



Nallamuthu Gounder Mahalingam College

(Autonomous)

Re-Accredited by NAAC and ISO 9001:2015 Certified Institution

Affiliated to Bharathiar University, Coimbatore

Pollachi - 642 001

INTERNAL QUALITY ASSURANCE CELL (IQAC)



Department of Zoology

Minutes of the Board of Studies Meeting held on 22-02-2020

The BoS Meeting started with prayer. The Head of the Department introduced the panel members and welcomed them. The panel members are,

1. **University Nominee**
Dr. K. Manimegalai,
Professor,
Department of Zoology,
Avinashilingam University,
Coimbatore- 641 043
2. **Subject Expert**
Dr. P. Thiruchenthil Nathan ,
Professor,
Department of Zoology,
Periyar University,
Salem - 636001
3. **Academic Auditor**
Dr. V. Gokula,
Head, Department of Zoology,
National College,
Trichy - 620001
4. **Industrialist**
Mr. R. M. Karthik,
Proprietor,
Kalpatgharu Coir Products,
Ravanapuram, Udumalpet
5. **Alumini**
Ms. P. Kalaivani,
Assistant Professor,
Department of Zoology,
Vellalar College for Women
Erode

The panel members gave the following suggestions and recommendations

UG/PG (2020-2023 BATCH)

S.No	Year	Sem	Paper Code	Paper Title	Changes	
					Removed (if any)	Added (if any)
1.	2020-2023	I	20UZY101	Core Major Paper –I Non - Chordata	Unit I Economic importance of Protozoa Unit II Coral reefs-Types and Formation Unit III Phylum Aschelminthes Economic importance of Aschelminthes Phylum Annelida Type study –Earthworm	Unit I Protozoa in Human Diseases Unit II Polymorphism in coelenterates Unit- III Phylum Annelida Type study Neries Metamerism in Annelids
2.	2020-2023	II	20UZY202	Core Major Paper –II Chordata	Unit I Pisces Urinogenital system Unit II Class Amphibia-Frog Cranial nerves Unit III Urinogenital system Unit IV Aves- Flightless birds	Unit I Pisces Placoid scales Excretory system Reproductive system Unit II Class Amphibia-Frog Heart Unit III Excretory system Reproductive system Unit IV Aves- Flight Adaptation
3.	2020-2023	II	20UZY203	Major Practical - I (Non-Semester Pattern) Non-Chordata & Chordata	Spotters A. Earthworm B.Human Brain C.Corals D.Emu	Spotters A.Leucosolenia Neries Pila B.L.S. of Leucosolenia Placoid scale Rabbit Brain C. Archaeopteryx Salamader Bat D. Sea horse, Platypus, Sepia
4.	2020-2023	I	20UBY1 A1	Ancillary Zoology Paper I Nonchordata and Chordata	Unit IV Migration of fishes Unit V Calotes-Brain	Unit IV Parental care in fishes Unit V Digestive system of Pigeon
5.	2020-2023	II	20UBY2 A2	Ancillary Zoology	Unit V Arthropod vectors and Human disease	Unit V Vermiculture

S.No	Year	Sem	Paper Code	Paper Title	Changes	
					Removed (if any)	Added (if any)
				Paper-II Economic Zoology		
6.	2020-2023	II	20UBY2 A3	Ancillary Zoology Practical (Non-Semester Pattern) Paper I & II	Spotters A.Taenia solium B.Pigeon-Quill feather	Spotters A. Obelia colony B. Leucosolenia B.Flight muscles C.Bat D.Peripatus D.Silk gland
7.	2020-2023	III	20UZY304	Core Major Paper-IV Cell Biology	Unit-II. Cytoplasmic matrix	Unit-II. Golgi complex Unit-III. Centrosomes Unit-IV. Types of chromosomes
8.	2020-2023	III	20UZY3N 1	Non-Major Elective (NME) Public Health and Hygiene	– Unit IV Malaria, Filariasis Unit V Global health council	Unit I Dynamics of Disease Transmission-Malaria Unit IV Influenza, Chicken pox
9.	2020-2023	IV	20UZY405	Core Major Paper-V Genetics	Unit II. XX-XO type-Grasshopper Unit III. Eye colour in drosophila Unit IV. Syndromes Down's syndrome Patau's syndrome V. Molecular basis of gene mutation Population genetics	Unit III. Inbreeding and out breeding Unit IV. Non-disjunction Anomalies of autosomes 21-Trisomy, 13-Trisomy Anomalies of allosomes Unit IV. Euphenics V. Genetic counseling : Aim, need and purpose
10.	2020-2023	IV	20UZY406	Major Practical – II (Non-Semester Pattern) Cell biology & Genetics	Spotters : Cell Biology Cell cycle	1.Polytene Chromosome
11.	2020-2023	IV	20UZY4N 3	Non-Major Elective (NME) Food and	Unit – V Basic techniques to identify Food adulteration	Unit – V Methods of purification of potable water

