SET-"Y"

(Total No. of printed pages : 17)

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

PG-EE-June. 2023

LIFE SCIENCES

Sr. No. 1629



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Time : 1¼ Hours	Total Ques	tions : 100	Max. Marks : 100
Roll No	(in figure)		(in words)
Name :		Date of Birth :	
Father's Name :		Mother's Name : _	
Date of Examination :			
(Signature of the candida	ate)	(Signatu	re of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/ **INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.**

- 1. All questions are compulsory.
- 2 The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- Keeping in view the transparency of the examination system, carbonless OMR 3. Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- Question Booklet along with answer key of all the A,B,C and D code will be 4. uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examinations in writing within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
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- There will be no negative marking. Each correct answer will be awarded 6. one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-7. Sheet.
- BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD 8. ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.



Question No.	Questions
1.	Which bond participates in maintaining the three-dimensional structure of a macromolecule is :
	(1) Peptide bond (2) Phosphodiester bond
	(3) Glycosidic bond (4) Hydrogen bond
2.	Which of the following are archaeo bacteria ?
	(1) Green sulphur bacteria (2) Purple sulphur bacteria
	(3) Mycoplasma (4) Methanogens
3.	Correct method of writing the name of a bacterium is :
	(1) Pseudomonas aeruginosa (2) Pseudomonas aeruginosa
	(3) Pseudomonas aeruginosa (4) pseudomonas aeruginosa
4.	How much amount of concentrated acid is required to prepare one litre of $1N H_2SO_4$ from concentrated acid whose purity (96%), specific gravity (1.84), molecular weight (98): (1) 27.74 ml (2) 55.48 ml (3) 110.96 ml (4) 221.92 ml
2	(3) 110.96 ml (4) 221.52 mi
5.	Phycology is the study of :(1) Algae(2) Fungi(3) Protozoans(4) Worms
6.	 Which of the following is not used as Bio-fertilizer: (1) Rhizobium (2) Azotobacter (3) Trichoderma (4) Azospirillum
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7.	In genetic code table, number of codons for methionine is : (1) One (2) Two
	(1) One (2) Two
	(3) Three (4) Four
8.	Which of the following is not microbial insecticide :
	(1) Bacillus thuringiensis
	(2) Hirsutella thompsonii
	(3) Heliothis nuclear polyhedrosis Virus
	(4) Agrobacterium radiobacter
9.	Chloramphenicol acts by :
	(1) Inhibiting cell wall synthesis
	(2) Damage to cytoplasmic membrane
	(3) Inhibition of protein synthsis
	(4) Inhibition of specific enzyme systems
10.	In bacteria, process for the transfer of genes from one cell to another by
	bacteriophage is known as
	(1) Conjugation (2) Transduction
	(3) Transformation (4) Transfection
11.	. If a single base substitution modifies a codon to a termination codon, th
	chain may terminate at the point of mutation. Such mutations are called
	(1) Frame shift Mutation (2) Mis-sense Mutation
	(3) Non-sense Mutation (4) Germinal Mutation

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Question No.		Q	uestio	ns
12.	Wh	ich of the following is no	t macro	omolecule :
	(1)	Amino acids	(2)	Fatty acids
	(3)	Lipids	(4)	Polysaccharides
13.	In v	vhich city, National Cent	tre for I	ONA fingerprinting and Diagnostics is
	situ	ated?		
	(1)	Hyderabad	(2)	Ahmedabad
	(3)	Secunderabad	(4)	Dhanbad
14.	The	e difference between nucl	eotide a	and nucleoside is that nucleoside lacks:
	(1)	Nitrogenous base	(2)	Pentose Sugar
	(3)	Deoxy ribose	(4)	Phosphate
15.	Gra	m negative bacterial cel	l wall co	ontains higher content of :
200	(1)	Lipid		Carbohydrate
	(3)	Protein	(4)	Peptidoglycan
16.	Inc	osmosis, water moves fro	om :	
10.		Hypotonic Solution to 1		onic Solution
	(2)	Hypertonic Solution to		
		Hypertonic Solution to		
	(3)	Hypotonic Solution to		
	(4)			
17.	For preparing 0.1M NaOH, how much amount of NaOH is required :			uch amount of NaOH is required :
	(1)	0.04g	(2)	0.4g
	(3)	4g	(4)	40g
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Question No.					
18.	General size of bound peptide to MHC II molecule is :				
	(1)	8–10 amino acids	(2)	13–18 amino acids	
	(3)	19–24 amino acids	(4)	25–36 amino acids	
19.	Cell	ular Totipotency prope	erty is pr	esent in :	
	(1)	Plants	(2)	Vertebrates	
	(3)	Non-Vertebrates	(4)	Viruses	
20.	Scie	entist known as Father	of Antis	eptic Surgery :	
	(1)	Joseph Lister	(2)	Edward Jenner	
	(3)	Louis Pasteur	(4)	Robert Koch	
21.	Spe	ectrophotometer measu	ires the a	bsorbance of :	
	(1)	Only coloured solutio	ns		
	(2)	Only colourless soluti	ons		
	(3)	Both coloured and co	lourless	solutions	
	(4)	None of these			
22.	Shine – Dalgarno sequence is rich in :				
	(1)	Purine bases			
	(2)	Pyrimidine bases			
	(3)	Equal amount of puri	ine and p	yrimidine bases	
	(4)	25% purine + 75% py	rimidine	bases	
23.	We	stern blotting is used	for the t	cansfer of :	
	(1)	DNA	(2)	RNA	
	(3)	Lipid	(4)	Protein	

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Question No.	Questions				
24.	The induced	l fit hypothesis of	Kosh	land is related to :	
	(1) Enzym	e action	(2)	Hormone action	
	(3) Carboh	ydrate function	· (4)	Lipid function	
25.	Metabolism	is:			
	(1) Catabo	lism	(2)	Anabolism	
	(3) Catabo	lism + Anabolism	(4)	None of those	
26.	FAD is the	coenzyme form of	:		
•	(1) Ribofla	vin	(2)	Niacin	
	(3) Pantot	henic Acid	(4)	Pyridoxine	
27.	Bt-cotton is	:			
	(1) Transg	enic plant	(2)	Cloned plant	
	(3) Hybrid	plant	.(4)	Mutated plant	
28.	Watchman	of the genome to p	orevei	nt oncogene activation is :	
	(1) p53	· ·	(2)	Cdk4	
	(3) Cdk6		(4)	Cyclin D1	
29.	Leaf like st	ructure in Pterido	phyte	es that bear spores are called as	
	(1) Sporop	hylls	(2)	Pteridophylls	
	(3) Sporan	gia	(4)	Sporophyte	
30.	Which one o	of the following is	an an	tioxidant?	
	(1) Vitami		(2)	Vitamin–E	
	(3) Vitami	n–K	(4)	Vitamin–D	

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Question No.		iestions			
31.	What is added to the 3' (prime) ends of eukaryotic mRNAs after			
	transcription ?				
	(1) Introns	(2) Poly A Tail			
	(3) CAP	(4) Trinucleotide CCA			
32.	Which of the following is a s	aturated fatty acid?			
	(1) Linoleic acid	(2) Linolenic acid			
	(3) Arachidic acid	(4) Arachidonic acid			
33.	Chilgoza is obtained from :				
	(1) Pinus roxburghii	(2) Pinus wallichiana			
	(3) Cycas revoluta	(4) Pinus gerardiana			
34.	Seed bearing plants comes	under the division :			
	(1) Bryophyta	(2) Pteridophyta			
	(3) Thallophyta	(4) Spermatophyta			
35.	A baby has born with a small tail. It is case exhibiting :				
001	(1) Atavism	(2) Mutation			
	(3) Metamorphosis	(4) Retrogressive evolution			
36.	Variation in gene frequence	ies within populations can occur by chance rat			
	than by natural selection. This is referred to as :				
	(1) Genetic flow	(2) Genetic drift			
	(3) Random mating	(4) Genetic load			

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Question No.	Questions			
37.	What is common to whale, seal and shark ?			shark?
	(1)	Homeothermy	(2)	Convergent evolution
	(3)	Seasonal migration	(4)	Thick subcutaneous fat
38.	Whi	ch of the following is co	ontrolled	by autonomous nervous system ?
	(1)	Papillary reflex	(2)	Swallowing of food
	(3)	Knee-jerk response	(4)	Peristalsis of intestine
39.	Gloi	merular capsule and Co	onvolute	d tubules always lie within the
	(1)	Renal pelvis	(2)	Renal medulla
	(3)	Renal cortex	(4)	None of these
40.		person undergoes a pr ain higher levels of :	olonged	fasting then his urine will be found to
	(1)	Ketones	(2)	Amino acids
	(3)	Fats	(4)	Glucose
41.	Coir	of commerce comes fr	om whic	ch part of coconut ?
	(1)	Mesocarp	(2)	Epicarp
	(3)	Endocarp	(4)	None of these
42.	Whi	ch one is diamino dica	rboxylic	amino acid ?
	(1)	Cystine	(2)	Lysine
	(3)	Cysteine	(4)	Aspartic Acid
43.	Whi	ich of the following giv	es rise t	o cork tissue ?
	(1)	Phellogen	(2)	Periblem
	(3)	Periderm	(4)	Phelloderm
				•

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Question No.	Questions
44.	Himgiri is a variety of resistant to hill bunt disease.
	(1) Rice (2) Wheat
	(3) Maize (4) Cowpea
45.	What was the most significant trend in the evolution of modern man ($Homo$
40.	sapiens) from his ancestors ?
	(1) Increasing cranial capacity
	(2) Upright posture
	(3) Shortening of jaws
	(4) Binocular vision
46.	National Bureau of Fish Genetic Resources is located at?
	(1) Jabalpur, Madhya Pradesh
	(2) Lucknow, Uttar Pradesh
	(3) Hyderabad, Andhra Pradesh
	(4) Patna, Bihar
47.	Aphid, small, sap-sucking insects are examples of
	(1) Oviparous (2) Viviparous
	(3) Paedogenesis (4) Parthenogenesis
48.	Horse became 3 toed and very successful in :
	(1) Pliohippus (2) Eohippus
	(3) Hipparion (4) Parahippus

