Entrance Examination for Admission to the P.G. Courses in the Teaching Departments, 2024

CSS

BOTANY WITH SPECIALIZATION IN BIODIVERSITY CONSERVATION

General	Instru	ctions

- 1. The Question Paper is having 100 Objective Questions, each carrying one mark.
- 2. The answers are to be (✓) 'tick marked' **only** in the "**Response Sheet**" provided.
- 3. Negative marking: 0.25 marks will be deducted for each wrong answer.

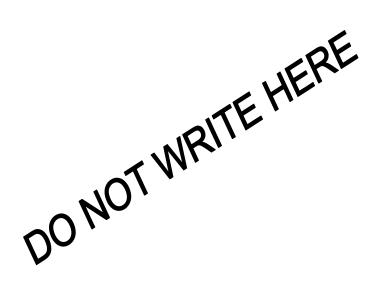
Time: 2 Hours Max. Marks: 100

To be filled	d in by the Can	ndidate				
Register	in Figures					
Number	in words					

Choose appropriate answer from the options in the questions.

 $(100 \times 1 = 100 \text{ marks})$

- 1. The mitochondrial electron transport chain carriers are located
 - A. in the inner mitochondrial membrane
 - B. in the mitochondrial matrix
 - C. in the inter-membrane space
 - D. on the inner surface of the outer mitochondrial membrane



- 2. The two Principle products of photosynthesis are:
 - A. Starch and Sucrose
 - B. Glycerol and Glycogen
 - C. Cellulose and Glycogen
 - D. Glycerol and Cellulose
- 3. Which of the following statements is true about the Krebs (citric acid) cycle and the Calvin (light independent) cycle?
 - A. They both result in a net production of ATP and NADH
 - B. They both result in a release of oxygen
 - C. They both are carried out by enzymes located within an organelle matrix
 - D. They both take place within the cytoplasmic matrix

4.	Am	ong the following, imino acid is		
	A.	Tryptophan	B.	Proline
	C.	Lysine	D.	Arginine
5.	In g	erminating seeds eta - oxidation of f	ree fa	atty acids take place in:
	A.	Oleosomes	B.	Glyoxysomes
	C.	Mitochondria	D.	Cytosol
6.	The	inhibitor for alternate oxidase		
	A.	Antimycin	B.	Oligomycin
	C.	SHAM	D.	Rotenone
7.	The	e donor of electron to PS II		
	A.	Tyrosine	B.	Phylloquinone
	C.	Plastoquinone	D.	Plastocyanin
8.		e process of ice crystal formation in	n inte	ercellular spaces and xylem vessels of
	A.	Solidification	B.	Crystallisation
	C.	Nucleation	D.	Dehydration
9.	In p	lants IAA causes cell elongation d	ue to	
	A.	increase in pH of apoplast	B.	increase in pH of cytoplasm
	C.	decrease in pH of apoplast	D.	decrease in pH of cytoplasm
10.		ne a mobile electron carrier in e akoid membrane.	electr	on transport process taking place ir
	A.	Ubiquinone	B.	Plastocyanin
	C.	Pheophytin	D.	Cytochrome oxidase

3 T - 2116

11. This is a blue light receptor				
	A.	Phytochrome	B.	Cytochrome
	C.	Cryptochrome	D.	Ferrochrome
12.	Wh	ere is the storage site of triacylglyc	erols	synthesized in plants?
	A.	Oleosomes	B.	Vacuoles
	C.	Mitochondria	D.	Chloroplast
13.	Pac	clobutrazol is an inhibitor of the syn	thesis	s of following hormone.
	A.	Cytokinin	B.	Auxin
	C.	GA	D.	Ethylene
14.		lichens that have both green a nobacteria are restricted to structur	_	and cyanobacterial symbionts, the alled:
	A.	Cephalodia	B.	Isidia
	C.	Soredia	D.	Soralia
15.	An	organism that uses glucose as a so	ource	of both energy and carbon is called:
	A.	Photoautotroph	B.	Photoheterotroph
	C.	Chemoautotroph	D.	Chemoheterotroph
16.	Whi	ich of the following vitamin is a pred	curso	or of coenzyme A?
	A.	Folic acid	B.	Riboflavin
	C.	Pantothenic acid	D.	Niacin
17.	Wh	at is the physiological function of st	atolit	hs?
	A.	Photoreception	B.	Signalling
	C.	Gravity sensing	D.	Senescence

