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KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Samyath

Year 2024 - 2022

Title of the Paper: Core. Paper - 3

Subject Code: 19PZ0309

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
CIA I From: <u>9-8-21</u> To: <u>11-10-21</u>	II. M.Sc. Zoology DNA Micro array - Radioisotopic Techniques Scanning Electron microscope	<u>7.5 hours</u>	<u>7.5 hours</u>	<u>NIL</u>	<u>ph</u>	<u>d</u>
CIA II From: <u>18-10-21</u> To: <u>24-12-21</u>	Transmission Electron microscope, Phase Contrast Microscope and Fluorescent Microscope	<u>7.5 hours</u>	<u>7.5 hours</u>	<u>NIL</u>	<u>ph</u>	<u>d</u>

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KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 2

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Samyathan Year 2021-2022

Title of the Paper: Major elective- Biophysics and Bioinformatics Subject Code: 21PZO1E1 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C1A I From : <u>9-8-21</u> To : <u>11-10-21</u>	I. M. SC Zoology Introduction to Bioinformatics, scope and Application of Bioinformatics. information technology, systems biology, Introduction to genomics and proteomics databases Nucleic acids, Sequence data base, gene house EMBL, VEC, Protein sequence databases Swiss-port, PDB, BLAST, P5F-BLAST, FASTA, Clustal W	15 hours	15 hours	Nic	Md	sd
C1A II From : <u>12-10-21</u> To : <u>24-12-2021</u>	world wide biological databases, Databases search data, mining, data management and interpretation, protein prediction tools, multiple sequence alignment, genes and primer modeling. Protein structure, analysis molecular cloning and phylogenetic analysis molecular modeling program language, for biological studies	15 hours	hours	Nic	Md	sd

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Sanyathar Year 2024 - 2022

Title of the Paper: Cob. Evolution Subject Code: 19020508 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C/A I From : <u>9-8-2024</u> To : <u>11-10-2024</u>	III. B.Sc Zoology <u>Introduction, Historical aspects of Evolutionary concept, origin of life, Zoological time scale</u>	<u>15 hours</u>	<u>15 hours</u>	<u>NIL</u>	<u>ph</u>	<u>k</u>
C/A II From : <u>12-10-24</u> To : <u>24-12-24</u>	<u>Evolution Horse, Evolution elephant, Evolution Man, and Animal distributions.</u>	<u>15 hours</u>	<u>15 hours</u>	<u>NIL</u>	<u>un</u>	<u>k</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Sanyasiraj

Year 2021 - 2022

Title of the Paper: Geography - I

Subject Code: 21020101

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C14 I From : 9-8-21 To : 11-10-21	I. BSC Zoology Protozoa - classification and characters upto classes with suitable examples type study - Paramecium caudatum. general topic - Parasitic Protozoa - Plasmodium vivax, Leishmania donovani.	8 hours	8 hours	Nil	<i>[Signature]</i>	<i>[Signature]</i>
C14 II From : 12-10-21 To : 24-12-21	Phylum - Porifera type study - Leucosolenia general topic - Canal system in Sponges	7 hours	17 hours	Nil	<i>[Signature]</i>	<i>[Signature]</i>

Department: Zoology

Title of the Paper: Geography - I

Test No. & Period

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Samyathir Year 20-21-2022

Title of the Paper: Allied Paper - I Subject Code: 2107201A1 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C14 I From : 9-8-24 To : 11-10-24	I. B. Sc. Botany Phylum protozoa - Paramucium condatum. general topic - Canal system in sponges. Canal system.	15 hours	15 hours	Nil	PS	PS
C14 II From : 12-10-24 To : 24-11-24	Phylum Arthropoda - Periplaneta americana general topic - Metamorphosis in Annelids water vascular system in starfish.	15 hours	15 hours	Nil	PS	PS

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Zoology

Dr. M. Samyathan

Year 2021 - 2022

Department: ... 7

Environmental studies

Subject Code: ..21EVS101

Semester: ODD / ~~EVEN~~

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C/A I From : 19/12/21 To : 11/10/21	I. D. Sc. Botany Definition - Causes effects and control measures Air pollution, - water pollution, Soil pollution, marine pollution, noise pollution, thermal pollution, Nuclear pollution, solid waste management, Causes effects Control measures of urban and industrial wastes. Roll in individual in prevention of pollution. Pollution case studies domestic waste water, effluent from, paper mill and dyeing, cement pollution - Disaster	9 hours	9 hours	Nil	✓	✓
II From : 10/10/21 To : 28/12/21	Sustainable development - smart city urban planning urban problems related to every water conservation rain water harvesting and watershed management - Resettlement and rehabilitation of people its problems and concerns case studies Narmada valley project environmental ethics, issues and possible	9 hours	9 hours	Nil	✓	✓

