]
32.	Pieces of plant tissue used i	in tissue cu	ulture is called					[Ans. (A)]
	A. Explant	B. Soma		C.	Inoculant	D.	Clone	[Ans. (A)]
33.	VAM is							. ,,,
	A. Symbiotic bacteria	•	ophytic bacteria	C.	Saprophytic fungi	D.	Symbiotic ft	ıngi [Ans. (D)]
34.	Ovule integument gets trans			0	1	Б	. 1 1	
25	A. seed Acid rain is caused by	B. fruit	wall	C.	seed coat	υ.	cotyledons	[Ans. (C)]
33.	A. NO ₂	B. SO ₂		C.	SO ₃	D.	CO_2	[Ans. (B)]
36.	Which one of the following A. Escherichia coli C. Staphylococcus aureu		n is used for produ	B.	on of transgenic plants? Bacillus thuringiensis Agrobacterium tumefa		ns	[131136 (D)]
27	A 1 / 111							[Ans. (D)]
37.	A plant cell becomes turgid A. Plasmolysis	l due to B. Exosi	mosis	C	Endosmosis	D	Electrolysis	
	21. 1 (asinotysis	D. EAUSI	1110313	С.	LIIGOSIIIOSIS	υ.	Licentitysis	[Ans. (C)]

38.	Restriction enzymes are use A. Single stranded RNA C. Single stranded DNA	ed to cut		Double stranded DNA Double stranded RNA			[Ans.	(B)]
39.	Spindle fibre is made up of A. humulin	B. intermediate filament	C.	flagellin	D.	tubulin	[Ans.	, , , -
40.	Edible part of Mushroom is A. Basidiocarp	B. Primary mycelium	C.	Fungal hyphae	D.	Basidiospor		
41.	Calcium level decreases in t	he blood due to hyposecreti	ion (of			[Alls.	
		B. Calcitonin		Thyroxine	D.	Adrenaline	[Ans.	(A)]
42.	Kupffer's cells are A. Phagocytic			Mast cells				
	C. Hormone secreting		D.	Digestive juice secretin	g		[Ans.	(A)1
43.	Which centre is stimulated of	during increase in body tem	pera	iture?			[71115.	(2.1)]
	A. Anterior hypothalamusC. Limbic system		B. D.	Posterior hypothalamus Red nucleus				
11	Name the following having	-	. (A	A) Heat loss centre i.e.	. Aı	nterior hypo	othala	musj
44.	Name the following having of A. Myoglobin	B. Actin	C.	Myosin	D.	Fibrin	[Ans.	(A)1
45.	Longest phase of meiosis A. Prophase I	B. Prophase II	C.	Anaphase I	D.	Metaphase		, , , -
46.	Tetany is caused by A. Hyperparathyroidism	B. Hypoparathyroidism	C.	Hyperthyroidism	D.	Hypothyroid		
47.	Which of the following is a A. Prolactin	gastro intestine hormone? B. Enterokinase	C.	GH	D.	FSH		, , , -
48.	Name the hormone that has A. LH	no role in menstruation. B. FSH	C.	GH	D.	TSH	[Ans.	(B)]
						1211	[Ans.	(D)]
49.	Which of the following sub A. GABA	stances can cure Parkinson' B. Acetylcholine		sease ? Dopamine	D.	Glutamic ac	id [Ans.	(C)l
50.	Movement of tongue muscle	· · · · · · · · · · · · · · · · · · ·			_			()/1
	A. facial nerve	B. trigeminal nerve	C.	hypoglossal nerve	D.	vagus nerve	Ans.	(C)]

