FINAL ANSWER KEY

		Exam:	Scientific Assistant (Biology) NCA- SC)
		Date of Test	02-03-2021
		Department	Kerala Police Service Forensic Science Laboratory
		Alphacode	A
Que	estion1:-Venous heart is	s the characteristic feature of	of
	A:-Sphenodon		
	B:-Salamander		
	C:-Mullet		
	D:-Pigeon		
	Correct Answer:- Opti	on-C	
Que	estion2:-Choose the org	ganisms showing 'neoteny'	
	A:-Oikopleura, Ambys	stoma	
	B:-Doliolum, Uraeotyp	ohlus	
	C:-Ascidia, Latimeria		
	D:-Necturus, Myxine		
	Correct Answer:- Opti	on-A	
Que	estion3:-'Ammocoetes'	is the larva of	
	A:-Protopterus		
	B:-Petromyzon		
	C:-Chimaera		
	D:-Latimeria		
	Correct Answer:- Opti	on-B	
Que	estion4:-The left-handed	d, Zig-Zag double helix DNA	, with only minor grooves is
	A:-B-DNA		
	B:-A-DNA		
	C:-Z-DNA		
	D:-Both A-DNA and B-	-DNA	
	Correct Answer:- Opti	on-C	
Que	estion5:-'Hybridoma' is	a hybrid cell produced by th	ne fusion of and
	A:-T-lymphocyte and	Macrophage	
	B:-B-lymphocyte and	Myeloma cell	
	C:-Neutrophil and Tun	nour Cell	
	D:-Cytotoxic T-cell an	d Myeloma cell	
	Correct Answer:- Opti		
Que		form encephalopathi' is cau	sed by
	A:-Rickettsia		
	B:-Mycoplasma		
	C:-Prions		
	D:-Retrovirus		
	Correct Answer:- Opti		
Que		o-organism used in the bior	emediation of oil-spill.
	A:-Pseudomonas puti		
	B:-Bordetella pertusis		
	C:-Vibrio parahaemol		
	D:-Sterptococcus pyo	genes	
	Correct Answer:- Opti	on-A	

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Question Paper Code:

Category Code:

A:-Pertusis vaccine
B:-Salk polio vaccine
C:-Tetanus toxoid vaccine
D:-Measles vaccine
Correct Answer:- Option-D
Question9:-Cephalosporin controls bacterial growth by inhibiting synthesis.
A:-DNA
B:-Cell wall
C:-Plasma membrane
D:-Capsule
Correct Answer:- Option-B
Question10:-Name the antibody which can pass through the placenta.
A:-IgA
B:-lgG
C:-lgD
D:-lgE
Correct Answer:- Option-B
Question11:-Which among the following is NOT a transfection method?
A:-Lipofection
B:-Shotgun method
C:-Colony hybridization
D:-Shotgun method
Correct Answer:- Option-C
Question12:-Degeneration of genetic code is attributed to the
A:-First member of codon
B:-Second member of codon
C:-Entire codon
D:-Third member of codon
Correct Answer:- Option-D
Question13:-In split genes, the coding sequences are called
A:-Introns
B:-Operons
C:-Exons
D:-Cistrons
Correct Answer:- Option-C
Question14:-Genes which confer antibiotic resistance on bacteria are located on
A:-Chromosomal DNA
B:-Plasmid
C:-RNA
D:-Polysome
Correct Answer:- Option-B
Question15:-Which among the following is NOT a fibrillar protein ?
A:-Elastin
B:-Collagen
C:-Myosin
D:-Albumin
Correct Answer:- Option-D
Question16:-Albinism is a congenital human disorder resulting from the lack of the enzyme
A:-Catalase

 $\label{thm:question:substitute} \mbox{Question:8:-Which among the following is an attenuated vaccine:?}$