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Question No.	n Questions		
49.	Cleidoic eggs are found in :		
	(1) Birds	(2)	Mammals
	(3) Insects	(4)	Mollusca
50.	Which of the following develop		
	(1) Spinal cord and brain		Liver and heart
	(3) Eye and skin	(4)	Notochord and vertebral column
51.	ICAR-Central Institute of Bra	ackisł	n Water is located at ?
	(1) Patna	(2)	Kochi
	(3) Chennai	(4)	Bhubaneswar
52.	Migratory fish that lives in fr as:	esh w	vater but breeds in salt water is known
•	(1) Potamodromus fish	(2)	Anadromous fish
	(3) Catadromous fish	(4)	None of these
53.	Recombinant DNase is used f	or tre	eatment of :
	(1) Muscular Dystrophy	(2)	Cystic fibrosis
	(3) Multiple sclerosis	(4)	Kidney disorders
54.	Antibody molecules are held t	toget	her by :
04.	n 11'le handa	(2)	
	(1) Disulphide bonds(3) Glycosidic bonds	(4)	All of these
	Pasteur effect is due inhibitio	n of a	glycolysis because of :
55.	(1) Creatine phosphate	(2)	ATP
	(3) ADP	(4)	AMP
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uestion No.		Questic	ons		
56.	Mahseer is the state fish of which state ?				
	(1) Orissa	(2)	Kerala		
	(3) Bihar	(4)	Karnataka		
57.	Which of the follow	ing pest causes	curling of leaves in tomato ?		
	(1) Aphids	(2)	Leafhopper		
	(3) Whitefly	(4)	All of the above		
58 .	How many spots ha	ıdda beetle has	on its back ?		
	(1) 20	(2)	26		
. ((3) 28	(4)	16		
59. N	Most abundant and basic Auxin is				
(1) IAA	(2)	NAA		
(;	3) 1BA	(4)	2-4 D		
60. V	Which test is used for testing the significance of mean differences ?				
	l) t-test		f-test		
(3	3) z-test	(4)	\mathbf{k}^2 -test		
61. W	Which of the following is NOT a step in Black tea manufacture ?				
(1					
(2					
(3					
(4	U U	n			
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Question No.	Questions				
62.	Oolong Tea is				
	(1) Mixture of Green and Black tea				
	(2) Partial Oxidation takes place				
	(3) The leaves are greenish brown				
	(4) All of the mentioned				
63.	National medical plants board is located in :				
	(1) Nagpur (2) Ahmedabad				
	(3) Hyderabad (4) New Delhi				
64.	Which one is the family of <i>liquorice</i> ?				
	(1) Malvaceae. (2) Liliaceae.				
	(3) Fabaceae. (4) Rosaceae.				
65.	Synthesis of cytoplasm and cell wall material takes place during :				
	(1) Maturation (2) Cell division				
	(3) Elongation (4) Differentiation				
66.	The notochord is one of few prominent structural features in chick embry				
00.	of about :				
	(1) 15 hours (2) 18 hours				
	(1) 10 hours (3) 13 hours (4) 10 hours				
67	Name the enzyme secreted by pancreas ?				
67.	(1) Pensin (2) Chymotrypsin				
	(3) Trypsin (4) Alcohol dehydrogenase				
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(11)

Question No.	Questions					
68.	Which of these enzymes in glycolysis do not take part in an irreversible					
	reaction ?					
	(1) Hexokinase	(2) Phosphofructokinase				
	(3) Pyruvate kinase	(4) Glucokinase				
69.	Which of these amino acids are essential for infants ?					
	(1) Methionine	(2) Arginine and Histidine				
	(3) Valine	(4) Lysine and Leucine				
70.	Name the amino acid which does not take part in transamination during amino acid catabolism ?					
	(1) Proline	(2) Threonine				
	(3) Lysine	(4) Serine				
71.	Name those living organisms which secrete nitrogen in form of urea ?					
	(1) Ureotelic	(2) Uricotelic				
	(3) Ammonotelic	(4) Nitroso compounds				
72.	Which of the following is	a Hill reagent?				
	(1) Sugar					
	(2) Chlorophylls					
	(3) 2, 6-dichlorophenoli	ndophenol				
		ne dinucleotide phosphate				
PG-EE						

(12)

Question No.	Questions						
73.	Out of the following, which one is not the inhibitor of the electron transpor- chain ?						
	(1) Rotenone (2) Antimycin A						
	(3) Cyanide (4) Malonate						
74.	Name the first transgenic virus resistant plant ?						
	(1) Rice (2) Cotton						
	(3) Tobacco (4) Tomato						
75.	Name the enzyme which has silenced to delay the ripening process ?						
	(1) Polygalacturonase (2) Glyphosate						
	(3) ADA (4) P53						
76.	Which of the following is NOT true for agrobacterium ?						
	(1) Horizontal gene transfer (2) Gram positive bacteria						
	(3) Causes tumor in plants (4) Transfer DNA in plants						
77.	Name the first vector used for a mammalian cell?						
	(1) Lambda phage (2) SV40						
	(3) M13 (4) EMBL3						
78.	Which of the following is NOT an endonuclease ?						
	(1) Mung bean nuclease						
	(2) S1 nuclease						
	3) Terminal deoxynucleotidyl transferase						
	4) RNase A						

(13)

Question No.		Qu	iestio	ns	
79.	How many isoprene units, are there in sesquiterpenes ?				
10.					
	(1)	1	(2)	2	
	(3)	3	(4)	8	
80.	Nar	ne the class of secondary	v meta	abolites which is characterized by the	
	1	sence of the hydroxyl grou		2	
	(1)	Glycosides	(2)	Phenolics	
	(3)	Alkaloids	(4)	Terpenes	
81.	Name the term which is given to the plants that grow at right angles to the				
		direction of gravity ?			
	(1)	Diagravitropic	(2)	Positive gravitropism	
	(3)	Negative gravitropism	(4)		
				T laglogravitropic	
82.	Wh	Which of the following produces the male sex hormone ?			
	(1)	Rete testis	(2)	Seminiferous tubule	
÷	(3)	Leydig cell	(4)	Scrotum	
83.	Out	t of the following, whic	h hor	mone does not secrete from corpus	
e.	lute	eum?		mone does not secrete from corpus	
	(1)	Estrogen	(2)	Progesterone	
	(3)	Relaxin	(4)	Testosterone	
84.	Wh	ich of the following cells s	uppor		
	(1)	Nissl bodies	(2)	ts, nourishes, and protect the neurons? Perikaryon	
	(3)	Ganglia	(4)	Glial cells	
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Question No.	Questions				
85.	What are Nissl bodies ?	What are Nissl bodies ?			
	(1) Golgi bodies				
	(2) Lysosomes				
	(3) Cluster of rough endoplasmic	reticulum			
	(4) Mitochondria				
86.	Which of the following is protein h	ormone ?			
	(1) Oxytocin (2)	Insulin			
	(3) TSH (4)	Antidiuretic hormone			
87.	Which of the following is NOT tru	e for Rods ?			
	(1) Used for scotopic vision (2)	Loss causes night blindness			
	(3) Not very light sensitive (4)	Confer achromatic vision			
88.	In which class is Aristotle's lanter	In which class is Aristotle's lantern present ?			
	(1) Asteroidea (2)				
	(3) Holothuroidea (4)	Ophiuroidea			
89.	Which of the following animals is	not a vertebrate ?			
	(1) Oryctolagus (2)	Eurotyphlis			
	(3) Sparrow (4)	Amphioxus			
90.	In which of the following the noto	chord is present in embryonic stage ?			
50.	(1) Vortebrates (2)	Some chordates			
	(3) All chordates (4)	Non-chordates			
01	Retrogressive metamorphosis is for	ound in :			
91.	$(a) D_{a} langeloggils \qquad (4)$	Diancinobionita			
р. Т	(4)	All of these			
	(3) Herdmania	to the maintain constant temperature			
92.	Animals having a built-in thermo	ostat to maintain constant temperature			
	are known as:) Poikilothermic			
	(1) Biothermic				
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Question No.	G	uestic	ons		
93.	What is the study of ancient plants called ?				
	(1) Paleontology	(2)			
	(3) Paleobotany	· · /	Paleobiology		
94.	Which of the following is no	t a cha	racteristic of the Devonian period ?		
	(1) Land plants first appea	(2)	Fish with jaws evolved		
	(3) Dinosaurs first appeare	ed (4)	Wingless insects evolved		
95.	Fruiting bodies of slime mol				
	(1) acervulus	(2)	sori		
	(3) apothecium	. ,	perithecium		
		(-/	Portonorium		
96.	The common yeast Schizosa	acchar	omyces follows which of the followir		
	asexual reproduction metho				
	(1) binary fission		budding		
	(3) fragmentation	(4)	spore formation		
97.	Cell walls of diatoms are imp	oregna	ted with		
	(1) chitin	(2)	cellulose		
	(3) starch	(4)	silica		
98. (Gullet is present in which alg	gae ?			
· · ·	1) Euglenoids	-	Golden algae		
(3) Dinoflagellates		Green algae		
99. I	n which phase of growth doe	es the r	recipient cell take up the donor DNA		
	1) lag phase	(2)	early logarithmic phage		
,	3) late logarithmic phage		stationary phage		
		(-)			
100. V	Which of the following has be	ads on	a string structure ?		
()) Chromosomes	(2)	Chromatin		
(3) Nucleosomes	(4)	Heterochromatin		
	/				

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SET-"Y"

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LIFE SCIENCES

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Question No.	Questions				
1.	If a single base substitution modifies a codon to a termination codon				
	chain may terminate at the point of mutation. Such mutations are called :				
	(1) Frame shift Mutation (2) Mis-sense Mutation				
	(3) Non-sense Mutation (4) Germinal Mutation				
2.	Which of the following is not macromolecule :				
	(1) Amino acids (2) Fatty acids				
	(3) Lipids (4) Polysaccharides				
3.	In which city, National Centre for DNA fingerprinting and Diagnostics is				
	situated ?				
	(1) Hyderabad (2) Ahmedabad				
	(3) Secunderabad (4) Dhanbad				
4.	The difference between nucleotide and nucleoside is that nucleoside lacks:				
	(1) Nitrogenous base (2) Pentose Sugar				
	(3) Deoxy ribose (4) Phosphate				
5.	Gram negative bacterial cell wall contains higher content of :				
	(1) Lipid (2) Carbohydrate				
· · ·	(3) Protein (4) Peptidoglycan				
6.	In osmosis, water moves from :				
	(1) Hypotonic Solution to Hypertonic Solution				
	(2) Hypertonic Solution to Isotonic Solution				
	(3) Hypertonic Solution to Hypotonic Solution				
	(4) Hypotonic Solution to Isotonic Solution				
	June 2023 (Life Sciences) Code P				

PG-EE-June, 2023 (Life Sciences) Code-B

uestion No.		Question	18	
7.	For preparing 0.1M NaOH	, how mu	ch amount of NaOH is required :	
	(1) $0.04g$		0.4g	
	(3) 4g	(4)	40g	
8.	General size of bound pep	tide to M	HC II molecule is :	
	(1) 8–10 amino acids		13–18 amino acids	
	(3) 19-24 amino acids	(4)	25–36 amino acids	
9.	Cellular Totipotency prop	erty is pr	esent in :	
	(1) Plants	(2)	Vertebrates	
	(3) Non-Vertebrates	(4)	Viruses	
10.	Scientist known as Fathe	r of Antis	eptic Surgery :	
	(1) Joseph Lister	(2)	Edward Jenner	
	(3) Louis Pasteur	(4)	Robert Koch	
11.	Retrogressive metamorphosis is found in :			
	(1) Balanoglossus	(2)	Branchiostoma	
	(3) Herdmania	(4)	All of these	
12.	Animals having a built-in thermostat to maintain constant temperatur are known as :			
	(1) Biothermic	(2)	Poikilothermic	
	(3) Oligothermic	(4)	Homoiothermic	
13.	What is the study of anci	ent plant	s called ?	
	(1) Paleontology	(2)	- · · ·	
	(3) Paleobotany	(4)	Paleobiology	