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Samyarth

Year 2021 - 2022

Title of the Paper: Environmental Studies

Subject Code: 21EV3101

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C14 I/ From : 9/8/24 To : 11/10/24	Solutions:- climate change - global warming Ozone layer depletion, acid rain nuclear accident and holocaust, case studies - Bhopal and Nagasaki - Consumption and waste products - Environmental Protection Act - Air Pollution Act - Water Pollution Act - Public Awareness Human population and the environment - Population Growth and Distribution - population explosion	3 hours	3 hours	nil		
II From : 10/10/24 To : 24/12/24	Family welfare Programme - Environment and Human health, human rights value education - HIV AIDS women and child welfare - Role of information technology in Environment					

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: P.T. M. Samyatharan

Year 2021 - 2022

Title of the Paper: Course Paper - II Applied Entomology

Subject Code: 20PZ0412

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C/4 I From : 21/12/21 To : 11/1/22	II. M.Sc Zoology Morphology life cycle disease caused by and control measures of Mosquitoes House flies and bug, head louse	12 hours	12 hours	NIL	M	S
C/4 II From : 25/1/22 To : 11/1/22	Morphology life cycle disease caused by and control measure of Cockroach Stored Product Pests: 1. Rice - Sitophilus oryzae 2. Flour - Tribolium castaneum 3. Green gram - Bruchus chinensis	12 hours	12 hours	NIL	M	S

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 2

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Sanyathra

Year 2021 - 2022

Title of the Paper: Course paper - 5 - Molecular genetics Subject Code: 21PZ0205

Semester: ODD / EVEN

Department: Zoo

Title of the Paper: C
And An

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C/A 1 From : 21/02/22 To : 14/02/22	<u>I M & Zoology</u> <u>Gene regulation in prokaryotes and eukaryotes, mechanism of positive and negative control of gene expression</u> <u>Translational and transcriptional control</u> <u>Regulatory mechanism of expression</u>	8 hours	8 hours	NIL	<u>MT</u>	<u>Y</u>
C/A 11 From : 20/04/22 To : 11/6/22	<u>Environmental effects on gene regulation</u> <u>regulation of gene expression by microproteins</u>	7 hours	8 hours	NIL	<u>MT</u>	<u>Y</u>

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Samyathar Year 2021 - 2022

Title of the Paper: Course Paper-12 - Biodiversity and Animal behaviour Subject Code: 19U ZOO 612 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C14 I From : 21/2/2022 To : 11/4/2022	III. B.Sc Zoology Introduction to the study of Animal behaviour - Branches of Ethology - Concepts of Ethology. Methods of studying behaviour.	6 hours	6 hours	NIL	Dr	Dr
C14 II From : 25/4/2022 To : 11/6/22	Mammalian Nervous system and Behaviour (with Special reference to hypothalamus) Hormones and Behaviour. Biological clocks.	6 hours	6 hours	NIL	Dr	Dr

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 641 022

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Samyathir

Year 2021 - 2022

Title of the Paper: Major elective - Pest and

Subject Code: 190205E1

Semester: ODD / EVEN

Department: Zoology

Title of the Paper: Pest and

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Staff	Signature of HOD
C/A I From: 21/02/22 To: 11/4/22	III. B.Sc. Zoology Biology, nature & damage to crops and control measures of snails, birds and rats Insect pest of stored produce - rice weevil - <i>Citophilus oryzae</i> and flour beetle (<i>Tribolium castaneum</i>) and Pulse beetle (<i>Callosobruchus chinensis</i>)	11 hours	11 hours	Nil	W	J
C/A II From: 21/4/22 To: 11/6/22	Insects in relation to public health. biology, life of insect vectors of human and control measures of mosquitoes, house flies, house flies	11 hours	11 hours	Nil	W	J

