

DEPARTMENT OF ZOOLOGY.

The Board of Studies Meeting held on
27.06.2017 at Darulain Hall.

Chairman : MRS. K. KRISHNAVENI,
Head, Department of Zoology

Members list : DR. K. BALAKRISHNAN,
University Nominee: Associate Professor,
Department of Immunology,
School of Biological Science,
Madurai Kamaraj University
Madurai.

Subject Expert 1 : DR. C. KANDOPAN,
Associate Professor,
PGI, Department of Zoology,
A.P.A. College of Arts & Culture,
Palani.

Subject Expert 2 : DR. P. ALAGESAN,
Associate Professor,
PG & Research Department of
Zoology,
Yadava College for Men,
Madurai.

Industrialist : DR. M. SIVAKUMAR,
Managing Director,
Quality Care Diagnostic Centre,
Dindigul.

Alumnus : DR. M. FATHAL POLINE,
Assistant Professor of Zoology,
M.V.M. Govt. Arts College,
Dindigul.

- Members list :
- 1) MRS. N. RENUGADEVI,
Assistant Professor,
Department of Zoology,
G.T.N. Arts college,
Dindigul.
 - 2) MRS. A. JEEVALATHA,
Assistant Professor,
Department of Zoology,
G.T.N. Arts college,
Dindigul.
 - 3) MS. K. SOUNDARAVALLI,
TEACHING ASSISTANT,
Department of Zoology,
G.T.N. Arts college,
Dindigul.
 - 4) MR. S. KALAIMANI. ASST. PROF
G.T.N. ARTS COLLEGE.

AGENDA:

- i) Reviewing and examining the syllabus for I year U.G.
- ii) Reviewing and examining the syllabus for Add on course.
- iii) Reviewing and examining the skeleton of the course structure.
- iv) Reviewing of Question Pattern for internal and external.
- v) Seeking Panels of examiners for question setting and valuation.

RESOLUTION :

- i) Resolved to approve the syllabus for I year [2017-2018] with minor changes.
- ii) Resolved to approve the syllabus for Add on course.
- iii) Resolved to approve the minor modifications in ^{the} skeleton of the course structure.
- iv) Resolved to approve the question pattern for both internal and external.
- v) Resolved to approve seeking Panels of examiners for question setting and valuation.
- vi) Resolved to replace the papers Biostatistics with Ecology, computer Applications & Career enhancement with Sericulture, Immunology with Economic Entomology in Ist & IInd Semester respectively.

MEMBERS PRESENT.

Chairman.

- 1) Mrs. K. Krishnaveni
- 2) University Nominee
Dr. K. Balakrishnan.
- 3) Subject Expert.
Dr. P. Alagesan.
- 4) Subject Expert.
Dr. C. Kandeepan.
- 5) Industrialist
Dr. M. Sivakumar.

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DEPARTMENT OF ZOOLOGY

The Board of Studies Meeting held on
30. 01. 2018 at Darwin Hall.

Chairman : PROF. K. KRISHNAVENI,
Head, Department of Zoology

Members list:

University Nominee : DR. K. BALAKRISHNAN,
Associate Professor,
Department of Immunology,
School of Biological Science,
Madurai Kamaraj University,
Madurai.

Subject Expert 1 : DR. C. KANDHEEPAN,
Associate Professor,
P.G. Department of Zoology,
A.P.A. College of Arts & Culture,
Palani.

Subject Expert 2 : DR. P. ALAGESAN,
Associate Professor,
P.G. & Research Department
of Zoology,
Yadava College for Men,
Madurai.

Industrialist : DR. M. SIVAKUMAR,
Managing Director,
Quality Care Diagnostic Centre,
Dindigul.

Alumnus : DR. M. EATHEL POLINE,
Assistant Professor of Zoology,
M.V.M. Govt. Arts College,
Dindigul.