(2)

Question No.	Questions				
14.	Which of the following is not a characteristic of the Devonian period ? (1) Land plants first appeared (2) Fish with jaws evolved				
	(3) Dinosaurs first appeared	d (4)	Wingless insects evolved		
15.	Fruiting bodies of slime molds are called :				
	(1) acervulus	(2)	sori		
	(3) apothecium	(4)	perithecium		
16.	The common yeast Schizosa asexual reproduction method		omyces follows which of the followin		
	(1) binary fission	(2)	budding		
	(3) fragmentation	(4)	spore formation		
17.	Cell walls of diatoms are impregnated with				
	(1) chitin	(2)	cellulose		
	(3) starch	(4)	silica		
18.	Gullet is present in which alg	Gullet is present in which algae ?			
	(1) Euglenoids	(2)	Golden algae		
	(3) Dinoflagellates	(4)	Green algae		
19.	In which phase of growth doe	s the	recipient cell take up the donor DNA		
	(1) lag phase		early logarithmic phage		
	(3) late logarithmic phage	(4)	stationary phage		
20.	Which of the following has be	ads or	n a string structure ?		
	(1) Chromosomes	(2)	Chromatin		
	(3) Nucleosomes	(4)	Heterochromatin		

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(3)

Question No.					
21.	Name those living organisms which secrete nitrogen in form of urea ?				
	(1) Ureotelic	(2)	Uricotelic		
	(3) Ammonotelic	(4)	Nitroso compounds		
22.	Which of the following is a Hill	rea	gent?		
	(1) Sugar				
	(2) Chlorophylls				
	(3) 2, 6-dichlorophenolindoph	enol			
	(4) Nicotinamide adenine din	ucle	otide phosphate		
23.	• Out of the following, which one is not the inhibitor of the electron to chain ?				
	(1) Rotenone	(2)	Antimycin A		
	(3) Cyanide	(4)	Malonate		
24.	Name the first transgenic viru	is res	bistant plant ?		
	(1) Rice	(2)	Cotton		
	(3) Tobacco	(4)	Tomato		
25.	Name the enzyme which has silenced to delay the ripening process ?				
201	(1) Polygalacturonase	(2)	Glyphosate		
	(3) ADA	(4)	P53		
26.	Which of the following is NOT	true	e for agrobacterium ?		
20.	transfor	(2)	Gram positive bacteria		
	 Horizontal gene transfer Causes tumor in plants 		Transfer DNA in plants		
PG-EE	June, 2023 (Life Sciences	s) C (4)	ode-B		

 27. Name the first vector used for a mammalian cell ? Lambda phage SV40 M13 EMBL3 28. Which of the following is NOT an endonuclease ? Mung bean nuclease S1 nuclease Terminal deoxynucleotidyl transferase RNase A 29. How many isoprene units, are there in sesquiterpenes ? 1 1 2 3 3 8 30. Name the class of secondary metabolites which is characterized by the presence of the hydroxyl group with an aromatic ring ? Glycosides Phenolics Alkaloids Terpenes 31. ICAR-Central Institute of Brackish Water is located at ? Patna Kochi Chennai Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as: Potamodromus fish None of these 	Question No.		(Questio	ns				
(1) Lambda phage (2) SV40 (3) M13 (4) EMBL3 28. Which of the following is NOT an endonuclease ? (1) Mung bean nuclease (2) S1 nuclease ? (1) Mung bean nuclease (2) S1 nuclease ? ? ? (3) Terminal deoxynucleotidyl transferase ? ? (4) RNase A ? ? 29. How many isoprene units, are there in sesquiterpenes ? ? (1) 1 (2) ? (3) 3 (4) 8 30. Name the class of secondary metabolites which is characterized by the presence of the hydroxyl group with an aromatic ring ? (1) Glycosides (2) Phenolics (3) Alkaloids (4) Terpenes 31. ICAR-Central Institute of Brackish Water is located at ? ? (1) Patna (2) Kochi (3) Chennai (4) Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as: (1) Potamo	27.	Nan	ne the first vector used	for a m:	ammalian coll 2				
 (3) M13 (4) EMBL3 28. Which of the following is NOT an endonuclease ? Mung bean nuclease S1 nuclease Terminal deoxynucleotidyl transferase RNase A 29. How many isoprene units, are there in sesquiterpenes ? 1 (2) 2 (3) 3 (4) 8 30. Name the class of secondary metabolites which is characterized by the presence of the hydroxyl group with an aromatic ring ? Glycosides Phenolics Alkaloids Terpenes 31. ICAR-Central Institute of Brackish Water is located at ? Patna Kochi Chennai Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as: Potamodromus fish Anadromous fish 									
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(1) Glycosides(2) Phenolics(3) Alkaloids(4) Terpenes 31. ICAR-Central Institute of Brackish Water is located at ?(1) Patna(2) Kochi(3) Chennai(4) Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as:(1) Potamodromus fish(2) Anadromous fish	30.	Napre	Name the class of secondary metabolites which is characterized by the						
 (3) Alkaloids (4) Terpenes 31. ICAR-Central Institute of Brackish Water is located at ? (1) Patna (2) Kochi (3) Chennai (4) Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as: (1) Potamodromus fish (2) Anadromous fish 									
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 (1) Patna (2) Kochi (3) Chennai (4) Bhubaneswar 32. Migratory fish that lives in fresh water but breeds in salt water is know as: (1) Potamodromus fish (2) Anadromous fish 	31.	ICA	R-Central Institute of I	Brackisł	n Water is located at ?				
 32. Migratory fish that lives in fresh water but breeds in salt water is know as: (1) Potamodromus fish (2) Anadromous fish 		(1)	Patna	(2)	Kochi				
as: (1) Potamodromus fish (2) Anadromous fish		(3)	Chennai	(4)	Bhubaneswar				
		+							
(3) Catadromous fish (4) None of these	32.		ratory fish that lives in	fresh w	ater but breeds in salt water is known				
	32.	as:							

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luestion No.		Q	uestio	ns			
33.	Reco	ecombinant DNase is used for treatment of :					
	(1)	Muscular Dystrophy	(2)	Cystic fibrosis			
	(3)	Multiple sclerosis	(4)	Kidney disorders			
34.	Anti	ibody molecules are held	togeth	ner by :			
	(1)	Disulphide bonds	(2)	Ester bonds			
	(3)	Glycosidic bonds	(4)	All of these			
35.	Pas	teur effect is due inhibiti	ion of g	lycolysis because of :			
	(1)	Creatine phosphate	(2)	ATP			
	(3)	ADP	(4)	AMP			
36.	Ma	hseer is the state fish of	which s	state?			
	(1)	Orissa	(2)	Kerala			
	(3)	Bihar	(4)	Karnataka			
37.	Wh	ich of the following pest o	causes	curling of leaves in tomato ?			
	(1)	Aphids		Leafhopper			
	(3)		(4)	All of the above			
38.	Ho	w many spots hadda beet	le has	on its back ?			
	(1)		(2)				
	(3)		(4)	16			
39.	Mo	ost abundant and basic Au	uxin is				
	(1)	IAA	(2)	NAA			
	(3)	1BA	(4)	2-4 D			

⁽⁶⁾

40.			ons	
	Which test is used for te	esting the s	ignificance of mean differences ?	
	(1) t-test	(2)	f-test	
	(3) z-test	(4)	k²-test	
41.	What is added to the	3' (prime	e) ends of eukaryotic mRNAs afte	
	transcription ?			
2	(1) Introns	(2)	Poly A Tail	
	(3) CAP	(4)	Trinucleotide CCA	
42.	Which of the following i	s a saturat	ed fatty acid ?	
	(1) Linoleic acid	(2)	Linolenic acid	
	(3) Arachidic acid	(4)	Arachidonic acid	
43.	Chilgoza is obtained from	m :		
	(1) Pinus roxburghii	(2)	Pinus wallichiana	
	(3) Cycas revoluta	(4)	Pinus gerardiana	
44.	Seed bearing plants con	nes under t	he division :	
•	(1) Bryophyta	(2)	Pteridophyta	
,	(3) Thallophyta	(4)	Spermatophyta	
45.	A baby has born with a small tail. It is case exhibiting :			
	(1) Atavism		•	
	(2) Mutation			
	(3) Metamorphosis			
	(4) Retrogressive evolution	ution		
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Question No.		Q	uestio	ns			
46.	Variation in gene frequencies within populations can occur by chance rather						
	than by natural selection. This is referred to as :						
	(1)	Genetic flow	(2)	Genetic drift			
	(3)	Random mating	(4)	Genetic load			
47.	What	at is common to whale, s	eal and	shark?			
	(1)	Homeothermy	(2)	Convergent evolution			
-	(3)	Seasonal migration	(4)	Thick subcutaneous fat			
48.	Wh	ich of the following is co	ntrolled	l by autonomous nervous system ?			
	(1)	Papillary reflex	(2)	Swallowing of food			
	(3)	Knee-jerk response	(4)	Peristalsis of intestine			
49.	Glo	merular capsule and Co	nvolute	d tubules always lie within the			
	(1)	Renal pelvis	(2)	Renal medulla			
-	(3)	Renal cortex	(4)	None of these			
50.		person undergoes a pro tain higher levels of :	olonged	fasting then his urine will be found to			
	(1)	Ketones	(2)	Amino acids			
	(3)	Fats	(4)	Glucose			
51.	Spectrophotometer measures the absorbance of :						
	(1)	Only coloured solution	8				
	(2)	Only colourless solution	ons				
	(3)	Both coloured and colo	ourless	solutions			
	(4)	None of these					
		ne, 2023 (Life Scien	2 (2 2 2	ada D			

(8)

Question No.		Questions					
52.	Shine	– Dalgarno sequence is ri	ich i	n :			
	(1) Purine bases						
	(2) Pyrimidine bases						
	(3) E	qual amount of purine an	ıd py	vrimidine bases			
	(4) 2	5% purine + 75% pyrimid	ine ł	bases			
53.	Weste	rn blotting is used for th	e tra	ansfer of :			
а.	(1) D	NA	(2)	RNA			
	(3) L	ipid	(4)	Protein			
54.	The in	duced fit hypothesis of K	losh	land is related to :			
	(1) E	nzyme action	(2)	Hormone action			
	(3) C	arbohydrate function	(4)	Lipid function			
55.	Metab	oolism is :	-				
	(1) C	atabolism	(2)	Anabolism			
	(3) C	atabolism + Anabolism	(4)	None of those			
56.	FAD i	s the coenzyme form of :	•				
	(1) R	liboflavin	(2)	Niacin			
· ·	(3) P	antothenic Acid	(4)	Pyridoxine			
57.	Bt-cot	ton is :					
	(1) T	ransgenic plant	(2)	Cloned plant			
	(3) F	Iybrid plant	(4)	Mutated plant			

