1.		- C		the three domain classification?					
	A)	Eukarya	B)	Bacteria					
	C)	Cyanobacteria	D)	Archaea					
2.	Temi	inism is the phenomenon of sy	nthesis	of					
	A)	DNA depending RNA	B)	RNA depending DNA					
	C)	RNA depending Proteins	D)	RNA depending RNA					
3.	Nodu	iles with nitrogen fixing bacte	ria are _l	present in					
	A)	Oriza sativa	B)	Triticumestivum					
	C)	Pisumsativum	D)	Zea mays					
4.	Biolu	iminescence is usually associa	ted wit	h					
	A)	Chrysophyta	B)	Pyrrophyta					
	C)	Chlorophyta	D)	Phaeophyta					
5.	Nam	e the Irish moss which produc	es caraş	geenin?					
	A)	Octoblepharum albidum	B)	Leucobryumbowringii					
	C)	Porphyra tenera	D)	Chondruscrispus					
6.	Whic	Which of the following are not algae in the true sense?							
	A)	Spirogyra and Chlorella	B)	Nostoc and Spirogyra					
	C)	Ulva and Chlorella	D)	Nostocand Chlorella					
7.	The f	following is not a vegetative m	node of	reproduction in fungi					
	A)	Fragmentation	B)	Rhizomorph					
	C)	Sclerotia	D)	Somatogamy					
8.	Rhizo	opus, Pencillium and Aspergil	lus are	examples of					
	A)	Parasitic fungi	B)	Symbiotic fungi					
	C)	Saprophytic fungi	D)	Predacious fungi					
9.	The f	following is not cultivated asar	n edible	e fungi					
	A)	Coprinuscomatus	B)	Agaricusbispora					
	C)	Volvariellavolvacea	D)	Pleurotussajorcaju					
10.	Parm	<i>nelia</i> is known as							
	A)	Iceland moss	B)	Orchil					
	CĴ	Rock flower	$\overrightarrow{\mathbf{D}}$	Reindeer moss					

11.	In Lichens following special veg A) Soredia C) Cyphellae	getative structure is formed as respiratory organs B) Isdia D) Medulla
12.	When a big fish eats a smaphytoplankton, the water fleas and A) Producers C) Secondary consumers	all fish, which eats water fleas supported by re B) Primary consumers D) Tertiary consumers
13.	Match the following	
	a. Apothecium	1. Erysiphe
	b. Perithecium	2. Peziza
	c. Cleistothecium	3. Claviceps
	d. Ascostroma	4. Loculoascomycetidae
	A) a-2, b-1, c-3, d-4 C) a-4, b-2, c-1, d-3	B) a-2, b-3, c-1, d-4 D) a-4, b-2, c-3, d-1
14.	Red rust in tea is caused by A) Fungi B) Ba	acteria C) Algae D) Virus
15.	Basidospores differ from ascosp A) Four spores and are exog B) Eight spores and are exog C) Four spores and are endo D) Eight spores and are endo	genously produced ogenously produced
16.		of associations with bryophytes ranging from the abioses. Name the bryophyte that possesses this B) <i>Anthoceros</i>
	C) Porella D)	Polytrichum
17.	 When moss spore germinate they A) Leafy gamaetophyte dire B) Capsule directly C) Protonema, then a leafy D) Protonema which bears a 	ctly