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. M. Samyathana

Year 2023 - 2024

Title of the Paper: Skill base Subject

Subject Code: BPVZ0452

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
C14 I From: <u>21/2/22</u> To: <u>11/4/22</u>	II. B.Sc. Zoology Soil pollutions and their effect on health Communicable diseases Viral and bacterial diseases, AIDS, Mumps	7 hours	7 hours	Nil	<u>Mr</u>	<u>S</u>
C14 II From: <u>20/4/22</u> To: <u>11/6/22</u>	Tuberculosis, Non Communicable diseases Diabetes, Cancer, Heart, and kidney problems Vector borne diseases - Dengue, Malaria Health care community Health care services and health programmes in India.	8 hours	7 hours	Nil	<u>Mr</u>	<u>S</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 20

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Sanyashan Year 20 21 - 2022

Title of the Paper: Cell Biology Seetha Subject Code: 210720202 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>C10 I</u>	<u>I. Bsc Botany</u> Structure of an animal cell, structure and functions of mitochondria, golgi body, centrosome, lysosomes and nucleus.	<u>8 hours</u>	<u>8 hours</u>	<u>N/C</u>	<u>M</u>	<u>J</u>
<u>C10 II</u>	<u>Mendel's Law of inheritance, Human genetic disorders - haemophilia, and colour blindness</u>	<u>8 hours</u>	<u>8 hours</u>	<u>N/C</u>	<u>M</u>	<u>J</u>
From: <u>21/2/22</u> To: <u>11/4/22</u>						
From: <u>21/4/22</u> To: <u>11/6/22</u>						

Title of the Paper: Physiology

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. M. Samyathna Year 2021-2022

Title of the Paper: Cell biology, Growth, Embryology, Evolution Subject Code: 21VZ02A2 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>C/PI</u> From: <u>21/2/22</u> To: <u>21/4/22</u>	<u>T. B. Sc. Biochemistry</u> <u>Nutrition in human-food constituents and enzymes</u>	<u>8 hours</u>	<u>8 hours</u>	<u>NIL</u>	<u>M</u>	<u>L</u>
<u>C/II</u> From: <u>25/4/22</u> To: <u>21/6/22</u>	<u>digestion and absorption.</u>	<u>7 hours</u>	<u>7 hours</u>	<u>NIL</u>	<u>M</u>	<u>L</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. Kannan

Year 2021 - 2022

Title of the Paper: CPD Development Biology

Subject Code: 20PZ031B

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.2021 To : 11.10.2021	Unit: V Regeneration. Types of regeneration Major events, Hydra, Planaria, - Physiological changes during regeneration. Factor influencing regeneration and Tektogenesis	7.5 hrs	-	Nil	K. Kannan	
II From : 19.10.21 To : 24.10.21	In detailed process happen in during the regeneration process of Hydra, Planaria and effects of changes in external factor influence,	7.5 hrs	-	Nil	K. Kannan	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. S. Kannan

Year 2021- 2022

Title of the Paper: C.P.9. Biophysics and

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.2021 To : 11.10.21	Unit V General introduction of Bio instrumentation principle of FTIR and applications Working principle and applications of GCMS.	7.5	-	Nil	K. Murthy	Dr
II From : 12.10.21 To : 24.12.21	- Principle and applications of Nuclear magnetic Resonance spectroscopy (NMR) - principle and methods, applications of coupled plasma spectroscopy ICP.	7.5	-	Nil	K. Murthy	Dr

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. Kannan

Year 20 - 20

Title of the Paper: Biophysics and Bioinformatics Subject Code: 20ZOO010 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.2024 To : 11.10.2024	Unit I Introduction of biophysics and instrument action, Principles and application of spectrophotometer, Biosensors Atomic Absorption Spectrophotometer and UV-vis spectrophotometer,	7.5 hrs	—	—	K. My	<u>[Signature]</u>
II From : 12.10.24 To : 24.12.24	Working Principles and application advantages and disadvantages of GCMS, NMR and ICP instruments	7.5 hrs	—	—	K. My	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. Kannan

Year 2024- 20 22

Title of the Paper: C.P. ... b. Evolution

Subject Code: 21070506

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.2024 To : 11.10.2024	Unit II Introduction of evolution Evidences of evolution, Homologous ^{types} and types Adaptive radiation, Parallel and Convergent evolution, Parallel and To complete information above morphological and anatomical evidences of evolution, connecting links	7.5	—	Nil	K.H	✓
II From : 12.10.2024 To : 24.12.22	Evolution - Embryological evidences Fish to human : Biochemical evidences of chromosome, DNA, Protein types of biochemical evidences.	7.5	—	Nil	K.H	✓