B:-Fructokinase	
C:-Tyrosinase	
D:-Xanthine oxidase	
Correct Answer:- Option-C	
Question17:-The starting t-RNA of prokaryotes is loaded with	
A:-Valine	
B:-Methionine	
C:-Formylated Methionine	
D:-Tryptophan	
Correct Answer:- Option-C	
Question18:-"Gene-battery model" of gene regulation in eukaryotes is proposed by	
A:-Jacob and Monod	
B:-Britten and Davidson	
C:-Beadle and Tatum	
D:-Komberg and Ochoa	
Correct Answer:- Option-B	
Question19:-The enzyme that removes the RNA-primer after DNA replication is	
A:-DNA polymerase-I	
B:-DNA polymerase-II	
C:-Ligase	
D:-Gyrase	
Correct Answer:- Option-A	
Question20:-DNA replication occurs in	
A:- G_1 phase	
B:- G_2 phase	
C:-S-phase	
D:-Interphase	
Correct Answer:- Option-C	
Question21:-A nucleosome is made of	
A:-DNA	
B:-Histone	
C:-Histone wrapped over octameric core of nucleic acid	
D:-DNA wrapped over octameric core of histone	
Correct Answer:- Option-D	
Question22:-Which among the following is NOT a continental Island ?	
A:-New Guinea	
B:-Mauritius	
C:-Madagascar	
D:-Tasmania	
Correct Answer:- Option-B	
Question23:-The active secretion of some substances from blood to urinary tubule is known as	
A:-Urine concentration	
B:-Tubular re-absorption	
C:-Ultrafiltration	
D:-Augmentation	
Correct Answer:- Option-D	
Question24:-The light and dark bands (stripes) of muscle fibres are called and respectively.	
A:-Anisotropic bands and Isotropic bands	
B:-Isotropic bands and Anisotropic bands	