18.	The o	conducting tissues do not co	onsists Xyl	em and Phloem tissues in
	A)	Pinus	B)	Cycas
	C)	Brassica	D)	Funaria
19.	The s	sporophyte containspseudoe		
	A)	Riccia	B)	Marchatia
	C)	Anthoceros	D)	Funaria
20.	and			ws variations with respect to its shape ch as actinostele, plectostele, mixed
	A)	Marsilea	B)	Salvinia
		Equisetum	Ď)	Lycopodium
21.	Dehi	scence of sporangia takes p	olace by a v	vertical splitting in
	A)	Lycopodium	B)	Selaginella
	C)	Equisetum	D)	Marselia
22.	In the A) B) C) D)	eprothallus of the fern plant The nuclei of all cells ind number Only the sex organs and Only the gametes have n The cells have mixploid	cluding sex gametes hannonoploid	
23.	Wing	ged seeds are present in		
	A)	Cycas	B)	Pinus
	C)	Gnetum	D)	Ephedra
24.	Deoc	lar wood, the strongest coni	iferous wo	od is obtained from
	A)	Cryptomeria	B)	Cedrus
	C)	Taxodium	D)	Sequoia
25.		gymnosperm <i>Ginkgo biloba</i> itive characters and It originated in the Triass It originated in the Jurass It originated in the Creta It originated in the Triass	sic period of sic period of sceous perio	of Mesozoic era od of Mesozoic era
26.		e system of classification be classified as Polypetalae, Gamopetala Polypetalae, Gamopetala Archechlamydae, Polype None of these	ae, Monoch ae, Dichlan	ıydae

27.	In the plant name Capparislasiantha R.Brex.DC. The author citation indicated that											
	A)											
	B)	De candolle named it										
	C)	Robert Brown has mo										
	D)	Robert Brown and de	Candolle ha	ive equal s	status							
28.	Gynobasic style is characteristic to the family											
	A)	Liliaceae	B)		thaceae							
	C)	Lauraceae	D)	Labiat	ae							
29.		neaxaploid plant 2n=42.										
	A)	21 B)	7	C)	14	D)	12					
30.	Tritic	rumaestivum is a polypl	oidy with g	genomes f	rom							
	A)	Triticummonococume										
	B)	Aegilopsspeltoedus&A										
	C)	Aegilopsissquarrosa&										
	D)	Triticummonococum,	Aegilopsspe	eltoedus&2	4egilopsisso	quarrosa						
31.	The f	ruit in the family crucife	erae is									
	A)	Siliqua	B)	Acher								
	C)	Berry	D)	Follic	le							
32.	Cincinnus inflorescence is a distinguishing feature of family											
	A)	Rutaceae	B)	Metas	tomaceae							
	C)	Caryophyllaceae	D)	Lythra	nceae							
33.	Quinine is obtained from the plant that belongs to the family											
	A)	Rutaceae	B)	Rham	naceae							
	C)	Rosaceae	D)	Rubia	ceae							
34.	The fleshy edible fruit of cashew nut is the modified											
	A)	Ovary	B)	Thalaı	nus							
	C)	Mesocarp	D)	Epicar	TP .							
35.	A spe	ecies confined to a small	area is know	wn as								
	A) ¹	Rare	B)	Key st	tone							
	C)	Endemic	D)	Endan	igered							
36.	For p	reservation in the herbar	rium, the spe	ecimens aı	re treated w	ith						
	A) ¹	Heating	B)	Repel								
	C)	Fumigants	D)	All the	e above							

37.			system		phylogenetic system of classification?			
	A)	Charles Bessey		B)	Robert Thorne			
	C)	Engler&Prantl	D)	De Ca	ndolle			
38.		on should have a single ent species or taxa is ki			f the same name to be used for			
	A)	Tautonym		B)	Basionym			
	C)	Homonym		D)	Nomennudum			
39.	The po	ollen tube that enters th	ne ovule	by pie	reing the integuments is known as			
	A)	Porogamy		B)	Chalazogamy			
	C)	Mesogamy		D)	Syngamy			
40.	Endos	perm development is o	complete	ely abse	ent in			
	A)	Orchidaceae		B)	Podostemaceae			
	C)	Both in A&B		D)	None of the above			
41.	Mono	sporicembryosac with	eight nu	iclei is f	found in			
	A)	Adoxa		B)	Polygonum			
	C)	Allium		D)	Fritillaria			
42.	Indian	rubber plant is						
	A)	Ficuselastica		B)	Ficusaltissima			
	C)	Ficuscarica		D)	Ficuspalmate			
43.		n is obtained from						
	A)	The stigma		B)	The stamens			
	C)	The petals		D)	The seeds			
44.	_	s obtained from						
	A)	Oryza sativa		B)	Eleusinecoracana			
	C)	Panicummiliaceum		D)	Sorghum vulgare			
45.	Chlorofluorocarbons rise to the stratosphere and							
	A)	React directly with st	ratosph	eric ozo	one to destroy it.			
	B)				oxygen to create ozone.			
	C)	React with free radic						
	D)	After interacting with	ı UV en	ergy, be	ecome free radicals, which destroy			
		ozone.						
46.		ni" made by using eth	anobota					
	A)	Kani		B)	Kurumar			
	C)	Vellan		D)	Naikkan			