18.		condition in which a single mutar mingly unrelated traits:	nt ge	ne affects two or more distinct and
	A.	Promoter mutation	B.	Epistasis
	C.	Phenotypic variance	D.	Pleiotropy
19.	Trai	nsport of proteins into mitochondria	a is th	rough:
	A.	F ₀ and F ₁ Complexes	B.	Tom and Tim Complexes
	C.	GERL Complexes	D.	Toc and Tic Complexes
20.	Ame	es test is a test for:		
	A.	Coliforms	B.	Carbohydrates
	C.	Mutagenicity	D.	Lipids
21.	Whi	ich of the following is an illegitimate	e nam	ne?
	A.	Superfluous name	B.	Later homonyms
	C.	Tautonyms	D.	All the above
22.	The	function of amphigastria is:		
	A.	Absorption of water	B.	Storage of water
	C.	Protection from microorganisms	D.	Protection from insects
23.	Cof	fee rust is caused by:		
	A.	Puccinia graminis	B.	Cephaleuros coffeae
	C.	Helminthosporium coffeae	D.	Hemileia vastatrix
24.		he chromosome number in the omosome number in the spores?	leaf	of Funaria is 20, what will be the
	A.	20	B.	40
	C.	10	D.	5

Jute	is obtained from:		
A.	Corchorus	B.	Cannabis
C.	Linum	D.	Crotalaria
The	precursor of Auxin synthesis		
A.	Leucine	B.	Isoleucine
C.	Tryptophan	D.	Glycine
A no	omen nudum is a name:		
A.	Without a type	B.	Without a figure
C.	Without a description	D.	Without an author's name
Whi	ch among the following is not a sci	entific	c literature database?
A.	PubMed	B.	ScienceDirect
C.	Scopus	D.	UniProt
Whi	ch of the following is a tautonym?		
A.	Malus malus	B.	Malus pumila
C.	Pyrus malus	D.	Malus domestica
A fu	ngus that exhibits alternation of ge	nerat	ion:
A.	Puccinia	B.	Neocallimastix
C.	Allomyces	D.	Agaricus
The	property of <i>Taq</i> polymerase that n	nakes	s it suitable for PCR:
A.	Low molecular weight	B.	Solubility in water
C.	Heat stability	D.	Easy availability
	A. C. The A. C. While A. C. While A. C. The A. C. The A.	C. Linum The precursor of Auxin synthesis A. Leucine C. Tryptophan A nomen nudum is a name: A. Without a type C. Without a description Which among the following is not a sci A. PubMed C. Scopus Which of the following is a tautonym? A. Malus malus C. Pyrus malus A fungus that exhibits alternation of ge A. Puccinia C. Allomyces The property of Taq polymerase that m A. Low molecular weight	A. Corchorus C. Linum D. The precursor of Auxin synthesis A. Leucine B. C. Tryptophan D. A nomen nudum is a name: A. Without a type B. C. Without a description D. Which among the following is not a scientific A. PubMed B. C. Scopus D. Which of the following is a tautonym? A. Malus malus B. C. Pyrus malus D. A fungus that exhibits alternation of general A. Puccinia B. C. Allomyces D. The property of Taq polymerase that makes A. Low molecular weight B.

32.	The	antenna complex found in photos	ynthe	tic bacteria are:
	A.	Chondrosome	B.	Chlorosome
	C.	Chromatosome	D.	Chromatophore
33.	In w	which of the following families does	pseu	do embryo sac is present?
	A.	Podostemaceae	B.	Amaranthaceae
	C.	Malvaceae	D.	Poaceae
34.	Sin	gle letter code of tryptophan		
	A.	W	B.	F
	C.	Υ	D.	Z
35.		ich one of the following terms des ss when two different inbred lines a		s the increase in the performance of a ossed?
	A.	Heterozygotic	B.	Heterosis
	C.	Heterogametic	D.	Homogametic
36.	Ball	loon like outgrowths seen in secon	dary :	xylem vessel is
	A.	Tyloses	B.	Tylosoid
	C.	Casparian thickening	D.	Periderm
37.		at is the difference between a cies?	threa	atened species and an endangered
	A.	A threatened species means	that	the population is likely to become

endangered; an endangered species has population numbers so low that it is likely to become extinct

B. A threatened species is already extinct; an endangered species means that the population numbers have increased greatly over the last 5 years