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C:-Hensen's band and M-band
    D:-Hensen's band and Z-band
    Correct Answer:- Option-B
Question25:-The jumping of nerve impulses from one node to the next in medullated nerve fibre is called
    A:-Synaptic transmission
    B:-Inhibitory transmission
    C:-Saltatory transmission
    D:-Synaptic delay
    Correct Answer:- Option-C
Question26:-Which among the following is NOT a hypothalamic hormone?
    A:-Oxytocin
    B:-ACTH
    C:-Vasopressin
    D:-TTRH
    Correct Answer:- Option-B
Question27:-The hormones secreted by thymus gland
    A:-Thymosin and Thymopoietin
    B:-Thymin-I and Thymin-II
    C:-HTH and THF
    D:-All the above
    Correct Answer:- Option-D
Question28:-Crossing-over and genetic recombination between adjoining non-sister chromatids occur during
    A:-Pachytene stage of first meiotic prophase
    B:-Zygotene stage of first meiotic prophase
    C:-Leptotene stage of first meiotic prophase
    D:-Diplotene stage of first meiotic prophase
    Correct Answer:- Option-A
Question29:-Edward's syndrome is the result of
    A:-Trisomy-13
    B:-Trisomy-18
    C:-Trisomy-21
    D:-Deletion of {\bf 4}^{th} or {\bf 5}^{th} chromosome
    Correct Answer:- Option-B
Question30:-The RNAs present in 80S Eukaryotes chromosomes
    A:-23S rRNA, 5S rRNA and 16S rRNA
    B:-28S rRNA, 5S rRNA, 5.8S rRNA and 18S rRNA
    C:-28S rRNA, 5S rRNA and 16S rRNA
    D:-23S rRNA, 5S rRNA and 18S rRNA
    Correct Answer:- Option-B
Question31:-Which among the following is known as "Portuguese -man-of war" ?
    A:-Halistemma
    B:-Physalia
    C:-Velella
    D:-Aurelia
    Correct Answer:- Option-B
Question32:-Phylum 'ctenophora' is known as
    A:-Comb-jellies
    B:-Barrel-Jelly fish
    C:-Moon-Jelly
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	D:-Swimming Bells
	Correct Answer:- Option-A
Ques	stion33:-'Widal test' is used for the diagnosis of
	A:-Tuberculosis
	B:-Typhoid fever
	C:-AIDS
	D:-Swine flue
	Correct Answer:- Option-B
Que	stion34:-"Itai-Itai disease" is caused by
	A:-Mercury poisoning
	B:-Arsenic poisoning
	C:-Cadmium poisoning
	D:-Lead poisoning
	Correct Answer:- Option-C
Ques	stion35:-The formation of new species from ancestral species as a result of the geographical isolation of fragmentation of the breeding population is called
	A:-Peripatric speciation
	B:-Sympatric speciation
	C:-Artificial speciation
	D:-Allopatric speciation
	Correct Answer:- Option-D
Ques	stion36:-The selfless behaviour of an animal for the benefit of its conspecific kins is known as
	A:-Promiscuity
	B:-Altruism
	C:-Co-operation
	D:-Cohesion
	Correct Answer:- Option-B
Que	stion37:-Name two 'Ramsar Sites' in Kerala.
Ques	stion37:-Name two 'Ramsar Sites' in Kerala. A:-Vembanad lake and Ashtamudi lake
Ques	
Ques	A:-Vembanad lake and Ashtamudi lake
Ques	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake
Ques	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries
	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries D:-Kadalundi community reserve and Mangalavanam
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Ques	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries D:-Kadalundi community reserve and Mangalavanam Correct Answer:-Question Cancelled stion38:-The type of isomerism shown by Fumaric acid and Maleic acid are A:-Geometrical isomerism with maleic acid (trans-form) and Fumaric acid (cis-form) B:-Geometrical isomerism with maleic acid (cis form) and Fumaric acid (trans-form) C:-Optical isomerism with maleic acid (L-form) and Fumaric acid (D-form) D:-Optical isomerism with maleic acid (D-form) and Fumaric acid (L-form) Correct Answer:- Option-A stion39:-The protein structure involving the interaction, orientation and organization of two or more polypeptide chains to form a functional proteins A:-Primary structure B:-Secondary structure C:-Tertiary structure
Que:	A: Vembanad lake and Ashtamudi lake B: Vembanad lake and Sasthamkota lake C: Thattekkadu and Kumarakom bird Sanctuaries D: Kadalundi community reserve and Mangalavanam Correct Answer: -Question Cancelled stion 38: The type of isomerism shown by Fumaric acid and Maleic acid are A: -Geometrical isomerism with maleic acid (trans-form) and Fumaric acid (cis-form) B: -Geometrical isomerism with maleic acid (cis form) and Fumaric acid (trans-form) C: -Optical isomerism with maleic acid (L-form) and Fumaric acid (D-form) D: -Optical isomerism with maleic acid (D-form) and Fumaric acid (L-form) Correct Answer: - Option-A stion 39: -The protein structure involving the interaction, orientation and organization of two or more polypeptide chains to form a functional proteins A: -Primary structure B: -Secondary structure C: -Tertiary structure D: -Quarternary structure
Que:	A:-Vembanad lake and Sasthamkota lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries D:-Kadalundi community reserve and Mangalavanam Correct Answer:-Question Cancelled stion38:-The type of isomerism shown by Fumaric acid and Maleic acid are A:-Geometrical isomerism with maleic acid (trans-form) and Fumaric acid (cis-form) B:-Geometrical isomerism with maleic acid (cis form) and Fumaric acid (trans-form) C:-Optical isomerism with maleic acid (L-form) and Fumaric acid (D-form) D:-Optical isomerism with maleic acid (D-form) and Fumaric acid (L-form) Correct Answer:- Option-A stion39:-The protein structure involving the interaction, orientation and organization of two or more polypeptide chains to form a functional proteins A:-Primary structure B:-Secondary structure C:-Tertiary structure D:-Quarternary structure Correct Answer:- Option-D
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Que:	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries D:-Kadalundi community reserve and Mangalavanam Correct Answer:-Question Cancelled stion38:-The type of isomerism shown by Fumaric acid and Maleic acid are A:-Geometrical isomerism with maleic acid (trans-form) and Fumaric acid (cis-form) B:-Geometrical isomerism with maleic acid (cis form) and Fumaric acid (trans-form) C:-Optical isomerism with maleic acid (L-form) and Fumaric acid (trans-form) C:-Optical isomerism with maleic acid (D-form) and Fumaric acid (L-form) Correct Answer:- Option-A stion39:-The protein structure involving the interaction, orientation and organization of two or more polypeptide chains to form a functional proteins A:-Primary structure B:-Secondary structure C:-Tertiary structure C:-Tertiary structure Correct Answer:- Option-D stion40:-The chemoreceptor found in gastropod molluscus is A:-Crystalline style
Que:	A:-Vembanad lake and Ashtamudi lake B:-Vembanad lake and Sasthamkota lake C:-Thattekkadu and Kumarakom bird Sanctuaries D:-Kadalundi community reserve and Mangalavanam Correct Answer:-Question Cancelled stion38:-The type of isomerism shown by Fumaric acid and Maleic acid are A:-Geometrical isomerism with maleic acid (trans-form) and Fumaric acid (cis-form) B:-Geometrical isomerism with maleic acid (cis form) and Fumaric acid (trans-form) C:-Optical isomerism with maleic acid (L-form) and Fumaric acid (D-form) D:-Optical isomerism with maleic acid (D-form) and Fumaric acid (L-form) Correct Answer:- Option-A stion39:-The protein structure involving the interaction, orientation and organization of two or more polypeptide chains to form a functional proteins A:-Primary structure B:-Secondary structure C:-Tertiary structure Correct Answer:- Option-D stion40:-The chemoreceptor found in gastropod molluscus is A:-Crystalline style B:-Radula