47.	Genera	ally the tribal people are non-	vegetar	ians except				
	A)	Todas	B)	Kora				
	C)	Paniyan	D)	Kurichiyar				
48.	The fil	bers of Flax and Hemp origina	ited from	m				
	A)	Xylem	B)	Pericycle				
	C)	Phloem	D)	Endodermis				
49.	During is take		piderm	is ruptured and the protective function				
	A)	Phellum	B)	Phellogen				
	C)	Periderm	D)	Phelloderm				
50.	In higl	her plants, parts get detached f	from mo	other plant by forming				
	A)	Callus	B)	Separation layer				
	C)	Protective layer	D)	Abscission zone				
51.	Calori	meters functions only in the v	isible li	ght of frequency ranging from				
	A)	400-700nm	B)	200-400nm				
	C)	700-800nm	D)	100-400nm				
52.	Which	of the following is not a natu	ral dye?	?				
	A)	Brazilin	B)	Hematoxylin				
	C)	Colchineal	D)	Aniline blue				
53.	Which of the following can be used to stain DNA?							
	i. Feul			etocarmineiv. Orcein				
	A)	i and ii only	B)	i and iii only				
	C)	i and iv only	D)	ii and iv only				
54.		tal evidence to discover DNA	structu	re wasprovided by				
	A)	Atomic Force Microscopy						
	B)	Spectrophotometry						
	C)	X-ray Diffraction						
	D)	Mass Spectrometry						
55.		the following are true for both						
	A)	The illuminating source is ar						
	B)	The microscope is focused u	_	<u>e</u>				
	C)	Can be used to view specime						
	D)	The specimen must be section	ned pri	or to viewing				

56.		in cells contain DNA sequence NA." What is your response to		match the sequences found in bacterial atement?					
	A)			ealthy human cells should contain no					
	B)		cause r	nitochondria contain bacterial DNA					
	C)		cause tl	here is no such thing as rDNA, only					
	D)	The statement is true, because 18S sequences	se the	16S sequences are part of the human					
57.	For tra	nsmission electron microscop	y, thin s	sections have to be prepared by					
	A)	Rotary microtome	B)	Sled microtome					
	C)	Cryomicrotome	D)	Ultramicrotome					
58.	Haema	atoxylin is obtained from the							
	A)	•	-	chianum of the family Fabaceae					
	B)	Leaf of Haematoxylumcampe		•					
	C)	•	-	chianum of the family Malvaceae					
	D)	Leaves of Haematoxylumcan	іреспіаі	num of the family Marvaceae					
59.	The fu	elgen nuclear reaction include	d the fo	llowing					
	A)	Reaction of deoxyribose with leucofuschin to give purple colour to DNA							
	B)			to give purple colour to DNA					
	C)		deoxyrı	boseglycosidic bond of DNA by acid					
	D)	hydrolysis. All of the above							
	D)	All of the above							
60.	In hum	nans, the Barr body is an							
	A)	Active X chromosome in fem							
	B)	Active X chromosome in mal							
	C)	Inactive Y chromosome in m Inactive X chromosome in fe							
	D)	mactive A chromosome in le	maies						
61.	Diseas	e(s) caused by perturbation of	protein	conformation					
	A)	Prion diseases only	B)	Alzheimer's disease only					
	C)	Both A&B	D)	None of these					
62.	The fo	llowing is not a carbohydrate.							
	A)	Starch	B)	Glycogen					
	C)	Inulin	D)	Prostaglandins					
63.	Kwash	iorkor disease is caused by de	ficianos	, of					
05.	A)	Starch	B)	Protein					
	C)	Fatty acids	D)	Minerals					
	,	J	,						