A threatened species means that the population is likely to become C. endangered; an endangered species is already extinct

D. A threatened species and an endangered species are the same thing

38.	Which among the following is not a nucleic acid database?			
	A.	EMBL	B.	GenBank
	C.	DDBJ	D.	SWISS-PROT
39.	Red	rust is caused by:		
	A.	Puccinia	B.	Cephaleuros
	C.	Batrachospermum	D.	Colletotrichum
40.	Whi	ich of the following is diploid in mos	ss pla	ant?
	A.	Spore	B.	Leaves
	C.	Spore mother cell	D.	Gametes
41.	Line	en is obtained from:		
	A.	Flax	B.	Hemp
	C.	Sisal	D.	Manila hemp
42.	A cı	ross in which the sexes of the pare	nts a	re the reverse of another cross:
	A.	Reciprocal cross	B.	Backcross
	C.	Test cross	D.	Dihybrid cross
43.	The	androecium of family Asteraceae	is	
	A.	Syngenesious	B.	Polyadelphous
	C.	Synandrous	D.	Monoadelphous
44.	The	term "Genetic load" refers to:		
	A.	The aggregate of deleterious general	enes	that are carried in the genome of a
	B.	Reduction in vigour and fertility in	plan	t species
	C.	Increased vigour and size of inter	- spe	cific hybrids
	D.	Increased homozygosity in the plant	ant p	rogeny

45.	. Heterocysts are cells specialised for:			
	A.	Photosynthesis	B.	Nitrogen fixation
	C.	Food storage	D.	Reproduction
46.	In p	rotoplast fusion which one of the fo	ollowi	ing compounds is used?
	A.	Sorbitol	B.	Polyethylene glycol
	C.	Dinitrophenol	D.	Mannitol
47.	Whi	ch one of the following is devoid o	f nuc	leus?
	A.	Sieve tube element	B.	Guard cell of stomata
	C.	Collenchyma cell	D.	Companion cell
48.	Gen	ne flow is a concept best used to do	escril	be an exchange between
	A.	Individuals	B.	Chromosomes
	C.	Species	D.	Populations
49.	Whi	ch one of the following genera sho	ws v	essels in xylem?
	A.	Cycas	B.	Pinus
	C.	Gnetum	D.	Araucaria
50.	Whi	ch one of the following is the first k	(now	n fossil vascular plant?
	A.	Cooksonia	B.	Zosterophyllum
	C.	Rhynia	D.	Wiliiamsonia
51.	BLA	ST is used:		
	A.	To find similarity between sequer	nces	
	B.	To align sequences		
	C.	To design primers		
	D.	To amplify DNA		

52.	2. The layer below the topmost layer in a thermally stratified lake is called					
	A.	Epilimnion	B.	Hypolimnion		
	C.	Littoral zone	D.	Profundal zone		
53.	The	most lethal ultra violet radiation is				
	A.	UV-A	B.	UV-B		
	C.	UV-C	D.	UV-D		
54.	The	free energy of a dissolved solute				
	A.	increases with solute concentration	on			
	B.	decreases with solute concentrat	ion			
	C.	is independent of solute concentr	ation			
	D.	depends only on temperature				
55.	intra with	acellular compartment or actively p	pump	artmentalize cytotoxic ions into the them out of the cell to the apoplasts proteins. Among these, the Na+-H+		
	1.	plasma membrane				
	2.	chloroplast (inner envelope)				
	3.	mitochondria (outer membrane)				
	4.	tonoplast				
	A.	1 & 2 is correct	B.	1 & 3 is correct		
	C.	1 & 4 is correct	D.	2 & 4 is correct		
56.		1 & 4 is correct owing is not a photoreceptor in pla		2 & 4 is correct		
56.				2 & 4 is correct Phytochrome		

57.		coincide to avoid self-pollination								
	A.	Dichogamy	B.	Monogamy						
	C.	Herkogamy	D.	Polygamy						
58.	The	e first step in glycogen breakdown r	eleas	ses glucose units as						
	A.	Glucose 6 phosphate	B.	Glucose 1 phosphate						
	C.	Glucose	D.	Glucose 2 phosphate						
59.		smids coding genes for metabolis	sm o	f complex hydrocarbons as found in						
	A.	Col plasmids	B.	F plasmids						
	C.	Degradative plasmids	D.	M plasmids						
60.	Wh	ich of the flowing is involved in lipid	l bios	synthesis?						
	A.	Rough endoplasmic reticulum	B.	Smooth endoplasmic reticulum						
	C.	Lysosomes	D.	Both (B) and (C)						
61.	Ray	/ florets is Asteraceae consists of								
	A.	Bisexual zygomorphic, hypogynous flowers whose sepals are modified into pappus								
	B.	Unisexual female or neuter, zygomorphic, epigynous flowers whose sepals are modified into pappus								
	C.	Bisexual, actinomorphic, epigynous flowers whose sepals are modified into pappus								
	D.	Unisexual female or neuter, ac sepals are not modified	ctinor	morphic, hypogynous flowers whose						