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(9)

Question No.	Questions				
58.	Watchman of the gen	ome to prevent oncogene activation is :			
	(1) p53	(2) Cdk4			
	(3) Cdk6	(4) Cyclin D1			
59.	Leaf like structure in	Pteridophytes that bear spores are called as			
	(1) Sporophylls	(2) Pteridophylls			
	(3) Sporangia	(4) Sporophyte			
60.	Which one of the follo	wing is an antioxidant ?			
	(1) Vitamin–A	(2) Vitamin–E			
	(3) Vitamin–K	(4) Vitamin–D			
61.	Coir of commerce com	es from which part of coconut ?			
	(1) Mesocarp	(2) Epicarp			
	(3) Endocarp	(4) None of these			
62.	Which one is diamino	dicarboxylic amino acid ?			
	(1) Cystine	(2) Lysine			
	(3) Cysteine	(4) Aspartic Acid			
63.	Which of the following	g gives rise to cork tissue ?			
	(1) Phellogen	(2) Periblem			
	(3) Periderm	(4) Phelloderm			
64.	. Himgiri is a variety of resistant to hill bunt disease.				
	(1) Rice	(2) Wheat			
	(3) Maize	(4) Cowpea			

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Question No.		Quest	tio	ns				
65.	Wha	What was the most significant trend in the evolution of modern man (Homo						
	sapiens) from his ancestors ?							
	(1)	Increasing cranial capacity		·				
	(2)	Upright posture						
	(3)	Shortening of jaws						
	(4)	Binocular vision						
66.	Nat	ional Bureau of Fish Genetic	c R	esources is located at?				
	(1)	Jabalpur, Madhya Pradesh						
	(2) Lucknow, Uttar Pradesh							
	(3)	Hyderabad, Andhra Prades	h					
	(4)	Patna, Bihar						
67.	Aph	nid, small, sap-sucking insect	ts a	are examples of				
	(1)		2)	Viviparous				
	(3)	Paedogenesis	(4)	Parthenogenesis				
68.	Hor	se became 3 toed and very s	ucc	essful in :				
· .	(1)	Pliohippus	(2)	Eohippus				
	(3)	Hipparion	(4)	Parahippus				
69.	Cle	idoic eggs are found in :						
	(1)	Birds	(2)	Mammals				
	(3)	Insects	(4)	Mollusca				
PG-EE								

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Question No.		Q	uesti	ons
70.	Wh	ich of the following devel	ops fr	om ectoderm ?
	(1)	Spinal cord and brain		Liver and heart
	(3)	Eye and skin	(4)	Notochord and vertebral column
71.	Wh	ich of the following is NO	T a st	ep in Black tea manufacture ?
	(1)	Drying/Firing	(2)	Rolling
	(3)	Withering	(4)	Lump formation
72.	Ool	ong Tea is		
	(1)	Mixture of Green and B	lack te	ea
	(2)	Partial Oxidation takes	place	
(3) The leaves are greenish brown				1
	(4)	All of the mentioned		
73.	Nat	tional medical plants boar	d is lo	cated in :
	(1)	Nagpur	(2)	Ahmedabad
	(3)	Hyderabad	(4)	New Delhi
74.	Wh	ich one is the family of <i>liq</i>	uorice	??
	(1)	Malvaceae.	(2)	Liliaceae.
	(3)	Fabaceae.	(4)	Rosaceae.
75.	. Synthesis of cytoplasm and cell wall material takes place during :			l material takes place during :
	(1)	Maturation		Cell division
	(3)	Elongation	(4)	Differentiation

(12)

Question No.	Questions				
76.		e notochord is one of few pro bout :	min	ent structural features in chick embryo	
	(1)	15 hours	(2)	18 hours	
	(3)	13 hours	(4)	10 hours	
77.	Nai	me the enzyme secreted by	pan	creas ?	
	(1)	Pepsin	(2)	Chymotrypsin	
	(3)	Trypsin	(4)	Alcohol dehydrogenase	
78.		ich of these enzymes in gly	coly	sis do not take part in an irreversible	
			$\langle \mathbf{O} \rangle$		
	(1)	Hexokinase	(2)	Phosphofructokinase	
	(3)	Pyruvate kinase	(4)	Glucokinase	
79.	Whi	ich of these amino acids are	ess	ential for infants ?	
	(1)	Methionine	(2)	Arginine and Histidine	
	(3)	Valine	(4)	Lysine and Leucine	
80.	Nan	ne the amino acid which do	oes n	ot take part in transamination during	
	ami	no acid catabolism ?			
	(1)	Proline			
	(2)	Threonine			
	(3)	Lysine			
	(4)	Serine			
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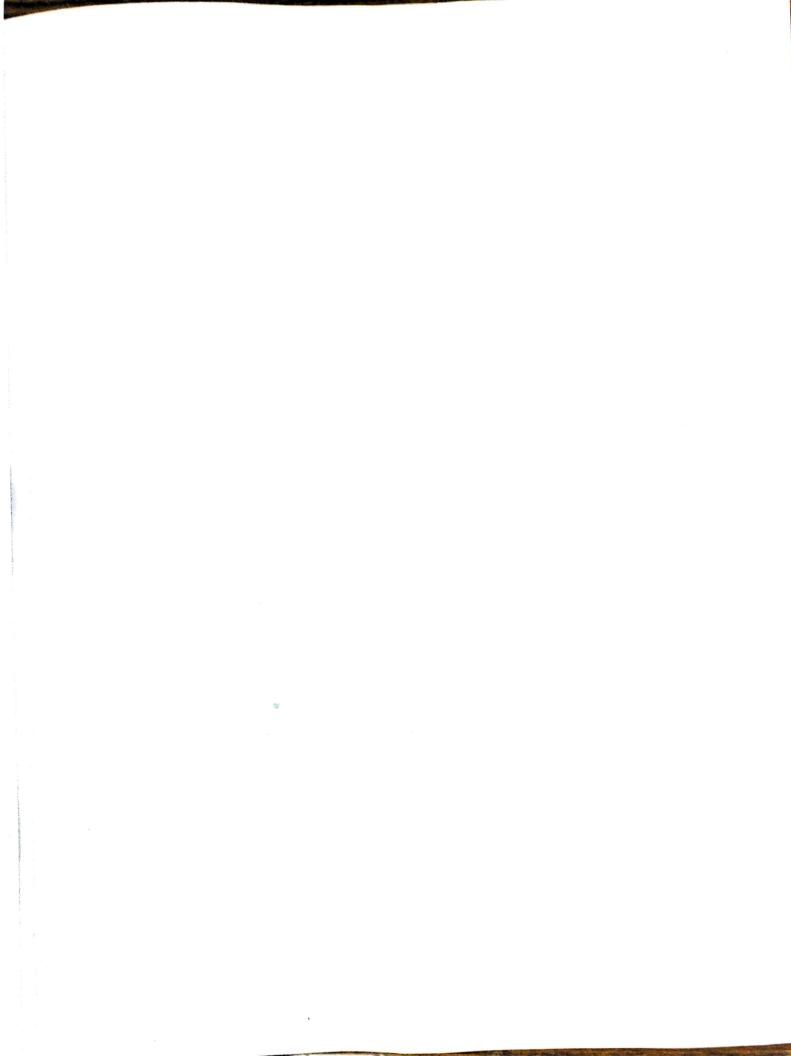
(13)

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Question No.		Que	stio	ns
81.		ch bond participates in ma macromolecule is :	ainte	ining the three-dimensional structure
	(1)	Peptide bond	(2)	Phosphodiester bond
	(3)	Glycosidic bond	(4)	Hydrogen bond
82.	Whi	ch of the following are arch	naeo	bacteria ?
	(1)	Green sulphur bacteria	(2)	Purple sulphur bacteria
	(3)	Mycoplasma	(4)	Methanogens
83.	Cor	rect method of writing the	nam	e of a bacterium is :
	(1)	Pseudomonas aeruginosa	(2)	Pseudomonas aeruginosa
	(3)	Pseudomonas aeruginosa	(4)	pseudomonas aeruginosa
84.	1N]			acid is required to prepare one litre of nose purity (96%), specific gravity (1.84),
	(1)	$27.74\mathrm{ml}$	(2)	55.48 ml
	(3)	110.96 ml	(4)	221.92 ml
85.	Phy	cology is the study of :		
	(1)	Algae	(2)	Fungi
	(3)	Protozoans	(4)	Worms
86.	Which of the following is not used as Bio-fertilizer :			
	(1)	Rhizobium	(2)	Azotobacter
2	(3)	Trichoderma	(4)	Azospirillum
		ne, 2023 (Life Sciences		ode-B

Question No.	Questions	
87.	In genetic code table, number of the	
	In genetic code table, number of codor (1) One (2) Two (2) The	
88.	(2) 1wo (3) The	aree (4) Four
00.	Which of the following is not microbial (1) Bacillus thuringiancia	insecticide :
	- activatio than inglensis	
	(3) Heliothis nuclear polyhedrosis Vi(4) Agrobacterium radiobacter	rus
89.		
09.	Chloramphenicol acts by : (1) Inhibiting cell wall synthesis	
	s wan synthesis	
	· · · · · · · · · · · · · · · · · · ·	e
	i protein synthisis	
	(4) Inhibition of specific enzyme syst	ems
90.	In bacteria, process for the transfer of bacterion bage is known as	genes from one cell to another by
	sactoriophage is known as	
		ansduction
	(3) Transformation (4) Tr	ansfection
91.	Name the term which is given to the pl direction of gravity ?	ants that grow at right angles to th
		ositive gravitropism
	(3) Negative gravitropism (4) Pl	
92.	Which of the following produces the m	nale sex hormone ?
	(1) Rete testis (2) Se	eminiferous tubule
	(3) Leydig cell (4) So	erotum
93.	Out of the following, which hormore luteum?	one does not secrete from corpu
	(1) Estrogen (2) Pr	rogesterone
	(3) Relaxin (4) Te	estosterone
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	(15)	