Que	stion41:-The scientific method in which final conclusions and generalisations are drawn from specific observations and analysis of known facts
	A:-Inductive method
	B:-Serendipity
	C:-Deductive method
	D:-Constructive method
	Correct Answer:- Option-A
Que	stion42:-Which among the following is a neutral stain ?
	A:-Janus Green
	B:-Methyl Green
	C:-Borax Carmine
	D:-Leishman's stain
	Correct Answer:- Option-D
Que	stion43:-According to the Patent Act 1970 (Amended in 2005), the term of every patent granted in India is
	A:-15 years from the date of filing
	B:-10 years from the date of filing
	C:-50 years from the date of filing
	D:-20 years from the date of filing
	Correct Answer:- Option-D
Que	stion44:-Choose the 'Nucleotide Sequence' databases.
	A:-EMBL, GenBank, NCBI
	B:-DDBJ, NCBI, PDB
	C:-Swiss Prot, EMBL, PDB
	D:-NCBI, MIPS, PIR
	Correct Answer:- Option-A
Que	stion45:-The Nobel Prize 2020 winners for Chemistry
	A:-Louise Gluck, Roger Penrose
	B:-Paul R. Milgrom and Robert B. Wilson
	C:-Emmanuelle Charpentier and Jennifer A. Doudna
	D:-Reinhard Genzel and Andrea Ghez
	Correct Answer:- Option-C
Que	stion46:-Write the scientific name of the fish known as "Miss Kerala".
	A:-Sahyadria denisonii
	B:-Labeo rohita
	C:-Poecilia reticulata
	D:-Danio rerio
	Correct Answer:- Option-A
Que	stion47:-Name the technique for determining the sequence specificity of DNA-binding proteins.
	A:-DNA finger printing
	B:-DOT blotting
	C:-Northern blotting
	D:-DNA foot printing
_	Correct Answer:- Option-D
Que	stion48:-The group of genes that specify regions of the body plan of an embryo along the head-tail axis of animals.
	A:-TATA box
	B:-Hox genes
	C:-Pribnow box
	D:-GC box
٠.	Correct Answer:- Option-B
Jue	At Companition and the following is a pest of paddy?
	A:-Cosmopolites sordidus