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. Kannan

Year 2021- 2022

Title of the Paper: CP 1- Invertebrata

Subject Code: 21VLD101

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
I From : 9.8.2021 To : 11.10.2021	Unit II phylum Coelenterata and A splanchnines with suitable examples Type study of Obelia and detailed information and life cycle General topic covered by Coral reefs, A scaris Lumbricoides and Discomyces.	15 hrs	-	Nil		
II From : 12.10.2021 To : 24.2.21	Unit II phylum Mollusca and Echinodermata Classification, characters with examples Type study of Pila globosa, A sterias General topic : Torsion in gastropods, Economic importance of molluscs General forms of Echinoderms.	15 hrs	-	Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: INVERTIBRATA and Chordata

Year 2021-2022

Title of the Paper: Applied A. Paper. I. Subject Code: 210201A1 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.21 To : 11.10.21	Unit IV The detailed study about Rana hexadactyla and all types of systems, For the general topic - Covered in Parental care of fishes and amphibians.	15 hrs	→	Nil		
II From : 12.10.21 To : 24.11.21	Unit V The detailed study about Orithotolagus curvicaudus and all systems - Migration of birds and dentition in Rabbit.	15 hrs.	→	Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. K. Kannan

Year 2021 - 2022

Title of the Paper: Environmental Studies Subject Code: 21ENV8101

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 9.8.2021 To: 12.10.21	Unit: III Biodiversity and its conservation, Types of biodiversity - value of biodiversity Hot spot, threats, endangered and endemic species of India. Conservation and type of conservation,	7.5 hrs	-	nil	K. K. K.	g
II From: 12.10.21 To: 24.12.21	Unit IV and V (chart) Environmental Pollution Causes, effects and control measures and types, Disaster management and types, Global issues & most urban Town planning. Environmental issues	7.5 hrs	-	nil	K. K. K.	g

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. K. Kananas Year 2021 - 2022

Title of the Paper: CP11 Biodiversity and Evolution Subject Code: 20020411 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.02.22 To: 11.04.2022	Unit II Conservation of biodiversity loss at biodiversity. Factors affecting loss at biodiversity. Threatened species and types, IUCN Red data book	12 hrs	-	Nic	K. J. P.	
II From: 28.04.22 To: 11.6.22	Unit II and I Cytoprotection of plants and animals. Genetic markers to help at conservation, Biodiversity hotspot critical habitats of Birds, Amphibians, Fishes.	8 hrs	-	Nic	K. J. P.	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. J. K. Kannan

Year 20 - 20

Title of the Paper: CP. b. Biostatistics and Research methodology

Subject Code: 21PZB206

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From 24.02.22 To: 14.04.22	Unit I Introduction of biostatistics, variables in biology, Data collection, classification, tabulation of data. Frequency distribution Diagrammatic and graphical type.	7.5	—	Nil ✓	King	✓
II From: 25.4.22 To: 11.6.22	Unit I Types of representation of data, Sampling techniques, Measures of central tendencies, Mean, Median mode, Standard Deviation, Standard error,	7.5	—	Nil ✓	King	✓

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. Kannan

Year 2021-2022

Title of the Paper: SBS Commercial Fish Culture
Subject Code: 21BZBBS4

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.2.22 To: 11.4.22	Unit I Introduction of fishery and fishery resources of India, Major resources fresh water and Marine resources and status, Marine water fisheries in India, present and future prospective in fishery	6 hrs	-	nic	<i>[Signature]</i>	<i>[Signature]</i>
II From: 25.4.22 To: 11.6.22	Unit II Biology of fishes. In Commercially important species, Food and feeding, biology and Reproductive index of fin fish and Shell fishes Unit III Culture practices of Commercial important fishes and types	9 hrs	-	nic	<i>[Signature]</i>	<i>[Signature]</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher:

Year 2021- 2022

Title of the Paper: C.P.4..... Physiology

Subject Code: 21VZ.D.H.04

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 21.02.22 To: 11.4.22	Unit <u>IV</u> Nerve Physiology. structure and properties of nerve cell, types of neurons, myelinated and non myelinated nerve system, origin of conduction of nerve impulse,	7.5 hrs	—	N/C	K/MS	&
II From : 25.4.22 To: 11.6.22	Unit <u>III</u> Structure of synapse and function, mechanism of interneuronal transmission, neuromuscular junction neurotransmitters and reflex action	7.5 hrs	—	N/C	K/MS	&