Question No.	Qu	estio	ns			
94.	Which of the following cells su	nnor	ts, nourishes, and protect the neurons?			
0 10	(1) Nissl bodies		Perikaryon			
	(3) Ganglia		Glial cells			
95.	What are Nissl bodies ?					
	(1) Golgi bodies					
	(2) Lysosomes		-			
	(3) Cluster of rough endopla	smic	reticulum			
	(4) Mitochondria					
96.	Which of the following is prote	ein ho	ormone ?			
	(1) Oxytocin	(2)	Insulin			
	(3) TSH	(4)	Antidiuretic hormone			
97.	Which of the following is NOT	l true	for Rods ?			
	(1) Used for scotopic vision	(2)	Loss causes night blindness			
	(3) Not very light sensitive	(4)	Confer achromatic vision			
98.	In which class is Aristotle's la	ntern	present?			
	(1) Asteroidea	(2)	Echinoidea			
	(3) Holothuroidea	(4)	Ophiuroidea			
99.	Which of the following animal	ls is n	ot a vertebrate ?			
	(1) Oryctolagus	(2)	Eurotyphlis			
	(3) Sparrow	(4)	Amphioxus			
100.	In which of the following the	notocl	hord is present in embryonic stage ?			
	(1) Vertebrates		Some chordates			
	(3) All chordates	(4)	Non-chordates			
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PG-EE-June, 2023

LIFE SCIENCES

Sr. No._____



Time : 1¼ Hours	Total Ques	Total Questions : 100	
Roll No	(in figure)		(in words)
Name :		Date of Birth :	
Father's Name :		Mother's Name : _	
Date of Examination :			
(Signature of the candid	ate)	(Signatu	re of the Invigilator)

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Question No.	Questions						
1.	Coir of commerce comes from which part of coconut?						
	(1)	Mesocarp		(2)	Epicarp		
	(3)	Endocarp		(4)	None of these		
2.	Wh	ich one is diami	no dicarboxy	lic a	amino acid ?		
	(1)	Cystine		(2)	Lysine		
	(3)	Cysteine		(4)	Aspartic Acid		
3.	Wh	ich of the follow	ving gives rise	e to	cork tissue ?		
	(1)	Phellogen			Periblem		
	(3)	Periderm		(4)	Phelloderm		
4.	Himgiri is a variety of resistant to hill bunt disease.						
	(1)	Rice	•	(2)	Wheat		
	(3)	Maize	-	(4)	Cowpea		
5.	Wh	at was the most	significant tr	enc	l in the evolution of modern m	nan (Hom	
	sap	<i>iens)</i> from his a	incestors ?				
	(1)	Increasing cra	nial capacity				
	(2)	Upright postu	re				
	(3)	Shortening of	jaws				
	(4)	Binocular visio	on				
6.	Nat	cional Bureau o	f Fish Geneti	ic R	esources is located at	?	
	(1)	Jabalpur, Mad	lhya Pradesh				
	(2)	Lucknow, Utta	ar Pradesh				
	(3)	Hyderabad, A	ndhra Prades	sh			
	(4)	Patna, Bihar					

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Question No.	Questions				
7.	Aphid, small, sap-sucking	insects a	are examples of		
	(1) Oviparous	(2)	Viviparous		
	(3) Paedogenesis	(4)	Parthenogenesis		
· 8.	Horse became 3 toed and v	very succ	essful in :		
	(1) Pliohippus	(2)	Eohippus		
	(3) Hipparion	(4)	Parahippus		
9.	Cleidoic eggs are found in	:			
	(1) Birds	(2)	Mammals		
	(3) Insects	(4)	Mollusca		
10.	Which of the following dev	velops fro	om ectoderm ?		
	(1) Spinal cord and brain	(2)	Liver and heart		
	(3) Eye and skin	(4)	Notochord and vertebral column		
11.	Spectrophotometer measu	res the a	absorbance of :		
	(1) Only coloured solution	ns			
	(2) Only colourless solutions				
	(3) Both coloured and col	ourless s	solutions		
	(4) None of these				
12.	Shine – Dalgarno sequence	e is rich i	in :		
	(1) Purine bases				
	(2) Pyrimidine bases				
	(3) Equal amount of puri	ne and p	yrimidine bases		
	(4) 25% purine + 75% pyr				

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Question No.	Questions					
13.	Western blotting is used for the transfer of :					
	(1) DNA	(2)	RNA			
	(3) Lipid	(4)	Protein			
14.	The induced fit hypothes	sis of Kosh	land is related to :			
	(1) Enzyme action	(2)	Hormone action			
	(3) Carbohydrate functi	ion (4)	Lipid function			
15.	Metabolism is :					
	(1) Catabolism	(2)	Anabolism			
	(3) Catabolism + Anabol	lism (4)	None of those			
16.	FAD is the coenzyme form of :					
	(1) Riboflavin	(2)	Niacin			
	(3) Pantothenic Acid	(4)	Pyridoxine			
17.	Bt-cotton is :					
	(1) Transgenic plant	(2)	Cloned plant			
	(3) Hybrid plant	(4)	Mutated plant			
18.	Watchman of the genome	e to prever	nt oncogene activation is :			
	(1) p53		Cdk4			
	(3) Cdk6	(4)	Cyclin D1			
19.	Leaf like structure in Pte	eridophyte	s that bear spores are called as			
	(1) Sporophylls	(2)	Pteridophylls			
	(3) Sporangia	(4)	Sporophyte			

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Question No.	n	Questions					
20.	W	Which one of the following is an antioxidant ?					
	(1)	Vitamin-A	(2) Vitamin–E			
	(3)	Vitamin–K	(4)) Vitamin–D			
21.	W	nich bond participates in m	naint	aining the three-dimensional structure			
		a macromolecule is :					
	(1)	Peptide bond	(2)	Phosphodiester bond			
×	(3)	Glycosidic bond	(4)	Hydrogen bond			
22.	Wh	uch of the following are arc	haed) bacteria ?			
	(1)	Green sulphur bacteria	(2)	Purple sulphur bacteria			
	(3)	Mycoplasma	(4)	Methanogens			
23.	Cor	rect method of writing the	nan	e of a bacterium is :			
	(1)	Pseudomonas aeruginosa	(2)	Pseudomonas aeruginosa			
	(3)			pseudomonas aeruginosa			
24.	Hov	v much amount of concentr	ated	acid is required to prepare one litre of			
	1N I	H_2SO_4 from concentrated accelerate the concentrated acceleration of the second structure of the s	id wl	nose purity (96%), specific gravity (1.84),			
	(1)	27.74 ml	(2)	55.48 ml			
	(3)	110.96 ml	(4)	221.92 ml			
25 .]	Phyc	cology is the study of :					
(1)	Algae	(2)	Fungi			
(3)	Protozoans	(4)	Worms			

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(4)

Questi No.	Questions					
26.	. Which of the following is not used as Bio-fertilizer :	Which of the following is not used as Bio fortili				
	(1) Rhizobium (2) Azotobacter					
	(3) Trichoderma (4) Azospirillum					
27.	In genetic code table, number of codons for methionine is :					
	(1) One (2) Two					
	(3) Three (4) Four					
28.	Which of the following is not microbial insecticide :					
	(1) Bacillus thuringiensis					
	(2) Hirsutella thompsonii					
	(3) Heliothis nuclear polyhedrosisVirus					
	(4) Agrobacterium radiobacter					
29.	Chloramphenicol acts by :					
	(1) Inhibiting cell wall synthesis					
	(2) Damage to cytoplasmic membrane					
	1					
	(4) Inhibition of specific enzyme systems					
30. 1	In bacteria, process for the transfer of genes from one cell to anoth	her by				
	bacteriophage is known as	J				
<u> </u>	(1) Conjugation (2) Transduction					
(3	(3) Transformation (4) Transfection					
1	(*/ */*********************************					

(5)

Question							
31.	Ret	Retrogressive metamorphosis is found in :					
	(1)	Balanoglossus	(2)	Branchiostoma			
	(3)	Herdmania		All of these			
32.	Ani are	mals having a bui known as :	lt-in thermo	stat to maintain constant temperatu			
	(1)	Biothermic	(2)	Poikilothermic			
	(3)	Oligothermic	(4)	Homoiothermic			
33.	Wha	at is the study of a	ncient plants	s called ?			
	(1)	Paleontology	_	Palynology			
	(3)	Paleobotany	(4)	Paleobiology			
34.	Whi	ch of the following	is not a cha	racteristic of the Devonian period ?			
				Fish with jaws evolved			
		-		Wingless insects evolved			
35.		ting bodies of slim					
		acervulus	(2)	_			
		apothecium	(4)	perithecium			
		common yeast Sch al reproduction m		myces follows which of the following			
	(1) k	oinary fission	(2)	budding			
	3) f	ragmentation	(4)	spore formation			
37. (Cell v	valls of diatoms ar	e impregnat	ed with			
		hitin		cellulose			
	-	tarch		silica			
38. G	ullet	; is present in whic	h algae ?				
(1	_	uglenoids	-	Golden algae			
(3	· _	inoflagellates					
	, ,		(4)	Green algae			

(6)

Question No.	Questions				
39.	In which phase of growth does the recipient cell take up the donor DNA?				
	(1) lag phase (2) early logarithmic phage				
	(3) late logarithmic phage (4) stationary phage				
40.	Which of the following has beads on a string structure ?				
ł,	(1) Chromosomes (2) Chromatin				
	(3) Nucleosomes (4) Heterochromatin				
41.	Which of the following is NOT a step in Black tea manufacture ?				
	(1) Drying/Firing (2) Rolling				
	(3) Withering (4) Lump formation				
42.	Oolong Tea is				
	(1) Mixture of Green and Black tea				
	(2) Partial Oxidation takes place				
	(3) The leaves are greenish brown				
,	(4) All of the mentioned				
43.	National medical plants board is located in :				
	(1) Nagpur (2) Ahmedabad				
	(3) Hyderabad (4) New Delhi				
44.	Which one is the family of <i>liquorice</i> ?				
	(1) Malvaceae. (2) Liliaceae.				
	(3) Fabaceae. (4) Rosaceae.				
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Questior No.		Questions
45.	Synthesis of cytoplasm	and cell wall material takes place during :
	(1) Maturation	(2) Cell division
	(3) Elongation	(4) Differentiation
46.	The notochord is one of	few prominent structural features in chick emb
	of about :	
	(1) 15 hours	(2) 18 hours
	(3) 13 hours	(4) 10 hours
47.	Name the enzyme secre	eted by pancreas ?
	(1) Pepsin	(2) Chymotrypsin
	(3) Trypsin	(4) Alcohol dehydrogenase
48.	Which of these enzymes reaction ?	s in glycolysis do not take part in an irreversit
	(1) Hexokinase	(2) Phosphofructokinase
	(3) Pyruvate kinase	(4) Glucokinase
49.	Which of these amino ac	ids are essential for infants ?
	(1) Methionine	(2) Arginine and Histidine
	(3) Valine	(4) Lysine and Leucine
50.	Name the amino acid wh	nich does not take part in transamination durin
1	amino acid catabolism ?	· .
	(1) Proline	(2) Threonine
	3) Lysine	(4) Serine
	une, 2023 (Life Scie	noog) Code (

