

Minutes of the Board of Studies Meeting

The XIVth Meeting of board of Studies in Zoology under Autonomous Scheme Conducted on 09.03.2019 at 10.30 AM in the Department of Zoology.

I Chairman

Dr. M. Lekshmanaswamy (HOD) - mhw

II Faculty members

1. Dr. R. Jeyaraaj
2. Dr. K. Logan Kumar
3. Dr. S. Loganwamy
4. Dr. M. Manimegalai
5. Dr. S. Binukumari
6. Dr. P. Kathireswari
7. Dr. S. Raja
8. Dr. S. Manivannan
9. Dr. R. Venkitachalam
10. Dr. P. Bharathi
11. Dr. V. Meiyalagan
12. Dr. S. Rajesh Kumar

R. Jeyaraaj
K. Logan Kumar
S. Loganwamy
M. Manimegalai
S. Binukumari
P. Kathireswari
S. Raja
S. Manivannan
R. Venkitachalam
P. Bharathi
V. Meiyalagan
S. Rajesh Kumar

III

Subject Experts Approved by the -
Academic Council Members

1. Dr. M. Shanmugavelu MS Shanmugavelu
Associate Professor and HOD of Zoology
Vivekananda College, Tiruvadagam west
Madurai District - 625 234. 09/03/19

2. Mrs. R. Tamilarasi
Associate Professor in Zoology
Arulmigu Palaniandevan Arts College for
Women,
Palani - 624 615
Tamilarani
09/03/19

IV Member nominated by Vice Chancellor

Dr. V. Ramasubramanian
Professor of Zoology
Bharathiar University
Coimbatore - 641 046

V. Ram
09/9/19

V P.G. Meritorious Alumni

ABSENT

Dr. T. Chitra
Associate Professor and HOD of Zoology
Erode Arts & Science College
Erode - 9

VI Representative for placement

Ms. S. Subramaniam
Sambalakadu Thotam
Rasakkapalayam,
Alampalayam via,
Pullichampatty post
Pollachi - 642 002

(Student)

P61 Students Representative - I

Theresa Leo
ii M.sc Zoology
Kongunadu Arts & Science College
Coimbatore - 641 029

Theresa

U61 Students Representative - II

Jegannivasan. M.
iii B.Sc Zoology
Kongunadu Arts & Science College
Coimbatore - 641 029

M. J. J.

Department of Zoology
Date 9th March 2019
XIV Board of studies
Minutes of the meeting

The meeting of the Board of studies was held on 9th March 2019 at room number D19. The chairman of the meeting welcomed the members of the board and detailed about the activities to be taken up by the board for the implementation of syllabi of the academic year 2019-20. Then the members of the board were requested to discuss the curriculum and finalise to upgrade the curriculum.

The following members were present. In the meeting the following changes were made in the curriculum and syllabi after detail discussion.

Faculty members, Department of Zoology

S.NO	NAME	DESIGNATION
1.	DR.M.LEKESHTMANASWAMY	Associate Professor & Head
2.	DR.R.JAYARAAJ	Associate Professor
3.	DR.K.LOGAN KUMAR	Associate Professor
4.	DR.K.LOGASWAMY	Associate Professor & COE
5.	DR.M.MANIMEGALAI	Associate Professor
6.	DR.S.BINUKUMARI	Assistant Professor
7.	DR.P.KATHIRESWARI	Assistant Professor
8.	DR.S.RAJA	Assistant Professor
9.	DR.S.MANIVANNAN	Assistant Professor
10.	DR.P.BHARATHI	Assistant Professor
11.	DR.S.RAJESH KUMAR	Assistant Professor
12.	DR.R.VENKITACHALAM	Assistant Professor
13.	DR.V.MEİYALAGAN	Assistant Professor

Subject Experts

1. Dr. M. Shanmugavelu

Associate Professor and Head
Department of Zoology
Vivekanandha College, Tiruvedagam west
Madurai Dt – 625234

2. Mrs. R. Tamilarasi

Associate Professor
Department of Zoology
Arulmigu Palaniandavar Arts
College for women
C. K. Pudur
Palani – 624 615

Member Nominated by Vice-chancellor

Dr. V. Ramasubramanian

Professor
Department of Zoology
Bharathiar University
Coimbatore – 641 046

Representative for placement

Mr. S. Subramaniam

Sambalakadu Thotam
Rasakkapalayam
Alampalayam via
Pulliampatty post
Pollachi – 642 002

P.G. Meritorious Alumini (Absent)

Dr. T. Chitra
Associate Professor and Head
Department of Zoology
Erode Arts and Science College
Erode -9

PG student Representative

Ms. Theresa Leo

II M.Sc., Zoology
Department of Zoology
Kongunadu Arts and Science College
Coimbatore – 641 029

UG Students Representative

Mr. Jegannivasan. M.