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					Removed (if any)	Added (if any)
				Nutrition		
12.	2020-2023	IV	20UZY4N4	Non-Major Elective (NME) Apiculture (NME)	Unit -II <i>Apis mellifera</i>	Unit- I Relationship between plants and bee- Plant as habitat-symbiosis-pollination
13.	2020-2023	V	20UZY507	Core Major Paper – VII Developmental Biology	Unit- I Definition- Ontogeny-Phylogeny Unit-III Comparison of the cleavage and gastrulation of frog and chick – Unit-IV Nuclear transplantation types- techniques	Unit-I Introduction to developmental biology
14.	2020-2023	V	20UZY508	Core Major Paper – VIII Biotechnology	Unit-I Gene map lambda DNA Unit – III Kinetics of cell growth	Unit – I Vaccines Unit-II RFLP Unit – III Biolistics (SS)
15.	2020-2023	V	20UZY509	Core Major Paper – IX Biostatistics & Biophysics	Unit-II. Merits and demerits	Unit-II. Measures of dispersion Unit-II. Mean deviation
16.	2020-2023	V	20UZY510	Core Major Paper – X Biochemistry and Bioinformatics	Unit -V Metabolism of carbohydrates: Glycolysis-Glycogenesis-Kreb's cycle & Glycogenolysis Metabolism of lipids : β -oxidation of fatty acids Metabolism of proteins :Transamination and Deamination	Unit –II Amino acids – Structure and types - Essential - Non-essential Nucleic acids - Nucleosides - Nucleotides - Polynucleotide Enzymes - Properties of enzymes - Classification Vitamins - Properties of vitamins - Classification of vitamins
17.	2020-2023	V	20UZY5E1	Core Elective Paper – I Medical	Unit-I Automatic analyzer Unit-V	Unit-I Urinometer, Albumino meter Unit-III Microscopic examination of

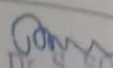
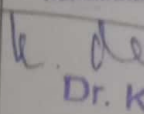
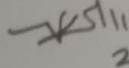
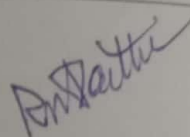
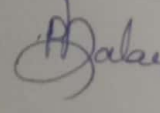
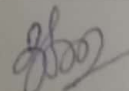
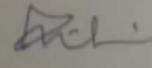
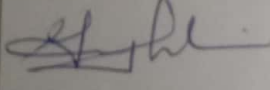
S.No	Year	Sem	Paper Code	Paper Title	Changes	
					Removed (if any)	Added (if any)
				Laboratory Techniques	Venereal Disease	faeces- various ova seen Occult blood test Unit-V Gonorrhoea Disease
18.	2020-2023	VI	20UZY611	Core Major Paper –XI Animal Physiology and Endocrinology	Unit-III Sexual cycle in human: Puberty, Spermiation, Ovulation, Menstrual cycle Pregnancy and Parturition.	Unit-I Metabolism of carbohydrates: Glycolysis- Glycogenesis- Kreb's cycle & Glycogenolysis Metabolism of lipids : β -oxidation of fatty acids Metabolism of proteins :Transamination and Deamination
19.	2020-2023	VI	20UZY612	Core Major Paper – XII Ecology & Evolution	Unit V Isolation Mechanism Geographic isolation, Reproductive isolation	Unit V Lamarckism principle of lamrckisms
20.	2020-2023	VI	20UZY613	Core Major Paper – XIII Microbiology and Immunology	Unit II Bacteriophages _Life cycle Lyic and Lysogenic Life cycle	Unit II Structure of Bacteriophages Unit III Biochemical changes of Food Spoilage Unit –V Types of tumor -, Causes of tumor –factors involved in tumor immunity
21.	2020-2023	VI	20UZY6E3/	Core Elelctive Paper-III Sericulture	Unit I. Central and state silk board functions Unit .IV Characteristic features of ripeworm	Unit-III. Bed cleaning and its methods Unit-IV. Chawki rearing in India Unit-V. Indian Uzi fly
22.	2020-2023	VI	20UZY614	Major Practical – III (Non-Semester Pattern) Developmental Biology, Animal Physiology &	Preparation of heamincrystals Frog yolk plug Chick egg Mammalian heart Sahli's haemometer BP apparatus	• Estimation of haemoglobin by using haemoglobinometer • Estimation of Erythrocyte Sedimentation(ESR) in human • Estimation of glucose by using digital method Spotters • Frog- Blastula