The a	1 21	ally con	isists of				
A)	3 codons	B)	6 codons				
C)	7 codons	D)	5 codons				
Trans	cription is specifically regulate	ed by re	egulatory proteins of unique motifs -				
A)	Helix-turn Helix	B)	Zinc finger				
C)	Leucine Zipper	D)	All the above				
Eco R A)	11 is the restriction enzyme the GGATCC CCTAGG	it recog	nizes the following DNA sequence				
B)	GAATTC CTTAAG						
C)	GCGC CGCG						
D)	TCGA AGCT						
Which	h of the following is a water so	oluble v	ritamin?				
	Vitamin A	B)	Vitamin B				
C)	Vitamin K	Ď)	Vitamin D				
Whicl	h of the following is not listed	as esse	ntial amino acid in humans?				
A)	Arginine	B)	Valine				
C)	Leucine	D)	Alanine				
In higher plant leaves, the reduction of nitrate to ammonium takes place by th combined action of nitrate reductase localized in cytosol and nitrite reductase localized in							
		B)	Mitochondria				
C)	Chloroplasts	D)	Cytosol				
The sy	welling of doors and windows	during	rainy season is due to				
		_	Absorption of water				
C)	Imbibition of water	D)	Diffusion of water				
reaction	ons of photosynthesis in highe	r plants	3?				
	- · ·	-					
		-					
		-					
D)	NADPH \rightarrow photosystem I –	→ photo	system II \rightarrow O ₂				
	A) C) Transa A) C) Eco R A) B) C) Which A) C) Which A) C) The st A) C) Which A) C) Which A) C) The st A) C) Which C) C)	A) 3 codons C) 7 codons Transcription is specifically regulate A) Helix-turn Helix C) Leucine Zipper Eco R1 is the restriction enzyme that A) GGATCC CCTAGG B) GAATTC CTTAAG C) GCGC CGCG D) TCGA AGCT Which of the following is a water so A) Vitamin A C) Vitamin K Which of the following is not listed A) Arginine C) Leucine In higher plant leaves, the reduction combined action of nitrate reductationalized in A) Peroxisomes C) Chloroplasts The swelling of doors and windows A) Adsorption of water C) Imbibition of water Which of the following represents the reactions of photosynthesis in higher A) H₂O → photosystem I → photosystem II → phot	 C) 7 codons D) Transcription is specifically regulated by really the polynomial of the following is a water soluble value of the following is not listed as essed as A arginine B arg				

	electro	-	mome molecul	e that actually accepts and release	
	A)	Carbon	B)	Iron	
	C)	Zinc	D)	Oxygen	
73.		h of the following respiration in plants?	statements a	are associated with the process of	of
	(P) Ph (Q) Pl (R) Pl (S) Gl	notorespiration takes p hotorespiration takes p hotorespiration takes p lycolate is oxidized to lycolate is oxidized to	place in only C4 place in both C3 glyoxylate in the	Plants. B and C4 plants. he peroxisome.	
	A) C)	(P) and (S) (Q) and (T)	B) D)	(R) and (S) (R) and (T)	
	,				
74.				isms exist in vascular plants?	
	A)	2 B)	3	C) 4 D) 1	
75.			•	ximum carbohydrate/unit land?	
	A)	Rice	B)	Wheat	
	C)	Potato	D)	Sugarcane	
76.		reatment that induces rerate or polar region is		d development in the plants of	
	A) 1	Vernalization	B)	Grating	
	C)	Scarification	D)	Soaking of seeds	
77.	Move	ment of pollen tube to	wards micropy	le of ovule depends on	
	A)	Thigmotropism	B) 13	Thermotropism	
	C)	Chemotropism	D)	Hydrotropism	
78.				are unique to the Calvin cycle?	1
	A)	Ribulosebisphospha sedoheptulose1, 7-bi	•	lase, phosphoribulokinase, ar	ıa
	B)	Ribose 5-phosphate			
	C)	Glyceraldehyde3-ph phosphoenolpyruvat		drogenase, phosphofructokinase, ar	ıd
	D)	1 1 12	•	cerol kinase, and serine synthetase	
			41	ween biomass and productivity of a	ın
79.	ecosys			s should have highest biomass turnover	er
79.	ecosys time?	stem. Which of the fo			er
79.	ecosystime?	stem. Which of the for	ollowing forests		er
79.	ecosys time?	stem. Which of the fo	ollowing forests		er