62.	Which one of the following Event indicates the establishment of seed habit in Pteridophytes?											
	A.	Germination and development of microspores within megasporangium										
	B.	Development of two types of spores in the same sporangium										
	C.	Germination of megaspore, fertilization and development of embryo to some extent within megasporangium										
	D.	Germination and development of microspores within microsporangium										
63.	Whi	ich one of the following pairs is not correctly matched?										
	A.	Interferon- an enzyme that interfere with DNA replication										
	B.	Cosmid - a vector for carrying large DNA fragments into host cells										
	C.	Anticodon- site of t-RNA molecule hydrogen bond that binds to m-RNA molecule										
	D.	Plasmid - small piece of extra-chromosomal DNA in bacteria										
64.		c up a site-specific nuclease involved in T-DNA transfer during Agrobacterium refaciens mediated genetic transformation:										
	A.	VirE2 B. VirD1										
	C.	VirA D. VirG										
65.	In C3 and C4 plants, primary carboxylation takes place with the help of											
	A.	PEP carboxylase and pyruvate carboxylase										
	B.	RuBP carboxylase and PEP carboxylase										
	C.	PEP carboxylase and RuBP carboxylase										
	D.	RuBP carboxylase and pyruvate carboxylase										
66.		oxisomes are involved in which type reactions pertaining to plant tosynthesis										

Calvin Cycle

Glyoxylate cycle

A.

C.

Bacterial photosynthesis

Glycolytic cycle

B.

D.

- 67. The fundamental feature of Kranz Anatomy of C4 plants is
 - A. Presence of typical granal chloroplasts in bundle sheath cells and rudimentary chloroplasts in mesophyll cells
 - B. Presence of rudimentary chloroplasts in bundle sheath cells and typical granal chloroplasts in mesophyll cells
 - C. Presence of chloroplasts in epidermal and mesophyll cells
 - D. Presence of chloroplasts in bundle sheath cells
- 68. The statement which is incorrect with respect to enzyme action is
 - A. Addition of lot of Succinate does not reverse the inhibition of succinic dehydrogenase by malonate
 - B. The substrate binds with enzyme as its active site
 - C. A non-competitive inhibitor binds the enzyme at a site distinct from that which binds the substrate
 - D. Malonate is a competitive inhibitor of succinic dehydrogenase
- 69. A phosphoglyceride is always composed of
 - A. Only an unsaturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached
 - B. Only a saturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached
 - C. An unsaturated or saturated fatty acid esterified to a phosphate molecule to which a glycerol molecule is also attached
 - D. An unsaturated or saturated fatty acid esterified to a glycerol molecule to which a phosphate group is also attached
- 70. When *Datura* plants have been regenerated from anther culture, endosperm culture and embryo culture under in vitro conditions, their respective ploidy levels will be:

A. 2n, 3n and 2n

B. 2n, 2n and 2n

C. n, 2n and 2n

D. n, 3n and 2n

71.	1. Which of the following is not a post translational modification?								
	A.	Proteolysis	B.	Protein folding					
	C.	Glycosylation	D.	Lipid addition					
72.	The	introns in mRNA are removed as							
	A.	Lariat structure	B.	Circular structure					
	C.	Linear structure	D.	Stem loop structure					
73.		The kind of association where both the population are benefitted, but not essential for the survival of either population is referred to as:							
	A.	Protocooperation	B.	Competition					
	C.	Amensalism	D.	Exploitation					
74.		ch of the following statements wate is correct?	abo	ut the oxidative decarboxylation of					
	A.	. The oxidative decarboxylation of pyruvate forms acetyl-CoA which is fed into the citric acid cycle							
	B.	The oxidative decarboxylation of place decrease of free energy in the real		vate is reversible since there is a large					
	C.	The oxidative decarboxylation occurs in the cytosol	of py	ruvate formed in aerobic glycolysis					
	D.	The oxidative decarboxylation of pyruvate Decarboxylase	of py	ruvate is catalysed by the enzyme					
75.		3' prime end of the t-RNA molecustation, always ends in base seque		at picks up specific amino acid during					
	A.	CGA	B.	GCA					
	C.	CCA	D.	ACC					

