

## Department of Zoology

20<sup>th</sup> Board of Studies Meeting, June, 2021

A meeting of <sup>the</sup> Board of Studies is convened for the B.Sc Zoology programme offered by the department of Zoology on 07.06.2021 at 10.00 am to 12.30 pm in online mode with 2 meetings. First, meeting with Principal on Teams meeting at 10.00 am to 10.30 am. Second meeting with Department through Google meet with the following members.

Google meet Link : <https://meet.google.com/kgu-cfac-jsg>

### Members:

1. Dr. S. Umamaheswari, M.Sc, M.Phil, B.Ed, Ph.D.  
Chairman and Head of the Department
2. Dr. S. Kaleichelvi, M.Sc, M.Phil, B.Ed, PGDCA, Ph.D,  
Associate Professor in Zoology  
Member.
3. Dr. K. Shobana, M.Sc, M.Phil, PGDCA, PGDNL, DIB, Ph.D
4. Dr. D. Abirami, M.Sc, M.Phil (Bio Inf) B.Ed, Ph.D
5. Dr. S. Beula Agnes, M.Sc, M.Phil, HUCA, Ph.D.
6. Dr. R. Gomathi, M.Sc, M.Phil, Ph.D (Botany)

### University Nominee:

Dr. C. Gunasekaran

Assistant Professor in Zoology

Bharathiar University

Coimbatore - 641046

Mobile No : 9489917540

email Id : gunasekaran@buc.edu.ac

Subject Expert :

Dr. (Mrs) K. Sujatha,  
Assistant Professor in Zoology,  
Government Arts and Science College,  
Coimbatore  
mobile no = 9843065554  
email Id = Sujatom1@rediffmail.com

Placement Officer :

Er. Madu Ramakrishnan.  
Organic Farmer, Santhosh Farms,  
Narikalpathy, Pollachi Taluk,  
mobile no = 9442416543  
email Id = Santhoshfarms@gmail.com

Alumini :

Dr. (Miss) D. Kalaiselvi, M.Sc, Ph.D,  
Division of Applied Bioscience and Biotechnology,  
Institute of Environmentally Friendly Agriculture,  
College of Agriculture and Life Sciences,  
Chonnam National University,  
Gwangju 500-757, Korea  
mobile no : 9578895148  
email Id : dkalaiselvi19@gmail.com

Agenda of the Meeting :

1. To finalise and approve the curricular framework and design of course content for the Zoology Programme from III to VI Semester, under outcome based education for the students admitted during 2020 - 2021 onwards.
2. To finalise and approve the curricular framework and design of course content for the Zoology Programme for I to VI

Semester, under outcome based education for the students admitted during 2021 - 2022 onwards

3. To finalise and approve MOOC in Advanced Learners Course as option for the Academic Year 2020 - 2021 onwards.

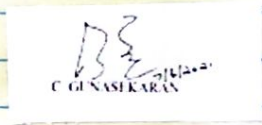
The following were the members present for the meeting

Members :

1. Dr. S. Umamaheswari,  
HOD & Associate Professor in  
Zoology  
Chairman.



2. Dr. C. Gunasekaram,  
Assistant Professor in Zoology  
Bharathiar University,  
Coimbatore  
University Nominee




3. Dr. (Mrs.) K. Sujatha,  
Assistant Professor in Zoology,  
Government Arts and Science College,  
Coimbatore  
Subject Expert.



K. Sujatha

4. Er. Madu Ramakrishnan,  
Organic Farmer, Santhosh Farms,  
Nellikalpathy, Pollachi Taluk,

  
(Er. Ramakrishnan)

Placement Officer.

Alumni:

5. Dr. (Miss) D. Kalaiselvi  
Division of Applied Bioscience & Biotechnology  
Institute of Environmentally friendly Agriculture,  
College of Agriculture and Life Sciences,  
Chonnam National University  
Gwangju - 500 - 757, Korea,

6. Dr. S. Kalaiichelvi  
Associate Professor in Zoology SKalai
7. Dr. K. Shobana  
Assistant Professor in Zoology shob
8. Dr. D. Abirami  
Assistant Professor in Zoology abirami
9. Dr. S. Benla Agnes  
Assistant Professor in Zoology -
10. Dr. R. Gomathi  
Assistant Professor in Botany R. Gomathi

The following were the suggestions and recommendations made by the board and the resolutions approved for the students admitted during 2020-2021 onwards.

Curriculum Frame Work - III to VI Semesters,  
Course Content - III to VI Semesters.

Item No: 1

Semester III - Part-III - Cell Biology and Biochemistry

Unit - I: Introduction of Cell biology is added.

Unit - II: Protein Synthesis, Amino acids, Triplet Codon and Translation included in Unit II

Unit - III:

Instead of ultra structure, types and functions of chromosomes, Morphology of chromosomes, Primary & Secondary constrictions, satellite bodies, classification on the basis of position of centromere is included.