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. K. K. Kanna Year 2021 - 2022

Title of the Paper: Animal Biology Cell biology, Genetics, Embryology, Physiology Ecology and Evolution Semester: OBD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.02.21 To: 11.4.21	<u>Unit - III</u> Nutrition in human and types, food constituents and process enzymes and digestion, mechanism of digestion and absorption. <u>Unit IV</u> Ecosystem and its components food chain energy flow	15 hrs (Theory)	-	NIC	K. K. Kanna	
II From: 25.4.21 To: 11.6.22	<u>Unit IV</u> Pollution of waters, air, noise <u>Unit V</u> Evidence of evolution, morphological, anatomical, embryological and biochemical, theories of evolution and types	7.5 hrs 15 hrs 15 hrs (Biochemistry)	-	NIC	K. K. Kanna	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. V. Lakshmi

Year 2021-2022

Title of the Paper: MAJOR ELECTIVE - 3
Economic Zoology

Subject Code: 19UZ05E1 4.21.EVS101 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
<u>CI A-I</u> From: 09/08/21 To: 11/10/21 <u>CI A-II</u> From: 12/10/21 To: 24/12/21	<u>UNIT - II</u> - Types of silkworm, Life cycle, Rearing methods - Hatching - Diseases of silkworm - Problems in sericulture. Economic Importance of sericulture - Rearing of cocoons - Role of women in sericulture.	7 hrs	15 hrs	NIL	<i>(Signature)</i>	<i>(Signature)</i>
<u>CI AI</u> <u>CI AII</u> From: 09/08/21 To: 11/10/21 <u>CI A-II</u> <u>CI AII</u> From: 12/10/21 To: 24/12/21	<u>I B.Sc. BIOCHEMISTRY ENVIRONMENTAL SCIENCE</u> <u>UNIT I, II & UNIT V (Half)</u> 21.EVS101 Scope & Importance of EIS - Public awareness - natural Resources - Types (Forest, water, land, food, energy) Ecosystem: Structure & function, Consumers & decomposition. Energy flow, Food chain, Food web, Pyramids. Ecosystem (Forest, Grassland, Aquatic) Environment pollution, Air (water, wildlife, Forest) Population growth, explosion, Family welfare, Human health Human rights Sustainable Development, Rain water harvesting Water Conservation, Climate change, Global warming, Ozone depletion	8 hrs	15 hrs	NIL	<i>(Signature)</i>	<i>(Signature)</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: ZOOLOGY

Name of the Teacher: DR. K. VELMURUGAN

Year 2021-2022

Title of the Paper: ALLIED A PAPER - I
INVERTEBRATA & PHYLOGENETICS

Subject Code: 24UZO.1A.1 9.19UZO.505

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>CIA-I</u> From: 09/08/21 To: 11/10/21 <u>CIA-II</u> From: 12/10/21 To: 24/12/21	<u>UNIT-I</u> B.Sc., Biochemistry <u>UNIT-II</u> <u>Phylum: Platyhelminthes</u> <u>Fasciola hepatica</u> General topic: parasitic worm diseases (In animals & humans) (Praziquantel & helminths) <u>UNIT-IV</u> <u>Phylum: Chordata</u> <u>Rana tigrina</u> (excluding Endocrinology) Parental care of fish and Amphibians <u>GENETICS</u>	15 hrs	30 hrs	NIL	<u>Dr</u>	<u>A</u>
<u>CIA-III</u> From: 09/08/21 To: 11/10/21 <u>CIA-IV</u> From: 12/10/21 To: 24/12/21	<u>III</u> B.Sc., ZOOLOGY - <u>UNIT-V</u> <u>5. CODE: 19UZO.505</u> <u>Inbreeding, outbreeding and Hybrid vigor, Eugenics.</u> <u>Evolution</u> <u>comparative anatomy & functional morphology in cattle.</u> <u>Population Genetics: Hardy-Weinberg Law, Genetic counselling, Human Genetic defect</u> <u>Evolution</u> <u>comparative anatomy & functional morphology in cattle.</u>	7 hrs 8 hrs	15 hrs	NIL	<u>Dr</u>	<u>A</u>