76. Which of the following statement is not correct?										
	1.	. Phytochrome mediated photo responses are reversible								
	2. Some of Phytochrome mediated photo responses are irreversible									
	3.	3. Phytochrome mediated photo responses are irreversible								
	A.	1 only	B.	1 and 3						
	C.	2 only	D.	None of the above						
77. Which of the following are non- climacteric fruits?										
	A.	Apple, avocado and banana	B.	Fig, mango and melon						
	C.	Pear, plum and tomato	D.	Oranges, grapes and pineapple						
78.	The	oxidation of the aldehyde group in	gluc	ose produces,						
	A.	Gluconic acid	B.	Glucuronic acid						
	C.	Glucaric acid	D.	Glucalic acid						
79.		exploration of which technolog tributor to the discovery of DNA str		nade Rosalind Fraklin as a crucial re?						
	A.	X-ray diffraction	B.	FISH						
	C.	Fluorescence microscopy	D.	HNMR spectroscopy						
80.	The	parasitic algae <i>Cephaleuros</i> is bel	long 1	to,						
	A.	Ulvophyceae	B.	Charophyceaes						
	C.	Zygnematophyceae	D.	Bangiophyceae						
81.	Cau	ısal organism of brown leaf spot of	rice							
	A.	A. Helminthosporium oryzae								
	B.	Sarocladium oryzae								
	C.	Pyricularia grisea (P. oryzae)								
	D.	Rhizoctonia solani								

82. Rice variety IR-8 was developed in:										
	A.	India	B.	China						
	C.	Philippines	D.	Malaysia						
83.	Which of the following statements regarding photosynthesis are correct?									
	1.	Photosystem I is activated by ligh	t ind	ependently from photosystem II						
	2.	Plastocyanin reduces photo oxidi	sed F	P700 in PSI						
	3.	Plastocyanin reduces photo oxidi	sed F	P680 in PSI						
	4.	Electrons ejected from P700 in photosystem I are replaced with electrons from water								
	Whi	Which of the following combination is correct?								
	A.	1, 2 and 4	B.	2, 3 and 4						
	C.	1, 2 and 3	D.	3 and 4						
84.	In an enzyme catalysed reaction, a non-competitive inhibitor cause									
	A.	Decrease of Vmax								
	B.	Decrease of both Km and Vmax								
	C.	Increase of Km								
	D.	Decrease of Km and increase of Vmax								
85.	Pick out the correct statements.									
	1.	Ethylene is especially useful in er	hand	cing seed germination						
	2.	Cytokinin receptor is located in ER membrane								
	3.	Quercetin is the natural inhibitor of	of AB	A.						
	4.	GA controls flowering by mimicking	ng ve	rnalization.						
	A.	2, 3 and 4	B.	1, 3 and 4						
	C.	2 and 4	D.	3 and 4						

16

T - 2116

86. Which	of the following statements are correct?
-----------	--

1. Gynobasic style is seen in Ocimum

2. Hypanthodium is a special type of inflorescence found in Euphorbia species

3. Mesocarp is the edible part in apple

4. Phyllode is a stem modification

A. 1 and 4

B. 1, 2 and 4

C. 2 and 4

D. 1 only

87. Which one of the following is the correct order of electron transport during light reaction in the thylakoid membrane of chloroplast?