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Question No.	Questions					
51.	What is added to the 3' (prime) ends of eukaryotic mRNAs after transcription ?					
	(1) Intro	ons	(2)	Poly A Tail		
	(3) CAP		(4)	Trinucleotide CCA		
52.	Which of	the following is	a saturate	d fatty acid ?		
	(1) Lino	leic acid	(2)	Linolenic acid		
	(3) Arao	chidic acid	(4)	Arachidonic acid		
53.	Chilgoza	is obtained from	n :			
	(1) Pinu	ıs roxburghii	(2)	Pinus wallichiana		
	(3) Cyce	as revoluta	(4)	Pinus gerardiana		
54.	Seed bea	ring plants com	nes under t	he division :		
	(1) Bry	ophyta	(2)	Pteridophyta		
	(3) Tha	llophyta	(4)	Spermatophyta		
55.	A baby h	as born with a s	small tail. I	t is case exhibiting :		
-	(1) Ata	vism	(2)	Mutation		
	(3) Met	tamorphosis	(4)	Retrogressive evolution		
56.	Variatio	n in gene freque	encies withi	n populations can occur by chance rathe		
	than by	natural selection	on. This is	referred to as :		
		netic flow	(2)	Genetic drift		
		ndom mating	(4)) Genetic load		
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Question No.		Questi	ons			
57.	What is common to whale, seal and shark ?					
	(1) Homeothern		1.1			
	(3) Seasonal mi	-	Thick subcutaneous fat			
58.	Which of the foll	owing is controlle	d by autonomous nervous system ?			
	(1) Papillary re	flex (2)	Swallowing of food			
	(3) Knee-jerk r	esponse (4)	Peristalsis of intestine			
59.	Glomerular caps	ule and Convolute	ed tubules always lie within the			
	(1) Renal pelvis	(2)	Renal medulla			
	(3) Renal cortex	K (4)	None of these			
60.	If a person under	rgoes a prolonged	fasting then his urine will be found t			
	contain higher le	vels of :				
	(1) Ketones	(2)	Amino acids			
	(3) Fats	(4)	Glucose			
61.	Name those livin	g organisms whic	h secrete nitrogen in form of urea ?			
×.	(1) Ureotelic	(2)	Uricotelic			
	(3) Ammonotelia	c (4)	Nitroso compounds			
62.	Which of the follo	wing is a Hill reag	gent?			
	(1) Sugar					
	2) Chlorophylls					
	3) 2, 6-dichlorop	henolindophenol				
(e adenine dinucleo	otide phosphate			
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Question No.	Questions						
63.	Out of the following, which one is not the inhibitor of the electron transport						
	chain?						
	(1) Rotenone (2) Antimycin A						
	(3) Cyanide (4) Malonate						
64.	Name the first transgenic virus resistant plant ?						
	(1) Rice (2) Cotton						
	(3) Tobacco (4) Tomato						
65.	Name the enzyme which has silenced to delay the ripening process ?						
	(1) Polygalacturonase (2) Glyphosate						
	(3) ADA (4) P53						
66.	Which of the following is NOT true for agrobacterium ?						
	(1) Horizontal gene transfer (2) Gram positive bacteria						
	(3) Causes tumor in plants (4) Transfer DNA in plants						
67.	Name the first vector used for a mammalian cell ?						
	(1) Lambda phage (2) SV40						
	(3) M13 (4) EMBL3						
68.	Which of the following is NOT an endonuclease ?						
	(1) Mung bean nuclease						
	(2) S1 nuclease						
	(3) Terminal deoxynucleotidyl transferase						
	(4) RNase A						

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Question No.	n		Questi	ons
69.	How many isoprene units, are there in sesquiterpenes ?			re in sesquiterpenes ?
	(1)	1	(2)	2
	(3)	3	(4)	8
70.	Na	me the class of seco	ondary met	abolites which is characterized by th
	1			th an aromatic ring ?
	(1)	Glycosides	(2)	Phenolics
	(3)	Alkaloids	(4)	Terpenes
71.	Nar	ne the term which is	given to th	e plants that grow at right angles to th
		ection of gravity ?	<i>r</i>	•
	(1)	Diagravitropic	(2)	Positive gravitropism
	(3)	Negative gravitrop	ism (4)	Plagiogravitropic
72.	Whi	ch of the following p	oroduces th	e male sex hormone ?
	(1)	Rete testis	(2)	Seminiferous tubule
	(3)	Leydig cell	(4)	Scrotum
73.	Out	of the following,	which hor	mone does not secrete from corpu
	luteı	um ?		
	(1)	Estrogen	(2)	Progesterone
	(3)	Relaxin	(4)	Testosterone
74.	Which of the following cells supports, nourishes, and protect the neuron			
	1)	Nissl bodies	(2)	Perikaryon
	3) (Ganglia		Glial cells
LEE-J	une	e, 2023 (Life Scie	nces) Co (12)	de-C

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Question No.	Questions			
75.	What are Nissl bodies ?			
	(1) Golgi bodies			
	(2) Lysosomes			
	(3) Cluster of rough endoplasmic reticulum			
	(4) Mitochondria			
76.	Which of the following is protein hormone ?			
	(1) Oxytocin (2) Insulin			
	(3) TSH (4) Antidiuretic hormone			
77.	Which of the following is NOT true for Rods ?			
	(1) Used for scotopic vision (2) Loss causes night blindness			
	(3) Not very light sensitive (4) Confer achromatic vision			
78.	In which class is Aristotle's lantern present ?			
	(1) Asteroidea (2) Echinoidea			
	(3) Holothuroidea (4) Ophiuroidea			
79.	Which of the following animals is not a vertebrate ?			
	(1) Oryctolagus (2) Eurotyphis			
	(3) Sparrow (4) Amphioxus			
80.	In which of the following the notochord is present in embryonic stage ?			
	(1) Vertebrates (2) Some chordates			
	(3) All chordates (4) Non-chordates			
81.	If a single base substitution modifies a codon to a termination codon, th chain may terminate at the point of mutation. Such mutations are called			
	(1) Frame shift Mutation (2) Mis-sense Mutation			
	(3) Non-sense Mutation (4) Germinal Mutation			
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Question No.	Questions		
82.	Which of the following is not macromolecule :		
	(1) Amino acids (2) Fatty acids		
	(3) Lipids (4) Polysaccharides		
83.	In which city, National Centre for DNA fingerprinting and Diagnostics i situated ?		
	(1) Hyderabad (2) Ahmedabad		
	(3) Secunderabad (4) Dhanbad		
84.	The difference between nucleotide and nucleoside is that nucleoside lacks		
	(1) Nitrogenous base (2) Pentose Sugar		
	(3) Deoxy ribose (4) Phosphate		
85.	Gram negative bacterial cell wall contains higher content of :		
	(1) Lipid (2) Carbohydrate		
	(3) Protein (4) Peptidoglycan		
86.	In osmosis, water moves from :		
,	(1) Hypotonic Solution to Hypertonic Solution		
	(2) Hypertonic Solution to Isotonic Solution		
	(3) Hypertonic Solution to Hypotonic Solution		
	(4) Hypotonic Solution to Isotonic Solution		
87.	For preparing 0.1M NaOH, how much amount of NaOH is required :		
	(1) $0.04g$ (2) $0.4g$		
	(4) $40g$		
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Question No.		Q	uestio	ns
88.	Gen	eral size of bound peptic		
	(1)	8–10 amino acids		
	(3)		(2)	13–18 amino acids
		19–24 amino acids	(4)	25–36 amino acids
89.	Cell	ular Totipotency proper	ty is pr	esent in :
	(1)	Plants	(2)	
	(3)	Non-Vertebrates		Viruses
90.	Scie	entist known as Father o	of Antis	eptic Surgery :
	(1)	Joseph Lister	. (2)	Edward Jenner
	(3)	Louis Pasteur	(4)	Robert Koch
91.	ICA	R-Central Institute of E	Brackisł	n Water is located at ?
	(1)	Patna	(2)	Kochi
	(3)	Chennai	(4)	Bhubaneswar
92.	Mig	ratory fish that lives in	fresh w	vater but breeds in salt water is know
	as:			
	(1)	Potamodromus fish	(2)	Anadromous fish
	(3)	Catadromous fish	(4)	None of these
93.	Rec	combinant DNase is used	d for tre	eatment of :
	(1)	Muscular Dystrophy	(2)	Cystic fibrosis
	(3)	Multiple sclerosis	(4)	Kidney disorders
94.	Ant	tibody molecules are hel	d toget	her by :
	(1)	Disulphide bonds	(2)	Ester bonds
	(3)	Glycosidic bonds	(4)	All of these

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Question No.		Q	uestion	ns	
95.	Pasteur effect is due inhibition of glycolysis because of :				
	(1)	Creatine phosphate	(2)	ATP	
	(3)	ADP	(4)	AMP	
96.	Mał	nseer is the state fish of	which s	state?	
	(1)	Orissa	(2)	Kerala	
	(3)	Bihar	(4)	Karnataka	
97.	Whi	ch of the following pest	causes	curling of leaves in tomato ?	
	(1)	Aphids	(2)	Leafhopper	
	(3)	Whitefly	(4)	All of the above	
98.	How many spots hadda beetle has on its back ?				
	(1)	20	(2)	26	
	(3)	28	(4)	16	
99.	Most abundant and basic Auxin is				
	(1)	IAA	(2)	NAA	
	(3)	1BA	(4)	2-4 D	
100.	Which test is used for testing the significance of mean differences ?				
	(1)	t-test		f-test	
	(3)	z-test		k ² -test	
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PG-EE-June, 2023

LIFE SCIENCES

Sr. No. 11628



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Father's Name :			
Date of Examination :			
(Signature of the candidate	2)	(Signatu	are of the Invigilator)