Department

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: ZOOLOGY

Name of the Teacher: DR. K. VELMURUGAN

Year 2021- 2022

Title of the Paper: CURE PAPER - 10

Subject Code: 2APZ0310

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
<u>CIA- I</u> From: 09/08/21 To: 11/12/21 <u>CIA- II</u> From: 12/10/21 To: 24/12/21	<u>II M.Sc. ZOOLOGY</u> <u>UNIT-I - GAMETOGENESIS</u> - Primordial germ cells and their origin - Spermatogenesis - oogenesis and vitellogenesis - Comparison of spermatogenesis and oogenesis, types of eggs - Role of hormones in oviducts and oogenesis in insects & human - Fertilization: Activation of eggs, Mechanisms of fertilization. <u>UNIT-II DIFFERENTIATION</u> cleavage: Salient features - Types of cleavage, plane of partition of cleavage - Types of blastula - molecular changes during cleavage - gastrulation - salient features - major events of gastrulation - mechanism of gastrulation in amphibians, birds, mammals.	15 hrs	30 hrs	NIL	<u>AV</u>	<u>L</u>
<u>CE/II</u> From: 09/08/21 To: 11/12/21 <u>CIA- II</u> From: 12/10/21 To: 24/12/21	<u>I M.Sc. ZOOLOGY</u> <u>CORE PAPER-3 CELL & MOLECULAR BIOLOGY</u> <u>UNIT-V CANCER</u> - Types of Cancer, Development of cancer - Cancer stem cells - Causative factors - Properties of cancer cells, metastasis, Breast Cancer. Colon cancer, Leukemia, Renal cancer, Ovarian cancer, Tumour suppressor genes (p53) function, Early detection of cancer, molecular diagnosis, Treatment (Radiotherapy, Chemotherapy, Immunotherapy & Stem cells)	7 hrs	15 hrs	NIL	<u>AV</u>	<u>L</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department:

ZOOLOGY

Name of the Teacher: ...Dr. M. VELMURUGAN.....

Year 2021 - 2022

Title of the Paper: BIODIVERSITY & EVOLUTION

Subject Code:

20BZ0411

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>CTA-I</u> From: <u>21/02/22</u> To: <u>11/04/2022</u>	<u>II M.Sc, Zoology</u> <u>UNIT - I & UNIT - IV</u> <u>(11hrs)</u> Biodiversity Concept and Definition - Values of Biodiversity - Methodologies for valuation of Biodiversity. Bio-geographic Zones of India Evolution: - Definition, Types of Isolation	7 hrs 22 hrs.		Nil		
<u>CTA II</u> From: <u>25/04/22</u> To: <u>11/06/22</u>	<u>UNIT: IV</u> Isolating mechanisms: Prezygotic and Postzygotic Barriers - role of isolating mechanisms in organic evolution. Definition, Species - race - Bore Speciation. Species Concept, Biological species, Phylogenetic species, Modes of speciation, Instantaneous speciation, Gradual Speciation, Sympatric & Allopatric Speciation	15 hrs		Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: ZOOLOGY

Name of the Teacher: DR. K. VEL. MURUGAN

Year 2021 - 2022

Title of the Paper: CORE PAPER - 5
MOLECULAR GENETICS

Subject Code: 21PZ0205

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>C7A-1</u> From: 21/04/22 To: 11/04/22	<u>I M. SC, ZOOLOGY</u> <u>UNIT-IV - HEREDITY AND VARIATION</u> Linkage & crossover Linkage maps, Terned Analysis, Mapping with Molecular markers, Mapping by using somatic cell hybrids.	7 hrs	15 hrs	NIL	<u>KA</u>	<u>SA</u>
<u>C7A-II</u> From: 25/04/22 To: 11/06/22	Lod score for Linkage testing, Kartomring / Pedigree Analysis, Heritability and its measurement - QTL mapping CRISPR / Cas-9 technology in genome Editing	8 hrs		NIL	<u>KA</u>	<u>SA</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. K. VELMURUGAN