51.	Which function will be lost	due to damage of occipital l	obe?				
	A. Hearing	B. Speech	C. Vision	1	D.	Memory	
							[Ans. (C)]
52.	Meissner's corpuscles occur						
	A. Brain	B. Nerve cells	C. Skin		D.	Tongue	
		1:					[Ans. (C)]
53.	Osteomalacia is a deficienc	•					
	A. Infants due to protein en			ts due to protein end	_	~	on
	C. Adults due to Vitamin D	deficiency	D. Infant	ts due to Vitamin K	\ de	eficiency	[A (C)]
<i>-</i> 1	TTI C : 1.1 11						[Ans. (C)]
54.	The gene of sickle cell anae	·	a a	1	ъ		
	A. Blood cells	B. Bone cells	C. Sex c	hromosomes	D.	Autosomes	[A (D))
	D(1' ' ' ' 11						[Ans. (D)]
33.	Ptyalin is inactivated by a c				Б	1101	
	A. Pepsin	B. Mucus	C. Renni	n .	υ.	HCl	[A (D)]
5.0	W/L:-L	1	:41	I 0			[Ans. (D)]
30.	Which one of the following	B. Red blood cell			D	W/hitahlaa	1 11
	A. Nerve cell	B. Rea blood cell	C. Liver	cen	υ.	White blood	
57	In which stone of the first m	raiatia divigian tura giatar al	romotida	ara formed 2			[Ans. (B)]
37.	In which stage of the first m				D	Dinlotono	
	A. Leptotene	B. Zygotene	C. Pachy	/tene	υ.	Diplotene	[Ang (C)]
50	Which one of the following	triplet codons is a chain terr	nination o	odon ?			[Ans. (C)]
56.	A. UGU	B. AAU	C. UUG		D	UAG	
	A. 000	D. AAU	C. 000		υ.	UAU	[Ans. (D)]
59	How many pairs of contras	ting characters in nea nod v	vere chose	n by Mendel ?			[Alls. (D)]
5).	A. 3	B. 5	C. 7	•	D.	9	
	11. J	D . 3		rding to English ver			Rie 5 nairs
		Acco	-	engali version pair i			-
60.	If a cross between two indi		s with 50%	6 dominant charac	eter	(A) and 50°	% recessive
	character (a) the genotype	•			_		
	$A. Aa \times Aa$	B. Aa × aa	C. AA ×	aa .	D.	$AA \times Aa$	
							[Ans. (B)]
61.	Structural lipids of cell men				_		
	A. Simple lipid	B. Chromolipids	C. Steroi	.d	D.	Phospholipi	
							[Ans. (D)]
62.	Which one of the following				_		
	A. Glycogen	B. Sucrose	C. Lacto	ise .	D.	Maltose	
<i>(</i> 2	TT 1 11 1 1 1 1 1	DMA 'CA DMA '	.ma	NA C 0			[Ans. (A)]
63.	What will be the codons in				ъ	TO A CT	~
	A. TAC – GTC	B. UAC – GUC	C. UCA	- IUA	υ.	TCA – GTO	
							[Ans. (B)]

64.	Which of the following spe	cies is restricted to a specifi	ic ar	rea ?			
	A. Sibling species	B. Allopatric species	C.	Sympatric species	D.	Endemic sp	
<i>(</i>	W/I: 1 C41 C II :	: NOT 41 4 1 16	n.				[Ans. (D)]
65.	Which one of the following A. Sycon – Canal system	is NOT correctly matched		Star fish – Radial symn	natr	**	
	C. Ascaris – Flame cell			Prawn – Haemocoel	iicu į	у	
	C. Associate Traine Cen		υ.	Tidwii Tideiliococi			[Ans. (C)]
66.	Which one of the following	animal phyla does not poss	ess	a coelom?			. (//
	A. Platyhelminthes	B. Annelida	C.	Mollusca	D.	Echinodern	nata
							[Ans. (A)]
67.	Cardiac muscles are						
	A. Striated and voluntary			Striated and involuntary			
	C. Smooth and voluntary		D.	Smooth and involuntary	7		[Ama (D)]
68	Which one of the following	immunaglabuling is found a	s ne	entamer 9			[Ans. (B)]
00.	A. IgG	B. IgM	-		D	IgE	
	71. 150	<i>D.</i> 18.11	С.	18.1	Δ.	-5-2	[Ans. (B)]
69.	Which one of the following	cells is not a phagocytic cel	1?				. ,,
	A. Macrophage	B. Monocyte	C.	Neutrophil	D.	Basophil	
							[Ans. (D)]
70.	Which one of the following	is the most primitive ancest					
	A. Homo habilis			Australopithecus			
	C. Rampithecus punjabic	eus	D.	Homo neanderthalens	sis		[A== (C)]
71	A female Anopheles mosqu	ito can be recognized by					[Ans. (C)]
/1.	-	long and more or less of equ	ual l	length			
	B. Proboscis long and palp	-					
	C. Proboscis short and palp						
	D. Both proboscis and palp	oi are short					
							[Ans. (A)]
72.	The anterior V-spot in micr	•			_		
	A. Nerve ring	B. Cervical papilla	C.	Excretory System	D.	Reproductiv	•
72	In a population, unrestricted	I ranzaduativa canacity is as	1104				[Ans. (C)]
13.	A. Biotic potential	B. Fertility		Carrying capacity	D	Birth rate	
	11. Blotte potential	B. Terunty	С.	carrying capacity	υ.	Birtirate	[Ans. (A)]
74.	When the two ecosystems of	overlap each other, the area	is c	alled			1 ** ()1
	A. Habitat	B. Niche		Ecotone	D.	Ecotype	
							[Ans. (C)]
75.	Pyramid of energy in ecosy						
	A. Always upright	B. Always inverted	C.	Mostly upright	D.	Mostly inve	
							[Ans. (A)]