A. P680 \rightarrow Cytochrome $b6f \rightarrow PC \rightarrow PQ$

B. $P680 \rightarrow PC \rightarrow Cytochrome b6f \rightarrow PQ$

C. $P680 \rightarrow PQ \rightarrow PC \rightarrow Cytochrome b6f$

D. $P680 \rightarrow PQ \rightarrow Cytochrome b6f \rightarrow PC$

88. Intron homing is:

A. Removal of introns from the exon sequences

B. Splicing of introns in the hnRNA

C. Deletion of introns from a homologous site

D. Insertion of intron to an intron-less site

89. Carrying capacity (K):

A. Remains constant in all environments

B. Differs among species, but does not vary within a given species

C. Is often determined by resource limitation

D. Is always eventually reached in any population

90.	Agr	Agrobacterium based gene transfer is efficient,								
	A.	Only with monocots								
	B.	Only with dicots								
	C.	With both monocots and dicots								
	D.	With majority monocots and few o	dicots	3						
91.	Silio	Silicula fruits are common in the family								
	A.	Apiaceae	B.	Annonaceae						
	C.	Anacardiaceae	D.	Brassicaceae						
92.	An enzyme that catalyses the transfer of phosphate groups from high-energy, phosphate-donating molecules to specific substrates.									
	A.	Kinase	B.	Phosphatase						
	C.	Peptidase	D.	Peptidyl transferase						
93.	The	e final seral stage of succession is o	lima	x community, it is						
	A.	Is self-sustaining								
	B.	Show growth proceeding in a pre-	dicta	ble pattern						
	C.	Is never changing								
	D.	Is not likely to be disturbed by loc	alize	d climatic change						
94.	Plant with white squash (WWYY) is crossed with plat with green squash (wwyy). On testing F1 and F2 progenies were obtained in the following ratio									
	12 white: 3 yellow: 1 green									
	Wh	Which of the following statement is correct?								
	A.	Duplicate dominant epistasis; W i	s epi	static gene						
	B.	Dominant epistasis; W is epistatic gene								
	C.	Duplicate dominant epistasis; Y is	epis	static gene						
	D.	Dominant epistasis; Y is epistatic gene								
		1	8	T – 2116						

- 95. One dimensional Polyacrylamide gel electrophoresis in the absence of SDS (native gel electrophoresis) resolves proteins based on their mass and
 - A. Charge
 - B. Hydrodynamic volume
 - C. Secondary structure
 - D. Hydrophobicity
- 96. Why do glycolipids exist almost exclusively on the exterior side, but not the cytoplasmic side of the cell membrane?
 - A. The inner layer of the membrane is not thick enough to accommodate carbohydrates
 - B. Carbohydrates are added only to lipids on the lumen side of the ER and golgi membranes
 - C. Flippases move the glycolipids to this side of the membrane
 - D. Carbohydrates are removed from the cytoplasmic side by glycosylase enzymes
- 97. Which of the following statement are correct?
 - i. Down's syndrome/mongolism is due to extra 21st chromosome
 - ii. Down's syndrome is due to non-disjunction of chromosomes
 - iii. Trisomy has chromosome complement of 2n+1
 - iv. Monosomics are 2n-1
 - A. i and ii
 - B. iii and iv
 - C. i, ii and iii
 - D. i, ii, iii and iv