B:-Rhynchophorus ferrugineus	
C:-Dicladispa armigera	
D:-Opisina arenosella	
Correct Answer:- Option-C	
Question50:-In industrial fermentation, secondary metabolites are produced in stage of microbial growth.	
A:-Idiophase	
B:-Trophophase	
C:-Lag phase	
D:-Prophase	
Correct Answer:- Option-A	
Question51:-A mixture of DNA lysate has been analysed for nucleotides. It has been found that the Percentage of Guanine in that mixture was 18%, what will be the percer Thymine in that mixture by considering Chargaff rules ?	ntage (
A:-18%	
B:-9%	
C:-32%	
D:-30%	
Correct Answer:- Option-C	
Question52:-The C_3 cycle has been often called an evolutionary flaw. What may be Plant Physiology basics the reason for saying so ? I. The rubisco enzyme that carries out C_3 cycle is equal affinity to Oxygen II. The flaws in C_3 cycle leads to Photorespiration which is less energy efficient III. The statement is incorrect, C_3 cycle has no flaw Choose the correct statements	
A:-I	
B:-II	
C:-I and II	
D:-III	
Correct Answer:- Option-C	
Question53:-Phylogenetic trees constructed from a Gene locus "A" have resulted in 4 different tree topologies. I. Tree 1 with 5 changes II. Tree 2 with 4 changes IV. Tree 4 with 7 changes IV. Tree 4 with 7 changes You are directed to select the tree having maximum parsimony. Which of the following statements is correct ?	
A:-All trees are equally acceptable hypothesis of evolution and tree 2 is the one with maximum parsimony	
B:-All trees are equally acceptable hypothesis of evolution and tree 4 is the one with maximum parsimony	
C:-Only tree 4 with maximum changes are accepted and is having maximum parsimony	
D:-None of these trees can be accepted as hypothesis and tree 4 is having maximum parsimony	
Correct Answer:- Option-A	
Question54:-Which of these enzymes can be found associated with pyrenoids ? I. Alpha Amylase II. Rubisco III. PEP IV. Citric acid synthase	
A:-I	
B:-II	
C:-I and II	
D:-All of these	
Correct Answer:- Option-B	
Question55:-Wood Wide Web is a term used to denote	
A:-Mycorrhiza	
B:-Cuscuta	
C:-Climbers and Lianas	
D:-None of these	
Correct Answer:- Option-A	

Question56:-Pichia kudriavzevii is the teleomorph of the Candida Krusei, which of the following statements are true?

I. Pichia Kudriavzevii and Candida Krusei are same organism and teleomorph is the sexual stage of an organism

II. Pichia Kudriavzevii and Candida Krusei are different organisms, teleomorph is different organism showing same morphology

III. Pichia Kudriavzevii and Candida Krusei are related organisms, teleomorph is different organism showing same physiology