Year 2024 - 2022

Title of the Paper: Developmental Biology

Subject Code: 19VZ0611

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>CIA-I</u> From: 21/02/22 To: 11/04/22	<u>UNIT-II:</u> <u>Themes of fertilization</u> Physico-chemical aspects of fertilization, types of eggs polarity - symmetry plans of cleavage, patterns of cleavage, laws of cleavage, patterns of cleavage as illustrated in Amphioxus frog, chick & pig	15hrs	30hrs	NIL	Dr. K. Velmurugan	Dr. K. Velmurugan
<u>CIA-II</u> From: 25/04/22 To: 11/06/22	<u>UNIT-V</u> <u>organizer & Experimental embryology</u> Induction Theory and Theory of organizer - Grader's experiments on organizer In vitro fertilization (IVF), Artificial Insemination and Embryo transfer.	15hrs		NIL	Dr. K. Velmurugan	Dr. K. Velmurugan

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. L. Velmurugan

Year 2021- 2022

Title of the Paper: ALIUD A PAPER - 2

Subject Code: 21UZO2A2

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>C1A- I</u> From: <u>21/02/22</u> <u>C</u> To: <u>11/04/22</u>	<u>UNIT - II</u> Types of eggs, cleavage, Blastulation and Gametogenesis in Frog	15 hrs	30 hrs.	NIL	<u>(Signature)</u>	<u>(Signature)</u>
<u>C1A- II</u> From: <u>25/04/22</u> To: <u>11/06/22</u>	<u>UNIT - IV</u> Ecosystem and its components, food chain, Energy flow, pollution of water, air and Noise	15 hrs		NIL	<u>(Signature)</u>	<u>(Signature)</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: ZOOLOGY

Name of the Teacher: Dr. K. VELMURUGAN

Year 2021- 2022

Title of the Paper: ALLIED A PAPER - 2

Subject Code: 21UZZD2A2

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>CTA - I</u> From: 21/2/22 To: 11/04/22 <u>CTA - II</u> From: 25/04/22 To: 11/06/22	<u>UNIT - II</u> <u>Types of eggs & egg membrane, types of egg cleavage.</u> <u>Blastulation, types of Blastula, Gastrulation in frog</u>	15 hrs	,	NIL		
II						
From:						
To:						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: D. S. Binu Lakshmanan

Year 2021 - 2022

Title of the Paper: Biophysics & Biochemistry

Subject Code: 20.PZ.0309

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 9.08.2021 To: 11.10.2021	<u>Unit III</u> <u>Histological techniques - Preparation of sample, serial sections, histochemical techniques, Immunological techniques - RIA, ELISA & Flow cytometry</u>	15 hrs	→	NIL	<u>[Signature]</u>	<u>[Signature]</u>
II From: 12.10.2021 To: 24.12.2021	<u>Unit IV</u> <u>Chromatography (Paper Column, Gas & HPLC), Electrophoresis - Paper, agarose, PAGE & Southern, Northern & Western blotting</u>	15 hrs	→	NIL	<u>[Signature]</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: Dr. S. Binukumar Year 2021 - 2022
 Title of the Paper: Ecology Subject Code: 19020504 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.08.2021 To : 11.10.2021	<u>Unit I</u> <u>Abiotic factors of the environment - Temperature, light, oxygen, carbon dioxide, Radiation, and biological mutation.</u> <u>Biotic factors of the environment - Commensalism, Symbiosis and Mutualism, Parasitism.</u>	15 hrs	-	NIL	<u>[Signature]</u>	<u>[Signature]</u>
II From : 12.10.2021 To : 24.12.2021	<u>Unit II</u> <u>Ecosystem.</u> <u>Components of an ecosystem, Ponds as an example of ecosystem - Food chain - Food web.</u> <u>Ecological pyramid & energy flow</u>	15 hrs	-	NIL	<u>[Signature]</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 2

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. S. Binu Kuregan

Year 2021-2022

Title of the Paper: Cell and Molecular Biology

Subject Code: 211VZ0303

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	<u>unit 2</u> <u>cell organelles & functions</u> Structure and functions of Plasma membrane, lysosomes, Golgi bodies & Ribosomes	15 hrs	-	<u>NIL</u>	<u>[Signature]</u>	<u>[Signature]</u>
II	<u>unit 5</u> <u>Structure & functions of DNA & RNA</u> Nucleic acids - Structure & functions of DNA & RNA, DNA replication, Protein synthesis - cell aging & cancer	15 hrs	-	<u>NIL</u>	<u>[Signature]</u>	<u>[Signature]</u>