			following	are	the	cha	aracteris	tics	of	type	II	restri	ction
i.	Nature of the enzyme: bifunctional enzyme with both endonuclease and methylase activity												
ii.	protein structure: Two identical subunits												
iii.	restriction requirement: ATP, Mg ²⁺												
iv.	cleavage sites: At or near restriction site												
A.	i and ii					B.	ii and iv	/					
C.	i and iv	1				D.	iii and i	V					
Which of these statements stands true with respect to ethylene													
i.	amino acid lysine is the precursor of ethylene												
ii.	amino oxy acetic acid and cobalt ion block the biosynthetic pathway of ethylene												
iii.	stimulates leaf and fruit abscission												
iv.	binds with membrane bound receptors												
V.	trans-cyclooctene acts as inhibitor of ethylene action because they block ethylene binding to its receptor												
A.	iii, iv and v					B.	i, ii, iii and v						
C.	i, ii, iii a	and iv				D.	ii, iii, iv	and v	′				
Whi	ch of the	e follo	wing stater	ment i	dentifi	ies t	he term	biolo	gica	l magı	nifica	ation?	
A.	Greenh	nouse	effect will	have	greate	er im	pact on	tropic	cal c	ountri	es		
B.	Toxins	beco	me concen	trated	l in su	cces	ssive tro	phic l	eve	ls of fo	od v	webs	
C.	Energy	is los	st at each le	evel ir	n a foc	od cl	nain						
D.	Primary producers are at the bottom of the food chain												
	endo i. ii. iii. iv. A. C. Which ii. v. A. C. Which A. C. C.	i. Nature methyl. ii. protein iii. restrict iv. cleavag A. i and ii C. i and iv Which of the i. amino ii. amino ethyler iii. stimula iv. binds v v. trans-c ethyler A. iii, iv ar C. i, ii, iii a Which of the A. Green B. Toxins C. Energy	ii. protein struction restriction restriction restriction resiv. cleavage site A. i and ii C. i and iv Which of these struction ii. amino acid liii. amino acid liii. amino acid liii. amino acid liii. stimulates lesiv. binds with mov. trans-cycloo ethylene bin A. iii, iv and v C. i, ii, iii and iv Which of the folloouse B. Toxins become	endonucleases? i. Nature of the enzyme methylase activity ii. protein structure: Two i iii. restriction requirement: iv. cleavage sites: At or net. A. i and ii C. i and iv Which of these statements ii. amino acid lysine is the iii. amino oxy acetic acid ethylene iii. stimulates leaf and fruit iv. binds with membrane binding to its restriction. A. iii, iv and v C. i, ii, iii and iv Which of the following states. A. Greenhouse effect will B. Toxins become concent. C. Energy is lost at each leaf and following is lost at each leaf and following is the iii.	endonucleases? i. Nature of the enzyme: bifumethylase activity ii. protein structure: Two identicitii. restriction requirement: ATP, iv. cleavage sites: At or near rest. A. i and ii C. i and iv Which of these statements stands i. amino acid lysine is the prectii. amino oxy acetic acid and ethylene iii. stimulates leaf and fruit absc. iv. binds with membrane bound v. trans-cyclooctene acts as ir ethylene binding to its recept. A. iii, iv and v. C. i, ii, iii and iv Which of the following statement in A. Greenhouse effect will have a B. Toxins become concentrated. C. Energy is lost at each level in	endonucleases? i. Nature of the enzyme: bifunction methylase activity ii. protein structure: Two identical subiii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction A. i and ii C. i and iv Which of these statements stands true ii. amino acid lysine is the precursor of iii. amino oxy acetic acid and cobal ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptive. trans-cyclooctene acts as inhibitod ethylene binding to its receptor A. iii, iv and v C. i, ii, iii and iv Which of the following statement identification. Greenhouse effect will have greated in successions. Toxins become concentrated in successions.	endonucleases? i. Nature of the enzyme: bifunctional emethylase activity ii. protein structure: Two identical subunit iii. restriction requirement: ATP, Mg ²⁺ iv. cleavage sites: At or near restriction sit A. i and ii B. C. i and iv D. Which of these statements stands true with i. amino acid lysine is the precursor of et ii. amino oxy acetic acid and cobalt io ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene binding to its receptor A. iii, iv and v B. C. i, ii, iii and iv D. Which of the following statement identifies the A. Greenhouse effect will have greater im B. Toxins become concentrated in success C. Energy is lost at each level in a food chem.	endonucleases? i. Nature of the enzyme: bifunctional enzyme methylase activity ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and ii C. i and iv D. iii and i Which of these statements stands true with respect i. amino acid lysine is the precursor of ethylene ii. amino oxy acetic acid and cobalt ion block ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene ethylene binding to its receptor A. iii, iv and v B. i, ii, iii and c. i, ii, iii and iv D. ii, iii, iv Which of the following statement identifies the term A. Greenhouse effect will have greater impact on B. Toxins become concentrated in successive tro C. Energy is lost at each level in a food chain	endonucleases? i. Nature of the enzyme: bifunctional enzyme with methylase activity ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and iv C. i and iv D. iii and iv Which of these statements stands true with respect to eth i. amino acid lysine is the precursor of ethylene ii. amino oxy acetic acid and cobalt ion block the ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene act ethylene binding to its receptor A. iii, iv and v C. i, ii, iii and iv D. ii, iii, iii and v Which of the following statement identifies the term biolog A. Greenhouse effect will have greater impact on tropic in the complete in a food chain	endonucleases? i. Nature of the enzyme: bifunctional enzyme with both methylase activity ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and iv C. i and iv D. iii and iv Which of these statements stands true with respect to ethyle i. amino acid lysine is the precursor of ethylene ii. amino oxy acetic acid and cobalt ion block the biosethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene action ethylene binding to its receptor A. iii, iv and v B. i, ii, iii and v C. i, ii, iii and iv D. ii, iii, iv and v Which of the following statement identifies the term biological A. Greenhouse effect will have greater impact on tropical of B. Toxins become concentrated in successive trophic level C. Energy is lost at each level in a food chain	endonucleases? i. Nature of the enzyme: bifunctional enzyme with both endomethylase activity ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and iv C. i and iv D. iii and iv Which of these statements stands true with respect to ethylene i. amino acid lysine is the precursor of ethylene ii. amino oxy acetic acid and cobalt ion block the biosynthete ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene action because thylene binding to its receptor A. iii, iv and v B. i, ii, iii and v C. i, ii, iii and iv D. ii, iii, iv and v Which of the following statement identifies the term biological magna. Greenhouse effect will have greater impact on tropical countries. Toxins become concentrated in successive trophic levels of forms.	endonucleases? i. Nature of the enzyme: bifunctional enzyme with both endonucleases? ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and iv C. i and iv D. iii and iv Which of these statements stands true with respect to ethylene ii. amino acid lysine is the precursor of ethylene iii. amino oxy acetic acid and cobalt ion block the biosynthetic pethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene action because ethylene binding to its receptor A. iii, iv and v B. i, ii, iii and v C. i, ii, iii and iv D. ii, iii, iv and v Which of the following statement identifies the term biological magnificate. A. Greenhouse effect will have greater impact on tropical countries B. Toxins become concentrated in successive trophic levels of food of the countries of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in successive trophic levels of food of the concentrated in a food chain	endonucleases? i. Nature of the enzyme: bifunctional enzyme with both endonuclease methylase activity ii. protein structure: Two identical subunits iii. restriction requirement: ATP, Mg²+ iv. cleavage sites: At or near restriction site A. i and ii B. ii and iv C. i and iv D. iii and iv Which of these statements stands true with respect to ethylene i. amino acid lysine is the precursor of ethylene ii. amino oxy acetic acid and cobalt ion block the biosynthetic pathway ethylene iii. stimulates leaf and fruit abscission iv. binds with membrane bound receptors v. trans-cyclooctene acts as inhibitor of ethylene action because they leathylene binding to its receptor A. iii, iv and v B. i, ii, iii and v C. i, ii, iii and iv D. ii, iii, iv and v Which of the following statement identifies the term biological magnification? A. Greenhouse effect will have greater impact on tropical countries B. Toxins become concentrated in successive trophic levels of food webs C. Energy is lost at each level in a food chain