76.	Which one of the following	is mainly responsible for g	reer	house effect?			
	A. SO ₂	B. CO ₂	C.	CO	D.	O_2	
							[Ans. (B)]
77.	Which one of the following	g is an exotic carp species?					
	A. Barbus stigma	B. Cyprinus carpio	C.	Labeo bata	D.	Cirrhinus	mrigala
							[Ans. (B)]
78.	Which of the following two	hormones are essential for	ind	uced breeding of fishes?			
	A. TSH and ACTH		В.	Oestrogen and progest	teroi	ne	
	C. FSH and LH		D.	Vassopressin and oxyto	ocin		
							[Ans. (C)]
79.	Which stage of malarial par	rasite is infective to man?					
	A. Gametocyte	B. Merozoite	C.	Cryptomerozoite	D.	Sporozoite	
							[Ans. (D)]
80.	The scientific name of the	noth which produce tasar is	5				
	A. Bombyx mori		В.	Antheraea mylitta			
	C. Antheraea assamensis	,	D.	Philosomia ricini			
							[Ans. (B)]

DESCRIPTIVE QUESTIONS SUBJECT : BIOLOGY

FULL MARKS: 20

(Each question carries two marks)

1. What are poikilothermic animals?

Ans. Also called cold blooded animals. Their body temperature changes according surrounding environment. These animals are less active.

- e.g. all invertebrates, fishes, amphibians, reptiles.
- 2. Write two functions of juxtaglomerular apparatus.

Ans. Functions:

- (i) Juxtaglomerular cells secretes Renin which through RAAS (Renin-Angiotensis Aldosterone System) help in absorption of Na⁺ from DCT and therefore increases Blood pressure.
- (ii) Its Macula densa cells act as chemorecptor feeding information to JG cells.
- 3. State two differences between red and white muscle.

Ans. Difference between Red & White Muscle.

	Red Muscles		White Muscles
i)	Rich in Myoglobin.	i)	Less myoglobin.
ii)	Mitochondria are more in number.	ii)	Less in number.
iii)	Less sarcoplasmic reticulum.	iii)	More sarcoplasmic reticulum.
iv)	Can carry out considerable aerobic respiration.	iv)	Depends mainly on anaerobic respiration.
v)	Slow rate of contraction for long period.	v)	Fast rate of contraction for short period.

4. What is the difference between pinocytosis and phagocytosis?

AIIS.

i) Bulk intake of fluid material by cell. ii) Vesicles formed are small. iii) Lysosome play no role. iiii) Pinocytosis ii) Intake of solid material from outside to inside of the cell. iii) Large iiii) Lysosomes are essential.

- 5. State four important functions of plasma membrane.
- Ans. (i) Helps in Transport by active and passive processes.
 - (ii) Take part in Exocytosis and Endocytosis.
 - 6. What is bioaccumulation?

Ans. Different types of elements and compound deposited inside the living beings. Which is called Bioaccumulation or Bioconcentration. Like in scallops maximum quantity of Zn, Cu, Cd and Cr deposited and in human beings maximum Iodide deposited in thyroid glands.

- 7. What is a test cross? Why is it so named?
- Ans. When F₁ progeny is crossed with recessive parent then it is called Test Cross. Test Cross helps to find out the genotype of dominant individual.
 - 8. What is ribozyme?
- Ans. Ribozymes are the RNA molecules (Non protein enzyme) that possess catalytic activity they function in RNA splicing reactions.
 - 9. What are mycorrhizae?
- Ans. The association of fungi with the roots of higher plant, is called mycorrhizae. Mycorrhizal association fround in conifers plant.
 - 10. Write down the scientific name of China rose plant. Give its floral formula.
- Ans. Hibiscus rosasinensis:

$$\text{Br} \oplus \bigcap^{\bullet} \text{Epi}_{7} \ k_{(5)} \ \widehat{C_{5}} \ A_{(\alpha)} \ \underline{G}_{(5-\alpha)}$$