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A:-III
      B:-II
      C:-I
     D:-None of these
      Correct Answer:- Option-C
Question57:-Root wilt is a serious disease causing havoc in Kerala coconut plantations.
     A:-The disease is caused by Plant hopper and lacewing bug
      B:-The disease is caused by Phytoplasma, Plant hopper and lacewing bug spreads the disease
      C:-The disease is caused by Phytoplasma Plant hopper spreads the disease
      D:-The disease is caused by Phytoplasma and spread by wind
      Correct Answer:- Option-B
Question58:-Which of this is a recently (in 2019) reported bryophyte from Kerala?
     A:-Cololejeunea manilalia
      B:-Marchantia polymorpha
      C:-Riccia nilagirica
     D:-Riccia sahyadrica
     Correct Answer:- Option-D
Question59:-Which among the following is Not a class in the recent classification of Pteridophytes by
Smith?
      A:-Equisetopsida
      B:-Psilotopsida
      C:-Marattiopsida
     D:-Sphaenopsida
      Correct Answer:- Option-D
Question60:-Archaeosperma arnoldii is a remarkable fossil found from the famennian of Penysylvania, USA. What makes this fossil remarkable?
I. It is the \mathbf{1}^{st} record of angiosperm fossil
II. It is the earliest ovuliferous structure due to the presence of cupules III. It is indication of early seed habit due to the presence of Endosperm
Which of these statements are true?
     A:-I
     B:-I and II
     C:-II
     D:-I, II and III
      Correct Answer:- Option-C
\label{eq:Question61:-Which of these plants yield an anticancer drug?}
     A:-Thuja plicata
      B:-Podocarpus wallichianus
     C:-Taxus brevifolia
     D:-Juniperus bermudiana
     Correct Answer:- Option-C
Question62:-Which of the following statements are true about R-Plasmids ? I. It is extrachromosomal genetic material
II. It have genes encoding bacterial toxins
III. It is circular and confer resistance to antibiotics
IV. It can spread fast in bacterial populations
     A:-I and II
     B:-I and III
     C:-II and III
     D:-I. III and IV
      Correct Answer:- Option-D
Question63:-The 6<sup>th</sup> Mass extinction is called as
     A:-Holocene extinction
      B:-Devonian extinction
      C:-Cretaceous-tertiary extinction
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	D:-Devonian extinction
	Correct Answer:- Option-A
I. Anr II. Pit III. He IV. Re	ted
	A:-I, II, III and IV
	B:-II, I, IV and III
	C:-I, III, IV and II
	D:-IV, I, III and II
	Correct Answer:- Option-C
Ques	tion65:-P-Protein can be seen in
	A:-Phloem Parenchyma
	B:-Xylem Parenchyma
	C:-Sieve tube elements
	D:-Companion cells
	Correct Answer:- Option-C
Ques	tion66:-Replacing the dehydrating agent in sections with a solvent of paraffin is called clearing because
	A:-It clears alcohol from the sections
	B:-It makes the material brittle
	C:-Most clearing agents makes the sections more translucent
	D:-None of these
	Correct Answer:- Option-C
Ques	tion67:-The endometaphase can be seen in
	A:-Abnormal Mitosis in Tapetum
	B:-Metaphase without wall formation in Endosperm haustorium
	C:-Abnormal Metaphase in Endothecium
	D:-Abnormal Metaphase in Endosperm
	Correct Answer:- Option-A
Ques	tion68:-The speciation event due to founder effect in small populations is known by
	A:-Allopatric
	B:-Sympatric
	C:-Parapatric
	D:-Peripatric
	Correct Answer:- Option-D
Ques	tion69:-The primitive condition of apocarpy NOT seen in
	A:-Magnoliaceae
	B:-Ranunculaceae
	C:-Capparidaceae
	D:-All of these
	Correct Answer:- Option-C
Ques	tion70:-Which among the following is an Eponym ?
	A:-Oryza malampuzhensis
	B:-Rotala vasudevanii
	C:-Alternanthera sessilis
	D:-Narcissus pseudonarcissus
	Correct Answer:- Option-B
Ques	tion71:-Which among the following trait can be considered as a synapomorphy for eudicots?
	A:-Two Cotyledons
	B:-Tricolpate Pollen