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 BEFORE ANSWERING THE OF
- 8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Questions
1.	Name those living organisms which secrete nitrogen in form of urea ?
	(1) Ureotelic (2) Uricotelic
	(3) Ammonotelic (4) Nitroso compounds
2.	Which of the following is a Hill reagent ?
	(1) Sugar
а — — — — — — — — — — — — — — — — — — —	(2) Chlorophylls
	(3) 2, 6-dichlorophenolindophenol
	(4) Nicotinamide adenine dinucleotide phosphate
3,	Out of the following, which one is not the inhibitor of the electron transport chain ?
	(1) Rotenone (2) Antimycin A
	(3) Cyanide (4) Malonate
4.	Name the first transgenic virus resistant plant ?
	(1) Rice (2) Cotton
	(3) Tobacco (4) Tomato
5.	Name the enzyme which has silenced to delay the ripening process ?
	(1) Polygalacturonase (2) Glyphosate
	(3) ADA (4) P53
6.	Which of the following is NOT true for agrobacterium ?
	(1) Horizontal gene transfer (2) Gram positive bacteria
•.	(3) Causes tumor in plants (4) Transfer DNA in plants
PC F	
I U-E	E-June, 2023 (Life Sciences) Code-D

uestion No.			Questio	ns		
7.	Nan	Name the first vector used for a mammalian cell ?				
	(1)	Lambda phage	(2)	SV40		
	(3)	M13	(4)	EMBL3		
8.	Wh	ich of the following is	NOT an e	ndonuclease ?		
	(1)	Mung bean nuclease	9			
	(2)	S1 nuclease				
	(3)	Terminal deoxynucl	eotidyl tra	nsferase		
	(4)	RNase A	•			
9.	Ho	w many isoprene unit	s, are ther	e in sesquiterpenes ?		
	(1)	1	(2)	2		
	(3)	3	(4)	8		
10.	Na	me the class of secor	ndary meta	abolites which is characterized by the		
	pre	sence of the hydroxyl	group wit	h an aromatic ring ?		
	(1)	Glycosides	(2)	Phenolics		
	(3)	Alkaloids	(4)	Terpenes		
11.	ICA	AR-Central Institute	of Brackisł	n Water is located at ?		
	(1)	Patna	(2)	Kochi		
• 00	(3)	Chennai	(4)	Bhubaneswar		
12.	Mi	Migratory fish that lives in fresh water but breeds in salt water is known				
	as:					
		Potamodromus fish		Anadromous fish		
	(3)	Catadromous fish		None of these		
G-EE	-Ju	ne, 2023 (Life Scie	ences) Co (2)	ode-D		

Question No.		Questic	ons	
13.	Recombinant DNase	is used for tre	eatment of :	
	(1) Muscular Dystro	ophy (2)	Cystic fibrosis	
	(3) Multiple scleros	is (4)	Kidney disorders	
14.	Antibody molecules a	are held togetl	ner by :	
	(1) Disulphide bond	s (2)	Ester bonds	
	(3) Glycosidic bonds	(4)	All of these	
15.	Pasteur effect is due	inhibition of g	lycolysis because of :	
	(1) Creatine phosph	.ate (2)	ATP	
	(3) ADP	(4)	AMP	
16.	Mahseer is the state	fish of which s	state ?	
	(1) Orissa	(2)	Kerala	
	(3) Bihar	(4)	Karnataka	
17.	Which of the following pest causes curling of leaves in tomato?			
	(1) Aphids	(2)	Leafhopper	
	(3) Whitefly	(4)	All of the above	
18.	How many spots hado	la beetle has o	on its back ?	
	(1) 20	(2)		
× .	(3) 28	(4)	16	
19.	Most abundant and b	asic Auxin is .	·····	
	(1) IAA	(2)	NAA	
A	(3) 1BA	(4)	2-4 D	

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Question No.		G	J uestio	ns	
20.	Wh	ich test is used for testi	ng the s	ignificance of mean differences ?	
	(1)	t-test	(2)	f-test	
	(3)	z-test	(4)	k²-test	
21.		at is added to the 3' nscription ?	(prime	e) ends of eukaryotic mRNAs after	
	(1)	Introns	(2)	Poly A Tail	
	(3)	CAP	(4)	Trinucleotide CCA	
22.	Wh	ich of the following is a s	saturate	ed fatty acid ?	
	(1)	Linoleic acid	(2)	Linolenic acid	
	(3)	Arachidic acid	(4)	Arachidonic acid	
23.	Chi	lgoza is obtained from :			
	(1)	Pinus roxburghii	(2)	Pinus wallichiana	
	(3)	Cycas revoluta	(4)	Pinus gerardiana	
24.	See	d bearing plants comes	under t	he division :	
	(1)	Bryophyta	(2)	Pteridophyta	
	(3)	Thallophyta	(4)	Spermatophyta	
25.	A baby has born with a small tail. It is case exhibiting :				
	(1)	Atavism	(2)	Mutation	
	(3)	Metamorphosis	(4)	Retrogressive evolution	
		2		de D	

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Question No.		Questio	ns		
26.	Variation in gene frequencies within populations can occur by chance rather than by natural selection. This is referred to as :				
	(1) Genetic flow		Genetic drift		
	(3) Random mating	(4)	Genetic load		
27.	What is common to v	vhale, seal and	shark?		
	(1) Homeothermy	(2)	Convergent evolution		
	(3) Seasonal migrat		Thick subcutaneous fat		
28.	Which of the followin	ng is controlled	by autonomous nervous system ?		
	(1) Papillary reflex		Swallowing of food		
	(3) Knee-jerk respo	onse (4)	Peristalsis of intestine		
29.	Glomerular capsule :	and Convolute	d tubules always lie within the		
	(1) Renal pelvis	(2)	Renal medulla		
	(3) Renal cortex	(4)	None of these		
30.	If a person undergoe contain higher levels		fasting then his urine will be found to		
	(1) Ketones	(2)	Amino acids		
	(3) Fats	(4)	Glucose		
31.	If a single base subs	titution modif	ies a codon to a termination codon, th		
	-		f mutation. Such mutations are called		
	(1) Frame shift Mu				
	(3) Non-sense Muta		Germinal Mutation		
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		(5)			

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		Questio	ns
Which of the following is not macromolecule :			omolecule :
(1)	Amino acids	(2)	Fatty acids
(3)	Lipids	(4)	Polysaccharides
		ntre for	DNA fingerprinting and Diagnostics is
(1)	Hyderabad	(2)	Ahmedabad
(3)	Secunderabad	(4)	Dhanbad
The	difference between nu	cleotide	and nucleoside is that nucleoside lacks
(1)	Nitrogenous base	(2)	Pentose Sugar
(3)	Deoxy ribose	(4)	Phosphate
Gra	am negative bacterial co	ell wall c	ontains higher content of :
(1)	Lipid	(2)	Carbohydrate
(3)	Protein	(4)	Peptidoglycan
In osmosis, water moves from :			
(1)	Hypotonic Solution to	o Hyperte	onic Solution
(2)	Hypertonic Solution	to Isoton	ic Solution
(3)	Hypertonic Solution t	to Hypot	onic Solution
(4)	Hypotonic Solution to	o Isotonio	e Solution
For	preparing 0.1M NaOH	I, how m	uch amount of NaOH is required :
(1)	0.04g	(2)	0.4g
(3)	4g	(4)	40g
	 (1) (3) In we situe (1) (3) Grassing (1) (3) Grassing (1) (3) In a structure (1) (3) (1) (2) (3) (1) (2) (3) (4) Formation (1) (3) 	 (1) Amino acids (3) Lipids In which city, National Cesituated ? (1) Hyderabad (3) Secunderabad The difference between numbers of the difference between numbers of the	(1) Amino acids(2)(3) Lipids(4)In which city, National Centre for situated ?(1)(1) Hyderabad(2)(3) Secunderabad(4)The difference between nucleotide ?(1)(1) Nitrogenous base(2)(3) Deoxy ribose(4)Gram negative bacterial cell wall c(1) Lipid(2)(3) Protein(4)In osmosis, water moves from :(1) Hypotonic Solution to Hypertonic(2) Hypertonic Solution to Hypertonic(3) Hypertonic Solution to Hypertonic(4) Hypotonic Solution to Isotonic(3) Hypertonic Solution to Isotonic(4) Hypotonic Solution to Isotonic(1) 0.04g(2)

(6)

Question No.		Questio	ns
38.	General size of bound p	eptide to M	HC II molecule is :
	(1) 8–10 amino acids	. (2)	13–18 amino acids
	(3) 19–24 amino acids	(4)	25–36 amino acids
39.	Cellular Totipotency pr	operty is pr	esent in :
, ,	(1) Plants	(2)	Vertebrates
	(3) Non-Vertebrates	(4)	Viruses
40.	Scientist known as Fath	her of Antise	eptic Surgery :
	(1) Joseph Lister	(2)	Edward Jenner
	(3) Louis Pasteur	(4)	Robert Koch
41.	Retrogressive metamor	phosis is fo	und in :
	(1) Balanoglossus	(2)	Branchiostoma
	(3) Herdmania	(4)	All of these
42.	Animals having a built	t-in thermos	stat to maintain constant temperatur
	are known as :		
	(1) Biothermic	(2)	Poikilothermic
	(3) Oligothermic	(4)	Homoiothermic
43.	What is the study of an	ncient plants	s called ?
	(1) Paleontology	(2)	Palynology
	(3) Paleobotany	(4)	Paleobiology

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Question No.	Q	uestio	ns			
44.	Which of the following is not a characteristic of the Devonian period ?					
	(1) Land plants first appea	red (2)	Fish with jaws evolved			
			Wingless insects evolved			
45.	Fruiting bodies of slime mole					
	(1) acervulus	(2)	sori			
	(3) apothecium	. ,	perithecium			
46.	The common yeast Schizosa asexual reproduction metho		omyces follows which of the followin			
	(1) binary fission	(2)	budding			
	(3) fragmentation	(4)	spore formation			
47.	Cell walls of diatoms are imp	pregna	ted with			
	(1) chitin	(2)	cellulose			
	(3) starch	(4)	silica			
48.	Gullet is present in which al	gae ?				
	(1) Euglenoids	(2)	Golden algae			
	(3) Dinoflagellates	(4)	Green algae			
49.	In which phase of growth do	es the	recipient cell take up the donor DNA			
	(1) lag phase	(2)	early logarithmic phage			
	(3) late logarithmic phage	(4)	stationary phage			
50.	Which of the following has b	eads or	n a string structure ?			
	(1) Chromosomes	(2)	Chromatin			
	(3) Nucleosomes	(4)	Heterochromatin			
51.	Which of the following is NO	T a ste	ep in Black tea manufacture ?			
	(1) Drying/Firing	(2)	Rolling			
	(3) Withering	(4)	Lump formation			

(8)

Question No.			Questio	ns		
52.	Oolo	ng Tea is				
	(1) Mixture of Green and Black tea					
	(2)	Partial Oxidation t	akes place			
	(3)	The leaves are gree	enish brown			
	(4)	All of the mentione	ed			
53.	Nat	ional medical plant	s board is lo	cated in :		
	(1)	Nagpur	(2)	Ahmedabad		
	(3)	Hyderabad	(4)	New Delhi		
54.	Wh	ich one is the family	of liquorice	2?		
	(1)	Malvaceae.	(2)	Liliaceae.		
	(3)	Fabaceae.	(4)	Rosaceae.		
55.	Syr	thesis of cytoplasm	and cell wa	ll material takes place during :		
	(1)	Maturation	(2)	Cell division		
	(3)	Elongation	(4)	Differentiation		
56.	The	e notochord is one of	few promine	ent structural features in chick embryo		
	ofa	bout :				
	(1)	15 hours	(2)	18 hours		
	(3)	13 hours	(4)	10 hours		
57.	Na	me the enzyme secr	eted by pan	creas?		
	(1)	Pepsin	(2)	Chymotrypsin		
	(3)	Trypsin	(4)	Alcohol dehydrogenase		
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Question No.		Qu	estio	ns		
58.	Which of these enzymes in glycolysis do not take part in an irreversible reaction ?					
	(1)	Hexokinase	(2)	Phosphofructokinase		
	(3)	Pyruvate kinase	(4)	Glucokinase		
59.	Whi	ich of these amino acids ar	re ess	ential for infants ?		
	(1)	Methionine	(2)	Arginine and Histidine		
	(3)	Valine	(4)	Lysine and Leucine		
60.		ne the amino acid which c no acid catabolism ?	loes n	ot take part in transamination durin		
	(1)	Proline	(2)	Threonine		
	(3)	Lysine	(4)	Serine		
61.		ne the term which is given ection of gravity ?	to the	e plants that grow at right angles to th		
	(1)	Diagravitropic	(2)	Positive gravitropism		
	(3)	Negative gravitropism		Plagiogravitropic		
62.	Whi	ch of the following produc	ces th	e male sex hormone ?		
	(1)	Rete testis				
	(2)	Seminiferous tubule				
	(3)	Leydig cell				
	(4)	Scrotum				