80.	A com A) C)	munity dominated by shrubs a Steppe Scrub	and bus B) D)	hes is called Prairie Pampas	
81.		ntion of individuals of a speci rtile and placed under same ta Ecads Endemic species		ng genetically fixed variations but are ic species is called Ecotypes Key stone species	e
82.	Which A) C)	among the following is not at Parathion Methyl parathion	n organo B) D)	ophosphates pesticide? Malathion DDT	
83.	Tecton A) C)	agrandis shed leaves during Winter Before flowering	B) D)	Summer After fruiting	
84.	Which A) B) C) D)	of the following represents a Grasshopper-Green plants-Fr Green plants - Grasshopper- Grasshopper-Green plants- S Green plants -Grasshopper- I	og-Sna -Frog-S nake- F	ke-Peacock Snake-Peacock Frog —Peacock	
85.	Match		Column		
		a. Strontium	(1) mi	namata	
		b. Mercury	(ii) ita	i–itai	
		c. lead	(iii) bo	one cancer	
		d. Cadmium	(iv) an	naemia	
	A)	a- iii, b-i, c-iv, d-ii	B)	a- ii, b-i, c-iv, d-iii	
	C)	a- i, b-ii, c-iii, d-iv	D)	a- iv, b-i c-iii, d-ii	
86.	The pe	eriod known as Age of Giant L	ycopod	ls	
	A)	Cretaceous	B)	Jurassic	
	C)	Triassic	D)	Carboniferous	
87.	Gondw A) B) C) D)	vana land consists of India, Africa, Australia, Sout South America &Antartica Africa, America &Antartica India & Australia	h Amer	rica &Antartica	

88.		n of the following best stionary origin of mitochondria Mitochondria, chloroplasts, a Genes for mitochondrial pyr nuclear DNA Mitochondrial and bacterial antibiotics The outer mitochondrial mer	? and proluvate d	karyot ehydro nal fui	es contain electrogenase subunits	on carrie are four	ers. nd in	the
89.	The or	rganism which requires priorit					l Data	a
		published by IUCN is			_			
	A)	Vulnerable	B)		ingered			
	C)	Rare	D)	Thre	atened			
90.	The fo	ollowing biofertilizer is not a r	itrogen	courc	Α.			
<i>9</i> 0.	A)	Rhizobium	B)	Azol				
	C)	Pseudomonas	D)		spirillum			
	C)	1 seddomonas	D)	AZU	spirinum			
91.	Biosp	here reserve in Madhya Prade	sh					
,	A)	Gulf of Mannar	B)	Sunc	larbans			
	C)	Nandadevi	D)		hmarhi			
	-,		-,					
92.	Diploi	id organisms in which one chr	omoson	ne of a	single pair is m	issing ar	e call	led
	A)	Trisomic	B)		isomic	Č		
	C)	Monosomic	D)	Tetra	asomic			
93.		rmal males possessing an extra						
	A)	Klinefelter Syndrome	B)		er Syndrome			
	C)	Down syndrome	D)	Pata	u Syndrome			
94.		n meiosis, an inversion in one member of a pair of homologous chromosomes will most likely lead to which of the following? A) Nondisjunction of the affected chromosome B) Chromosomes with duplications and deficiencies C) Increased recombination frequency in the inverted region						
95.		est unit in the cell wall is						
	A)	Fibril	B)		ofibril			
	C)	Micelle	D)	Cuti	n			
96.	The fo	ollowing crystalline DNA heli	v atmot	ire is 1	eft handed			
90.	A)	A- DNA	B)	B –I				
	,	Z -DNA		D –I				
	C)	L-DINA	D)	ח–ד	JINA			