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D:-Vascular Bundles arranged in a ring
      Correct Answer:- Option-B
Question72:-Which of these plants NOT belonging to the family Amaranthaceae (APG) ?
      A:-Achyranthes
      B:-Brachylepis
      C:-Gomphrena
      D:-Cerastium
      Correct Answer:- Option-D
Question73:-In the families listed below 2 are closely related by phylogenetic terms.
I. Caryophyllaceae
II. Malvaceae
III. Capparidaceae
IV. Amaranthaceae
Whihc are they ?
      A:-II and III
      B:-III and IV
      C:-IV and I
      D:-I and III
      Correct Answer:- Option-C
Question74:-Which is NOT an accepted Acronym?
      A:-K
      B:-MH
      C:-TBGT
      D:-MOU
      Correct Answer:- Option-D
Question75:-Which is an evidence for the concept of flower as a modified shoot? I.Reduction in Stamens with an increase in number of petals in cultivated roses
II. Gynandrophore of Gynandropsis
III. Foliar open carpels of Fabaceae
IV. Syconium of Ficus
      A:-I and II
      B:-I and IV
      C:-I, II and III
      D:-All of these
      Correct Answer:- Option-C
Question76:-The plant Agave sisalana has been cultivated and harvested for
      A:-Sisal Fiber
      B:-Sisal Liquer
      C:-Sisal Wood
      D:-Sisal Flower
      Correct Answer:- Option-A
Question77:-The haploid chromosome number of Rice is
      A:-10
      B:-11
      C:-12
      D:-13
      Correct Answer:- Option-C
Question78:-The TBGRI model of benefit sharing has been associated with which of the following?
I. Kani Tribes
II.Trichopus zeylanicus
III. Forest Development
IV. Ethnomedicine
      A:-I and II
      B:-I and III
      C:-II, III and IV
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C:-Reticulate Venation

D:-I, II and IV
Correct Answer:- Option-D
Question79:-The endemic plant that has been rediscovered after a period of 135 years from a sacred grove of Kerala
A:-Madhuca diplostemon
B:-Madhuca latifolia
C:-Madhuca longifolia
D:-Madhuca bourdillonii
Correct Answer:- Option-A
Question80:-Find the Minor Forest Products (NWFP) from the list I. Acacia torta II. Adenanthera pavonina III. Caesalpinia bonduc IV. Aegle marmelos
A:-l and III
B:-I, II and III
C:-I and IV
D:-I, II, III and IV
Correct Answer:- Option-D
Question81:-An international agreement that aimed to manage and reduce carbon dioxide emissions and greenhouse gases is
A:-Rio Summit
B:-Kyoto Protocol
C:-Montreal Protocol
D:-Stockholm Convention
Correct Answer:- Option-B
Question82:-The objectives of carbon farming are I. Lock carbon from atmosphere through farming Il.Reduce reliance on chemical fertilizers through carbon rich organic fertilisers Ill. Increase the crop yield and food security IV. Increase the farming of seaweeds
A:-I and II
B:-II and III
C:-I and III
D:-I only
Correct Answer:- Option-D
Question83:-The fossil plant can be seen in all continents and land masses that was part of the ancient Gondwana land which is regarded as a proof for plate tectonics.
A:-Blanzyopteris
B:-Glossopteris
C:-Barthelopteris
D:-Calamites
Correct Answer:- Option-B
Question84:-From the conditions listed below those that contributes to high risk of species extinction are I. Long Life Span II. Low Dispersal Ability III. High Degree of Specialization IV. Low Reproductive Ability
A:-I, II and III
B:-II, III and IV
C:-III, IV and I
D:-All of these
Correct Answer:- Option-B
Question85:-An amino acid with a non polar side chain is
A:-Asparagine
B:-Alanine
C:-Glutamine
D:-Serine
Correct Answer:- Option-B