(10)

Question No.	Qu	estions
63.	Out of the following, which luteum?	h hormone does not secrete from corpus
	(1) Estrogen	(2) Progesterone
	(3) Relaxin	(4) Testosterone
64.	Which of the following cells su	apports, nourishes, and protect the neurons?
	(1) Nissl bodies	(2) Perikaryon
	(3) Ganglia	(4) Glial cells
65.	What are Nissl bodies ?(1) Golgi bodies(2) Lysosomes	•
	(3) Cluster of rough endoplas(4) Mitochondria	smic reticulum
66.	Which of the following is prote(1) Oxytocin(3) TSH	ein hormone ? (2) Insulin (4) Antidiuretic hormone
67.	Which of the following is NOT	Γ true for Rods ?
	 Used for scotopic vision Not very light sensitive 	
68.	In which class is Aristotle's la	intern present ?
	 Asteroidea Holothuroidea 	(2) Echinoidea(4) Ophiuroidea
69.	Which of the following animal	
	 Oryctolagus Sparrow 	(2) Eurotyphlis(4) Amphioxus

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Question No.			Questio			
70.	In which of the following the notochord is present in embryonic stage ?					
	(1)	Vertebrates	(2)	Some chordates		
	(3)	All chordates	(4)	Non-chordates		
71.	Coir	of commerce comes f	rom whic	h part of coconut ?		
	(1)	Mesocarp	(2)	Epicarp		
	(3)	Endocarp	(4)	None of these		
72.	Whic	h one is diamino dica	rboxylic a	amino acid ?		
	(1)	Cystine	(2)	Lysine		
	(3)	Cysteine	(4)	Aspartic Acid .		
73.	Whic	h of the following giv	ves rise to	o cork tissue ?		
	(1)	Phellogen	(2)	Periblem		
	(3)	Periderm	(4)	Phelloderm		
74.	Him	giri is a variety of	res	sistant to hill bunt disease.		
		Rice	(2)	Wheat		
	(3)	Maize	(4)	Cowpea		
75.	What was the most significant trend in the evolution of modern man (Home					
101	1	ens) from his ancesto				
	(1)	Increasing cranial ca	pacity			
	(2)	Upright posture				
	(3)	Shortening of jaws				
	(4)	Binocular vision				
а. С						
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Question No.		Qu	estio	ns			
76.	Nat	National Bureau of Fish Genetic Resources is located at?					
	(1)	Jabalpur, Madhya Prade					
	(2)	Lucknow, Uttar Pradesh					
	(3)	Hyderabad, Andhra Prac					
	(4)	Patna, Bihar					
77.	Apł	nid, small, sap-sucking ins	sects a	re examples of			
	(1)	Oviparous	(2)	Viviparous			
	(3)	Paedogenesis	(4)	Parthenogenesis			
78.	Hor	Horse became 3 toed and very successful in :					
	(1)	Pliohippus	(2)	Eohippus			
	(3)	Hipparion	(4)	Parahippus			
79.	Clei	idoic eggs are found in :					
	(1)	Birds	(2)	Mammals			
	(3)	Insects	(4)	Mollusca			
80.	Wh	ich of the following develo	ops fro	om ectoderm ?			
	(1)	Spinal cord and brain	(2)	Liver and heart			
	(3)	Eye and skin	(4)	Notochord and vertebral column			
81.	Spe	ctrophotometer measures	s the a	absorbance of :			
	(1)	Only coloured solutions					
	(2)	Only colourless solution	s				
	(3)	Both coloured and colou	rless	solutions			
	(4)	None of these					

(13)

Question No.	Que	stio	18	
82.	Shine – Dalgarno sequence is r	rich ir	1 ;	
	(1) Purine bases			
	(2) Pyrimidine bases			
	(3) Equal amount of purine a			
	(4) 25% purine + 75% pyrimic	dine k	bases	
83.	Western blotting is used for th	he tra	unsfer of :	
	(1) DNA	(2)	RNA	
	(3) Lipid	(4)	Protein	,
84.	The induced fit hypothesis of	Kosh	land is related to :	
	(1) Enzyme action	(2)	Hormone action	
	(3) Carbohydrate function	(4)	Lipid function	
85.	Metabolism is :			
	(1) Catabolism	(2)	Anabolism	
	(3) Catabolism + Anabolism	(4)	None of those	
86.	FAD is the coenzyme form of	:		
	(1) Riboflavin	(2)	Niacin	
	(3) Pantothenic Acid	(4)	Pyridoxine	
87.	Bt-cotton is :			
· ·	(1) Transgenic plant			
	(2) Cloned plant			
	(3) Hybrid plant			
6	(4) Mutated plant			

Question No.		Que	stio	ns
88.	Watchman of the genome to prevent oncogene activation is :			
	(1)	p53	(2)	Cdk4
	(3)	Cdk6	(4)	Cyclin D1
89.	Lea	f like structure in Pteridon	hyte	s that bear spores are called as
	(1)	Sporophylls	(2)	Pteridophylls
	(3)	Sporangia	(2) (4)	
	. /		(4)	Sporophyte
90.	Whi	ich one of the following is a	n an	tioxidant ?
	(1)	Vitamin–A	(2)	Vitamin–E
	(3)	Vitamin–K	(4)	Vitamin-D
91.	Whi of a	ich bond participates in ma macromolecule is :	ainte	ining the three-dimensional structure
	(1)	Peptide bond	(2)	Phosphodiester bond
	(3)	Glycosidic bond	(4)	•
92.	Whi	ch of the following are arch	naeo	bacteria ?
	(1)	Green sulphur bacteria		Purple sulphur bacteria
	(3)	Mycoplasma	(4)	
93.	Cori	rect method of writing the	nam	e of a bacterium is :
6	(1)			Pseudomonas aeruginosa
	(3)			pseudomonas aeruginosa
	1N F	much amount of concentr H_2SO_4 from concentrated action cular weight (98) :	ated id wl	l acid is required to prepare one litre o hose purity (96%), specific gravity (1.84
	(1)	27.74 ml	(2)	55.48 ml
	(3)	110.96 ml	(4)	221.92 ml
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Question No.	Questions							
95.	Phycology is the study of	Phycology is the study of :						
	(1) Algae	(2)	Fungi					
	(3) Protozoans	(4)	Worms					
96.	Which of the following is	not used a	as Bio-fertilizer :					
	(1) Rhizobium	(2)	Azotobacter					
	(3) Trichoderma	(4)	Azospirillum					
97.	In genetic code table, nur	nber of co	dons for methionine is :					
	(1) One	(2)	Two					
	(3) Three	(4)	Four					
98.	Which of the following is	not micro	bial insecticide :					
	(1) Bacillus thuringiens	is						
	(2) Hirsutella thompson	ii						
	(3) Heliothis nuclear po	lyhedrosi	s Virus					
	(4) Agrobacterium radio							
99.	Chloramphenicol acts by :							
	(1) Inhibiting cell wall sy	nthesis						
	(2) Damage to cytoplasm	nic membr	rane					
	(3) Inhibition of protein							
	(4) Inhibition of specific		ystems					
100.	In bacteria, process for th	e transfe	r of genes from one cell to another by a					
	bacteriophage is known a	s						
	(1) Conjugation	(2)	Transduction					
	(3) Transformation	(4)	Transfection					
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(16)

Q. NO.	A	В	C	D
1	4	3	1	1
2	4	4	1	3
3	3	1	1	4
4	1	4	2	4
5	1	1	1	1
6	3	1	2	2
7	1	3	2	2
8	4	2	3	3
9	3	1	2	4
10	2	1	1	2
11	3	3	3	2
12	4	4	1	2
13	1	3	4	2
13	4	3	1	1
15	1	2	3	2
15	1	1	1	1
10	3	4	1 1	3
17	2	1	1	3
		2	3	1
19	1	3	2	1
20	1			
21	3	1	4	2
22	1	3	4	3
23	4	4	3	4
24	1	4	1	4
25	3	1	1	1
26	1	2	3	2
27	1	2	1	2
28	1	3	4	4
29	3	4	3	3
30	2	2	2	11
31	2	2	3	3
32	3	2	4	4
33	4	2	3	1
34	4	1	3	4
35	1	2	2	1
36	2	1	1	1
37	2	3	4	3
38	4	3	1	2
39	3	1	2	1
40	1	1	3	1
41	1	2	4	3
42	1	3	4	4
43	1	4	4	3
44	2	4	3	3
45	1	1	2	2
46	2	2	2	1
47	2	2	3	4
48	3	4	4	1
49	2	3	2	2
50	1	1	4	3

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Q. NO.	A	В	c	D
51	2	3	2	4
52	2	1	3	4
53	2	4	4	4
54	1	1	4	3
55	2	3	1	2
56	1	1	2	2
57	3	1	2	3
58	3	1	4	4
59	1	3	3	2
60	1	2	1	4
61	4	1	1	4
62	4	1	3	3
			4	4
63 64	4 3	1	4 4	4
		2		
65	2	1	1	3
66	2	2	2	2
67	3	2	2	3
68	4	3	3	2
69	2	2	4	4
70	4	1	2	3
71	1	4	1	1
72	3	4	3	1
73	4	4	4	1
74	4	3	4	2
75	1	2	3	1
76	2	2	2	2
77	2	3	3	2
78	3	4	2	3
79	4	2	4	2
80	2	4	3	1
81	1	4	3	3
82	3	4	4	1
83	4	3	1	4
84	4	1	4	1
85	3	1	1	3
86	2	3	1	1
87	3	1	3	1
88	2	4	2	1
89	4	3	1	3
90	3	2	1	2
91	3	1	2	4
92	4	3	2	4
93	3	4	2	3
94	3	4	1	1
95	2	3	2	1
96	1	2	1	3
97	4	3	3	1
98	1	2	3	4
99	2	4	1	3
100	3	3	1	2

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