ANSWER SHEET

1 A B C	D E 26	6 A B C D E	51 A B C D E	76 A B C D E
2 A B C	D E 27	7 A B C D E	52 A B C D E	77 A B C D E
3 A B C	D E 28	8 A B C D E	53 A B C D E	78 A B C D E
4 A B C	D E 29	9 A B C D E	54 A B C D E	79 A B C D E
5 A B C	D E 30	OABCDE	55 A B C D E	80 A B C D E
6 A B C	D E 3	1 A B C D E	56 A B C D E	81 A B C D E
7 A B C	D E 32	2 A B C D E	57 A B C D E	82 A B C D E
8 A B C	D E 33	3 A B C D E	58 A B C D E	83 A B C D E
9 A B C	D E 34	4 A B C D E	59 A B C D E	84 A B C D E
10 A B C	D E 35	5 A B C D E	60 A B C D E	85 A B C D E
11 A B C	D E 36	6 A B C D E	61 A B C D E	86 A B C D E
12 A B C	D E 37	7 A B C D E	62 A B C D E	87 A B C D E
13 A B C	D E 38	BABCDE	63 A B C D E	88 A B C D E
14 A B C	D E 39	A B C D E	64 A B C D E	89 A B C D E
15 A B C	D E 40	DABCDE	65 A B C D E	90 A B C D E
16 A B C	D E 4	1 A B C D E	66 A B C D E	91 A B C D E
17 A B C	D E 42	2 A B C D E	67 A B C D E	92 A B C D E
18 A B C	D E 43	A B C D E	68 A B C D E	93 A B C D E
19 A B C	D E 44	4 A B C D E	69 A B C D E	94 A B C D E
20 A B C	D E 45	5 A B C D E	70 A B C D E	95 A B C D E
21 A B C	D E 46	6 A B C D E	71 A B C D E	96 A B C D E
22 A B C	D E 47	7 A B C D E	72 A B C D E	97 A B C D E
23 A B C	D E 48	8 A B C D E	73 A B C D E	98 A B C D E
24 A B C	D E 49	9 A B C D E	74 A B C D E	99 A B C D E
25 A B C	D E 50	OABCDE	75 A B C D E	100 A B C D E

ROUGH WORK

ROUGH WORK

ROUGH WORK