Question86:-You are tasked with cloning of a plant gene in bacterial systems and later its expression in cultured cells. Which type of vector you should select for easy cloning and expression?	
A:-Phage Vector	
B:-Cosmid Vector	
C:-Shuttle Vector	
D:YAC	
Correct Answer:- Option-C	
Question87:-The 70S ribosomes that can be seen in Chloroplast and Mitochondria is I. An evidence for Endosymbiont Hypothesis on origin of Eukaryotes II. Prokaryotic ancestor of Chloroplast and Mitochondria III. Less efficient in translation comparing to 80S ribosomes in the cytoplasm	
A:-l and III	
B:-II and III	
C:-l and II	
D:-l, II and III	
Correct Answer:- Option-C	
Question88:-Arrange the following algae based on its evolutionary advancement of thallus I. Volvox II. Ulothrix III. Chlamydomonas IV. Ulva V. Chara	
A:-I, II, IV, III, V	
B:-III, I, II, IV, V	
C:-IV, III, I, V, II	
D:-III, II, I, IV, V	
Correct Answer:- Option-B	
Question89:-What properties of RNA support the hypothesis that it was the first self-replicating molecule in early evolution? I. It can transfer amino acids for protein synthesis II. It can store and pass information III. It can catalyse its own synthesis IV. It can form 3D structures V. It has catalytic activity	
A:-I, III and V	
B:-II, III and IV	
C:-I, II and III	
D:-II, III and V	
Correct Answer:- Option-D	
Question 90: The small polar molecules, ions and macromolecules (proteins and RNAs) can travel between the nucleus and the cytoplasm through	
A:-Membrane Channels	
B:-Inter membrane transporters	
C:-Transporters like Kinesin	
D:-Nuclear pore complexes	
Correct Answer:- Option-D	
Question91:-One among the following technique is a Taxon specific technique that can assist in identification of Taxon like species	
A:-RAPD	
B:-RFLP	
C:-DNA Barcoding	
D:-DNA Fingerprinting	
Correct Answer:- Option-C	
Question92:-You are entrusted to analyse leaf sample for the presence of a protein followed by its structure determination. Which are the techniques you can use for these experime? I. Western Blotting II. 2D PAGE III. MALDI TOF MS IV. X-Ray Crystallography	ents
A:-I, II and III B:-II, III and IV	

C:-I, III and IV

D:-All of these Correct Answer:- Option-D Question 93:-Which of the following crops are sterile due to triploid chromosome number? I. Banana III. Watermelon IV. Grapes A:-I and II B:-I and III C:-II and IV D:-III and IV Correct Answer:- Option-B Question94:-Plants has evolved to overcome the affinity of Rubisco to Oxygen by spatial and time separation of carbon dioxide fixation from the vicinity of atmosphere having oxygen and carbon dioxide A:-C2 cycle is separation in space and CAM in time respectively B:-CAM is separation in space and C4 cycle in time respectively C:-C4 cycle is separation in space and CAM in time respectively D:-C4 cycle is separation in space and C2 in time respectively Correct Answer:- Option-C Question95:-A solution of pH 4 has been diluted by adding 40 ml of double distilled water to 10 ml of the solution. What will be the pH of the diluted solution? A:-4.5 B:-5.0 C:-3.5 D:-4.0 Correct Answer:- Option-A Question 96:-The lab you are working is entrusting you to find out the molecular weight of a recently purified protein. Which of the following techniques available in the laboratory that you will be using for this task? A:-Density Gradient Centrifugation B:-ELISA C:-PAGE D:-Isoelectric Focusing Correct Answer:- Option-A Question97:-Name the software package that can be used to phylogenetic analysis of plants I. NTSYS II. Mesquite III. Darwin IV. Phylip A:-I, II and III B:-II, III and IV C:-I, III and IV D:-All of these Correct Answer:- Option-D Question98:-CRISPR CAS 9, which won 2020 Nobel Prize is a A:-Gene Editing Technique B:-Gene Therapy C:-Gene Transfer Tool D:-RNA Interference Tool Correct Answer:- Option-A Question99:-An algae that is commonly used for the production of single cell protein is A:-Arthrospira B:-Spirogyra C:-Nostoc D:-Anabaena Correct Answer:- Option-A

Question100:-The lichen group that forms the primary coloniser of a barren rock surface is

A:-Crustose

B:-Fruticose

C:-Foliose

D:-Byssoid

Correct Answer:- Option-A