Item No: 2

Semester III - Part IV - Skill Enhancement Course -  
Apiculture - The Paper has been shifted from  
Semester - III to Semester - IV

Semester III - Part IV - Skill Enhancement Course - I -  
Professional English for Zoology - New Course  
has been introduced.

Item No: 3

Semester - III Part - IV - Non Major Elective  
- Sericulture

Unit - V - The topic fungal disease - Muscardine  
is included.

Item No: 4

Semester IV - Part III - Core V - Environmental  
Biology and Evolution

Unit - III : The topic Life Support System was  
deleted.

Item No: 5

Semester IV - Part - III - Core Practical - II

1. Squash Preparation of Grass hopper (or)  
Cockroach has been introduced.
2. Quantitative estimation of Carbohydrates,  
Proteins has been made as an individual  
experiment.

Item No: 6

Semester - IV - Skill Enhancement Course II -  
Apiculture

In Unit IV -

1. Topics Natural enemies of honeybee Crow,  
Black ant, Black bears, Wax moths, mites, and  
Wasp were included.

2. In diseases of honeybee and their  
control, Viral diseases, Bacterial disease,  
Fungal disease and protozoan diseases were  
included.

Item No: 7

Semester IV - Advanced Learners Course I -  
Instead of "Vermiculture", new Course "Wild Life  
Management and Conservation" has been introduced

Item No: 8

Semester V - Core IX - Group project and Viva  
voce has been shifted from VI Semester to  
V Semester

Item No: 9

Semester V - Part III Core VI - Physiology  
Unit - III

1. Topic Osmoregulation in marine and  
fresh water fish was deleted.
2. Topic Counter Current theory, dialysis and  
dialyser were included.

Unit - IV

The topic bioluminescence was deleted

Item No: 10

Semester - V - Core VII - Biotechnology  
Unit - IV: Human genome project was deleted

Item No: 11

Semester: V - Core VIII - Biostatistics, Bioinformatics  
and Computer Applications

Unit - II: Graphic location Median and Mode is  
included.

Item No: 12

Semester - V - Elective I - clinical Laboratory  
Techniques

Unit - V: Topics - Investigation of throat Swab  
Diphtheria and Corona infection were included.

Item No: 13

Semester V - Elective I - Bioinstrumentation

Unit IV: Blotting Techniques were introduced

Item No: 14

Semester V - Part IV - Skill Enhancement Course III - New Course "Ornamental Fishes and Poultry Farming" has been introduced.

Item No: 15

Semester VI - Part III Core - X - Genetics

Unit II: The topic "Gene and Gene Concept" is introduced.

Item No: 16

Semester - VI - Part - II Core - XI Developmental Biology

Unit - II: Parthenogenesis has been reshuffled  
Unit - IV: Organizer Concept was deleted from unit - IV and Amniocentesis has been introduced in unit - IV

Item No: 17

Semester VI - Core XII - Microbiology - Shifted from V semester to VI semester.

Unit: V Covid 19 topic is introduced.

Item No: 18

Semester VI - Part III Elective II - Sericulture Rearing operations - Disinfection is included; Topics has been reshuffled in unit III, IV, V  
Unit - III

1. Topics disinfection has been included.
2. Byproducts of Sericulture has been introduced.

Item No: 19

Semester VI Elective - II - Pest and their Control - Unit - II Pest of Sorghum is deleted.

Item No: 20

Semester VI Core Practical - III - Localization of Barr body in buccal epithelial

Cells is included in Genetics practical

Item No: 21

Semester VI - Elective Practical (Opt-I)  
Urine analysis - microscopic examination of blood cells (RBC) in Urine introduced.

Item No: 22

Semester VI - Elective Practical (Opt-2) Unit- Blotting Techniques is introduced.

Item No: 23

Semester VI - Advanced Learners Course II - Insects, vectors and diseases / MOOC option for ALC or MOOC has been introduced.

Resolved that Curricular framework and design of Course Content to be approved for the courses of the Semesters II, IV, V and VI for the students of the Academic Years 2020-2021 onwards UG Programme of Zoology.

The following were the suggestions and recommendations made by the board and the resolutions approved for the students admitted during 2021-2022 onwards.

Curriculum Framework - I to VI Semesters  
Course Content - I to VI Semesters

Item No: 1

Semester - I - Core I - Nonchordates I and Core II Nonchordates - II merged as single paper as Nonchordata.

Item No: 2

Semester - II Core II - InChordata



I Unit - General topic Economic importance of fishes added.

Item No: 3

Semester - III - Core III - Cell Biology and Biochemistry  
 II Unit - Amino acids introduced.

Item No: 4

Part IV - Skill Enhancement Course - I - Professional English.

1. A new topic has been included in Unit - I  
 Topics Vocabulary in Context: Word formation  
 - 1) Creating antonyms using prefixes.

2. Intensifying prefixes (Ex. Inflammable) changing words using suffixes  
 A) Noun Endings  
 B) Adjective Endings  
 C) Verb Endings.