III B.Sc., Zoology
Department of Zoology
Kongunadu Arts and Science College, Coimbatore – 641 029

1. **I B.Sc., Zoology** - Title of the paper was changed as Invertebrata instead of Non chordata
2. **I. B.Sc., Allied Zoology** - Title was changed as Invertebrata and chordata instead of Non chordata and chordata
3. **I. B.Sc., Core Zoology and Allied zoology** practical title has been changed as Invertebrata and chordata instead of Non Chordata and Chordate, Included 6 animals in virtual lab.
4. **II B.Sc., Zoology** Title Cell Biology is changed as Cell and Molecular Biology
 1. **Unit 1** – Added stains and fixatives,
 2. **Unit 5** – study of cancer cell is changed as types and properties of cancer cells, Removed self study topics.
5. **III B.Sc., Zoology.**
 1. **Core paper 8** – Biostatistics Biophysics and Bioinformatics has been changed as Biostatistics and Bioinformatics
 - (1)**Unit 1** – Deleted primary and secondary data collection
 - (2) **Unit 2** – Measures of central tendency – Deleted the calculation of mean, median and mode
 - (3) **Unit 3** – Biophysics is completely deleted
 - 3.1. Introduce one way and two way ANOVA and Statistical package
 4. **Unit 4** changed as Introduction to Bioinformatics, Scope and Application of Bioinformatics, Information technology, Systems Biology, Introduction to genomics and proteomics databases
 5. **Unit 5** Introduced the new contents – Nucleic acid sequence database Genbank, EMBL, UCSC, Protein sequence databases, Swiss-port, PDB, BLAST, PSI-BLAST, Clustal W, FASTA.
6. **I.Msc., Zoology**

Core paper 2 - Title of the paper is changed as Cell and molecular biology instead of Cell and Molecular Biology and Biochemistry.

Unit I - Cell Membrane was changed as Cell organelles, Ultra structure and composition of cell membrane changed as Ultra structure, chemical composition and functions of cell membrane and included Lysosomes, Ribosomes, and Mitochondria.

Unit II – Reconstructed as **Nucleus**: Structure, types and composition of DNA. C value paradox, Satellite DNA and its role, nuclear matrix, composition and its role, nucleolus- its structure and function.

Chromosomes: Types of chromosomes, basic structural features, chromosomal banding, molecular organization of eukaryotic chromosome, Giant chromosomes, Chromosomal movement during cell division.

Unit III – Uncontrolled cell growth was deleted and Lac operon concept was included.

Unit IV and V Reconstructed as follows

UNIT IV

Cell cycle: Comparative account of cell cycle events in yeasts and animal cells; check points during cell cycle-G1 to S, progression of S phase, G2 to M phase.

Apoptosis: Characteristic features of cells undergoing apoptosis and necrosis, par apoptosis and cell death forms. Apoptosis during developmental process and irregular apoptosis and disease. Mechanism of programmed cell death (PCD), direct activation by death signals. Pathways of Apoptosis*.

UNIT V

Cancer: Types of cancer, development of cancer, cancer stem cells, causes of cancer, properties of cancer cells. Metastasis, breast cancer, colon cancer, leukemia. Retroviral oncogenes, protooncogenes, tumor suppressor genes (P53) and their functions. Early detection of cancer, molecular diagnosis, treatment (radiotherapy, chemotherapy, immunotherapy and stem cells).

Core paper 5 – Title of the paper has been changed to Biostatistics and Bioinformatics instead of Biostatistics, Biophysics and bioinformatics.

Bioinformatics

Unit IV – Introduction to Bioinformatics, Scope and Application of Bioinformatics, Information technology, systems biology, Introduction to genomics and proteomics databases, Nucleic acids, sequence database, Genbank, EMBL, UCSC, Protein sequence databases, Swiss – port, PDB, BLAST, PSI-BLAST, FASTA, Clustal W.

Unit V – World wide biological databases, Database search-data mining, data management and interpretation, protein prediction tools, multiple sequence alignment, genes and primer modeling, protein structure analysis, docking and phylogenetic analysis, molecular modeling, programme languages for biological studies.

Core paper 7 -Microbiology and Immunology – Unit III delete Leprosy.

Core paper – 9

Title of the paper - Bioinstrumentation was changed as Biophysics and Bioinstrumentation

Unit 1 – deleted systems biology

Bioinformatics Practical

1. PDB
2. BLAST
3. FASTA
4. Clustal W
5. Introduction to MATLAB
6. DNA library (Demo only)

7. II M.Sc., Zoology

Entomology Practical – Only Cockroach is to be used for dissection – Nepa and cybister are to be used as demo only.

8. JOC – Changed as Animal Husbandry subject is introduced

9. ALC – Ecotourism – A self study Subject is introduced



Dr. M. LEKESHMANASWAMY
ASSOCIATE PROFESSOR AND HOD OF ZOOLOGY
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