Department: Zoology

Title of the Paper: Cell and Molecular Biology

ACADEMIC PLANNING

Department: Zoology Name of the Teacher: D. S. Prakash Kumar Year 2021 - 2022

Title of the Paper: M.Sc. Environmental Biology & Toxicology Subject Code: 21PZ04E2 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.02.2022 To: 11.04.2022	<u>Unit IV Environmental Quality Awareness</u> <u>Indicators of the environment</u> <u>Education & Awareness, Environmental</u> <u>and Environmental Impact Assessment</u> <u>(EIA), Environmental Management and</u> <u>bio remediation.</u>	15 hrs	-	Nil		
II From: 25.04.2022 To: 11.06.2022	<u>Unit V Toxicology</u> <u>Scope & Significance, Classification of Toxic</u> <u>Substances, Absorption & Excretion of Toxicants</u> <u>Toxicity - Mode of action of poisons, Toxicity</u> <u>Acute & Chronic toxicity, Toxicological testing methods</u> <u>Valuation of toxicity in organisms - Lethal in aquatic</u> <u>organisms, LD50 in terrestrial organisms, Environmental</u> <u>auditing, system planning, Sustainable development</u> <u>Physiology regulation, Bioethics, Environmental</u> <u>act.</u>	15 hrs	-	Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. S. Renukumar

Year 2021 - 2022

Title of the Paper: Molecular Genetics Subject Code: 21PZ0205 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.01.2022 To: 11.04.2022	Unit I Chromatin structure and nucleosome concept, Organization and function of genetic material, Repetitive DNA.	7 1/2	—	Nil		
II From: 25.04.2022 To: 11.06.2022	Unit II Overlapping genes, Mitochondrial DNA, Types & structure of RNA, Transposons, Genetic structure & analysis of eukaryotic genomes	7 1/2	—	Nil		

Department:

Title of the Paper:

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. S. Rajakumar

Year 2021-2022

Title of the Paper: Biodiversity & Evolution, Subject Code: 2.0120411

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.02.2022 To: 11.04.2022	Unit I <u>Biodiversity</u> concept and definition - Values of biodiversity Methodology for valuation of biodiversity, Bio geographic Zones of India	7 1/2	—	NIL		
II From: 25.04.2022 To: 11.06.2022	Unit I <u>Wild life of India</u> (study of mammals, Birds reptiles Amphibians and fishes (examples in each family) wild life Management in India Biodiversity Hot Spots.	7 1/2	—	NIL		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Zoology

Name of the Teacher: Dr. S. Raju Kumar

Year 2021 - 2022

Title of the Paper: Biochemistry Subject Code: 19.V.Z.O.B.10

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 21.01.2022 To : 11.04.2022	<u>Unit I Molecular Tools of Genetic Engineering</u> Biotechnology definition, Scope <u>Endonuclease</u> - Eco nuclease, Restriction endonuclease, Reverse transcriptase, ligase, Alkaline phosphatase, polymerase. cloning vectors - pBR322, λ phage, yeast vector - Yac Vector, Yec Vector shuttle vector	15 hrs	—	nil		
II From : 25.04.2022 To : 11.06.2022	<u>Unit II Techniques in Genetic Engineering</u> Probes - Construction & labeling Radioactive - Random primed method, non Radioactive - Biotinylation method, Blotting techniques - Southern blotting	15 hrs	—	nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: of Zoology

Name of the Teacher: Dr. S. Rajalakshmi

Year 2021 - 2022

Title of the Paper: Physiology Subject Code: BAU-Zo-404

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 21.02.2022 To: 11.04.2022	<u>Unit I Nutrition & Respiration</u> Types of Nutrition, feeding mechanism Digestion - Extra & Intracellular Metabolism of carbohydrates, fats & Protein, vitamins & Minerals. <u>Respiration</u> Types, pigments, transport of gases, Bohr's effect Chloride shift.	15 hrs	—	nil	<u>[Signature]</u>	<u>[Signature]</u>
II From: 25.04.2022 To: 11.06.2022	<u>Unit II. Nerve Physiology</u> Types of Nerves, myelination & non-myelinated nerve fibres, synapse origin and conduction of nerve impulse, inter-neuronal transmission, neuromuscular junction, reflex action.	15 hrs	—	nil	<u>[Signature]</u>	<u>[Signature]</u>