3. A new topic introduced in Unit II: Synonyms (register) - Compare and Contrast expressions.

4. A new topic has been in Unit III: Phrasal verbs.

Item No: ~~5~~ Semester - III

Part IV - Non Major Elective - Sericulture

Unit V - Marketing and Byproducts of Sericulture included.

Item No: 6

1. Semester - IV - Part III - Environmental Biology and Evolution Course title Nomenclature has been changed into Environmental Biology, Evolution and Zoogeography.

2. Unit - II Natural resources topic has been reshuffled.

3. In Unit III Extra Terrestrial Environment was deleted

Item No: 7

Semester IV - Part IV Skill Enhancement Course - II  
Apiculture

1. Unit IV - Natural enemies of honey bee - Sub headings were removed.
2. Unit IV - Diseases honey bee and their control Sub headings were removed.

Item No: 8

Semester IV - Part II Core Practical - II (Based on Core Course III and IV)

1. Mounting - Giant Chromosome in Chironomus Larva / *Chironomus* larva has been introduced.
2. Identification of plankton has been included.

Item No: 9

Semester IV - Advanced Learners Course I - *Bioinformatics*  
Wild life Management and Conservation  
Unit - V: Telemetry topic is introduced.

Item No: 10

Semester V - Part III Core V Physiology

1. Osmoregulation in marine and fresh water fish added from Unit III
2. Unit IV - Bioluminescence was added.

Item No: 11

1. Semester V - Part III Core VI - Biotechnology

Unit - I - Characteristics of Ideal Vectors; PBR322, PUC8, pUC121 topic has been introduced.

2. Protoplast technology was deleted from Unit IV

3. Unit IV - Stem cell Culture and applications introduced.

Item No: 12

Semester V - Part III - Core VII - Biostatistics,

- ① Bioinformatics and Computer Applications Course nomenclature has been changed as Biostatistics and Computer Applications.
- ② Regression analysis - definition, types and uses, regression lines, regression equation, Problems reshuffled from Unit III to Unit IV
- ③ Probability - definition, basic concepts, kinds and theorems of probability introduced in Unit IV
- ④ Chi Square ( $\chi^2$ ) test - definition, characteristics, applications and problems were reshuffled from Unit - III to Unit IV
- ⑤ Student's "t" test - definition, types and uses, Problems reshuffled from Unit III to Unit IV

Item No: 13 Semester - V

Part III Core VIII - Group project and Viva Voce is shifted from VI Semester to V Semester

Item No: 14

Semester V - Part III - Elective I - Sericulture (Opt)

- II/ Bioinstrumentation were removed and new courses introduced as Elective I - Nursery Techniques, Insect Vectors and diseases / Elective II (Opt) Agro Industrial Chemistry (cluster course with chemistry)

Item No: 15

Semester V - Part IV Skill Enhancement Course III -

Ornamental fishes and Poultry farming  
Unit V - a topic Aflatoxicosis is added.

Item No: 16

Semester - VI Part III - Core IX Genetics.

Twins, Identical Twins, Fraternal twins, Siamese added - Unit IV

Sex determination in man and *Anopheles* were introduced. - Unit - II

Item No: 17.

Semester VI - Part III Core X Developmental Biology

1. Fertilization and theories of fertilization has been reshuffled into unit - I
2. Unit - II - Blastulation, Gastrulation and Fate map has been reshuffled with unit I to unit II
3. Unit - III Morphogenetic movement new topic introduced.
4. Unit - III chick embryos topic reshuffled.
5. Unit - IV Regeneration topic has been reshuffled.

Item No: 18

Semester VI - Part III Core XI Microbiology and Immunology

1. The microbiology Core IX has been changed as XI Core and microbiology merged with Immunology and introduced as new Core as Core XI.
2. Immunology topics are newly introduced

Item No: 19

Semester VI Part III - Core XII Sericulture

1. Elective Course III - Sericulture has been changed as Core XII Sericulture.

Item No: 20

Semester VI Part III Elective II (Opt) Clinical Laboratory techniques / (Opt) - III Bioinstrumentation

1. This course shifted from V Semester to VI Semester. Clinical Lab techniques
2. In investigation throat Swab - Diphtheria topic removed in clinical laboratory techniques in Unit - IV
3. In Bioinstrumentation Course. Blotting techniques topic removed. - Unit IV

Item No : 21

Semester VI - Part III Core Practical - III

1. Shellless chick embryos development added in Developmental Biology practical.

Item No : 22

Semester VI - Elective II - Pest and their Control

1. The Elective come Pest and their Control completely removed.

Item No : 23.

Semester VI - Elective Practicals no topics added no practicals deleted.

Resolved that the Curricular framework and design of Course Content be approved for the Courses of the semesters for I, II, III, IV, V and VI Semester for the students of I B.Sc admitted from academic year during 2021 - 2022 onwards in the UG programme under OBE pattern.

Proposed by

Dr. C. Gunasekaram  
Assistant Professor in Zoology  
Bharathiyar University

(ONLINE)

Seconded by

Dr. S. Umamaheswari  
Associate Professor and Head  
Department of Zoology

Rajiswari N