97.		g meiosis, crossing	g over betwe				atids occurs	at
	A)	Leptotene		B)	Zygot			
	C)	Pachytene		D)	Diplo	tene		
98.		organism of genoty types can appear in	•		test cro	ssed, how	many differ	ent
	A)	4 B)		-5	C)	12	D)	16
99.	_	enotype Ab/aB pro en A and B is estir		each of	cross ov	ver type ga	metes. The	distance
	A)	8cM		B)	16cM			
	C)	4cM		D)	None	of the abo	ve	
100.	called		sed by addi				two nucleot	tides is
	A)	Silent Mutation		B)	Trans	ition version		
	C)	Frame shift		D)	Trans	version		
101.		roplast based DNA tification of plants. RAPD			lled RFLP			
	C)	AFLP		D)	DNA	barcoding	,	
102.		oose that in a sam l is dominant over 0.7 B	black wool.					
103.	intake must a	duals born with a of phenylalanine avoid foods rich in	or suffer d what?	levelopi	mental	problems.		
	A) C)	Proteins and lipid Proteins	ds	B) D)		nd oils e sugars		
104.		mRNA codon GU	C will be re) GUC	_	-			CTG
	A)	CAG B) doc		C)	UAC	D)	CIU
105.	The A)	radioisotope used to 32P B		tein diff	Terently C)	from nucl	eic acid is D)	¹⁵ N
106.		e are three kinds o ch of the following RNA I-rRNA, RI RNA I-rRNA, RI RNA I-tRNA, RI	g is the corre NA II –mRI NA II-tRNA RNAII-tRNA	ect mate NA, RN A, RNA A, RNA	ch? IA III-tl III-mR III-rRN	RNA NA IA	one class of	f RNA.

107.	The terminator codons are									
	A)	UAA, UAG, UGA	B)	UUU, UUC, UUG						
	C)	UUA, UGG, UGA	D)	UGC, UGG, UAG						
108.	A base change in DNA that would not affect the amino acid sequence in the protein is known as									
	A)	Missense mutation	B)	Nonsense mutation						
	C)		D)	Neutral mutation						
	Ο)	Shelit Watation	D)	1 Cata matation						
109.	Electrophoresis of histones and myoglobin under non-denaturing conditions (pH = 7.0) results in									
	A) Both proteins migrate to the anode									
	B)									
		C) Histones migrate to the cathode and myoglobin migrates to the anode								
	D) Both proteins migrate to the cathode									
110.	Formation of what type of chemical bond is catalyzed by DNA ligase									
	A)	Phosphoester	B)	Hydrogen						
	C)	Glycosidic	D)	Ester						
111.	The following crop is used in phytoremediation									
	A)	Mustard	B)	Wheat						
	C)	Rice	D)	Sugarcane						
112.	Freeze preservation of living plant cells involves the following steps									
	A)									
	B)	Freezing-storage- recultur	re –thawin	g						
	C)									
	D) Freezingreculture -storage-thawing									
113.	The cDNA library of the organism will be									
	A)	Tissue specific	B)	Growth specific						
	C)	Organ specific	D)	Cell specific						
114.	Drought tolerance in plants is strongly correlated with the accumulation of									
	aminoacid									
	A)	Serine	B)	Lysine						
	C)	Tryptophan	D)	Proline						
115.	If m	-	-	s tetraploid, the endosperm will be						
	A)	Haploid	B)	Pentaploid						
	C)	Triploid	D)	Tetraploid						

116.	The tool used for pairwise analysis of DNA sequences										
	A)	ClustalW		B)	PRO	BCONS					
	C)	MUSCLE		D)	BLA	ST					
117.	Which of the following public domain is/are open access data bases?										
	A)	NCBI		B)	ExP						
	C)	PDB		D)	All t	he above					
118.	Emasculation in coconut tree is done by										
	A)	A) Removing anthers from the male flowers									
	B)										
	C)	,									
	D)										
119.	scat	en light is intered light is reserved sof the served Radioimmu Immunopred	eleased fr cattered lig noassay	om the cell ght. This pr B)	s and cel inciple is Flow	ls can be used in cytometr	separated ba	_			
120.	The standard deviation of the data is 6. When each observation is increased by 1, the standard deviation of the new data is										
	A)	6	B)	8	C)	5	D)	7			