S.No	Year	Sem	Paper Code	Paper Title	Changes	
					Removed (if any)	Added (if any)
				Endocrinology, Biostatistics & Biophysics, Bioinformatics & Biochemistry & MLT		• Placenta of sheep • Human foetus • Digestive system - M Automatic BP monitor
23.	2020-2023	VI	20UZY615	MAJOR ZOOLOGY PRACTICAL - IV (Ecology, Evolution, Biotechnology, Microbiology, Sericulture and Aquaculture)	SPOTTERS Sacculina on Crab Coccyx Peppered moth	SPOTTERS Sucker fish Giraffe Lung fish Silk gland Pebrine disease Lernaeasis disease Live feed-Daphnia
24.	2020-2023	VI	20UZY6S3	Skill Based Elective (SBE) Vermiculture	Unit I Economic importance of Vermiculture Unit III Diseases and Predators of Earthworm control measures Unit IV Biomass Nutrient content of Soil and Biomass Unit V Nutrient value of vermicompost	Unit I Economic importance of Earthworm Unit III Collection of earth worms, Methods of vermicomposting Unit IV Indoor vermicomposting Precautions need for vermicomposting Nutrient content of vermicompost
25.	2020-2023	VI	20UZY6S4	Skill Based Elective (SBE) Biopharmaceuticals (SBE)	Unit V Quality assurance and quality control Fundamental of quality assurance, benefits, structure of quality management, documentation, quality assurance in manufacturing	Unit V Pharmaceutical products of DNA technology: Therapeutic proteins – Insulin- human growth hormone- Diuretics- clotting factors-Vector usage strategies for gene therapy; Clinical trials

New papers (Courses) introduced

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					Removed (if any)	Added (if any)
1	2020-2023	VI	20UZY6E6	Core Elective Paper –VI Wildlife Conservation	Dairy farming and management Technology	Wildlife Conservation

After a thorough discussion based on the suggestions/feedback received from the stakeholders, the department suggested the following new courses and classified the courses as skills development / Employability / Entrepreneurship.

	Name of the members	Signature
1.	Chairman Dr. S. Somasundaram, Assistant Professor & Head Department of Zoology, NGM College, Pollachi	 Dr. S. SOMASUNDARAM M.Sc., Ph.D. Assistant Professor and Head Department of Zoology Nallamuthu Gounder Mahalingam College Pollachi - 642 001.
2.	University Nominee Dr. K. Manimegalai, Professor, Department of Zoology, Avinashilingam University, Coimbatore- 641 043	 Dr. K. Manimegalai M.Sc., M.Phil., Ph.D. Professor in Zoology Avinashilingam Institute for Science and Technology for Women Coimbatore - 641 043
3.	Subject Expert Dr. P. Thiruchenthil Nathan , Professor, Department of Zoology, Periyar University, Salem-636001	 Dr. P. THIRUCHENTHIL NATHAN Professor Department of Zoology Periyar University, Salem - 636 001 Cell: 094436 99908
4.	Academic Auditor Dr. V. Gokula, Head, Department of Zoology, National College, Trichy-620001	 22/2/2020 Dr. V. GOKULA Head & Associate Professor Research Department of Zoology National College (Autonomous) Tiruchirappalli - 620 001 Tamilnadu, India.
5.	Industrialist Mr. R. M. Karthik, Proprietor, Kalpatgharu Coir Products, Ravanapuram, Udumalpet	
6.	Alumini Ms. P. Kalaivani, Assistant Professor, Department of Zoology, Vellalar College for Women Erode	 22/2/2020
7.	Dr. M. Durairaju Associate Professor of Zoology NGM College, Pollachi	
8.	Dr.S.Mariselvi Assistant Professor of Zoology NGM College, Pollachi	
9.	Ms. S.Jayalakshmi Assistant Professor of Zoology NGM College, Pollachi	
10.	Dr. S. Christobher Assistant Professor of Zoology NGM College, Pollachi	