STAFF MEMBERS:

- 1) PROF. N. RENUGADEVI,
ASSISTANT PROFESSOR,
DEPARTMENT OF ZOOLOGY,
G.T.N. ARTS COLLEGE,
DINDIGUL.
- 2) PROF. A. JEEVALATHA,
ASSISTANT PROFESSOR,
DEPARTMENT OF ZOOLOGY,
G.T.N. ARTS COLLEGE,
DINDIGUL.
- 3) DR. S. DHARANEEEDHARAN,
ASSISTANT PROFESSOR,
DEPARTMENT OF ZOOLOGY,
G.T.N. ARTS COLLEGE,
DINDIGUL.
- 4) MS. K. SOUNDARAVALLI,
TEACHING ASSISTANT, (SSC),
G.T.N. ARTS COLLEGE,
DINDIGUL.

AGENDA:

Reviewing and examining the syllabus for II year U.G.

RESOLUTION:


- i) Resolved to approve the syllabus for II year.

2) Resolved to replace the Developmental Biology, presently in the IIIrd Semester, to IVth Semester. Similarly it is resolved to introduce the Cell Biology in the IIIrd Semester.

MEMBERS PRESENT:

1. CHAIRMAN:

PROF. K. KRISHNAVENI.


30/11/18

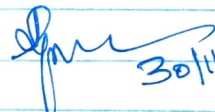
2. UNIVERSITY NOMINEE:

DR. K. BALAKRISHNAN.


30/11/18

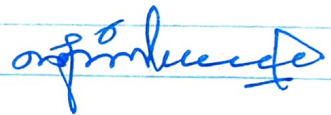
3. SUBJECT EXPERT:

DR. P. ALAGESAN.


30/11/18

4. ~~SUBJECT~~ INDUSTRIALIST.

DR. M. SIVAKUMAR.



5. ALUMNUS:

DR. M. EATHEL POLINE.

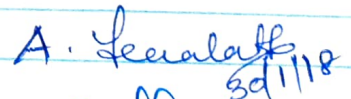

30/11/18

STAFF MEMBERS.

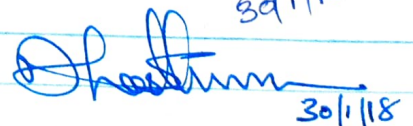
6. PROF. N. RENUGA DEVI.


30/11/18

7. PROF. A. JEEVA LATHA.


30/11/18

8. DR. S. DHARANEEDHARAN.


30/11/18

9. MS. K. SOUNDRAVALLI.


30/11/18

DEPARTMENT OF ZOOLOGY.

The Board of Studies Meeting held on 07.03.2019 at Darwin Hall.

Chairman : Prof. K. KRISHNAVENI,
Head, Department of Zoology

Members List:

University Nominee : DR. K. BALAKRISHNAN,
Associate Professor,
Department of Immunology
School of Biological Science
Madurai Kamaraj University,
Madurai.

Subject Expert 1: DR. C. Kandeepan.
Associate professor & Head
Pg, Department of Zoology,
A.P.A. College of Arts & Culture
Palani.

Subject Expert 2: DR. P. Alagesan,
Associate Professor,
P.G. & Research Department
of Zoology,
Yadava college for men,
Madurai.

Industrialist : DR. M. Sivakumar.
Managing Director,
Quality Care Diagnostic center
Dindigul.

Alumnus : DR. M. Fathel Poline,
Assistant Professor of Zoology

M.V.M. Govt Arts College,
Dindigul.

STAFF MEMBERS:

- 1) Prof. N. Renugadevi,
Assistant Professor,
Department of Zoology,
G.T.N. Arts College,
Dindigul.
- 2) Prof. A. Jeevalatha,
Assistant Professor,
Department of Zoology,
G.T.N. Arts college,
Dindigul.
- 3) Dr. S. Dharamedharan,
Assistant Professor,
Department of Zoology,
G.T.N. Arts college,
Dindigul.

AGENDA

Reviewing and examining the
syllabus for III year U.G.

Resolution :

1) Resolved to approve the
syllabus for III year.

2) Resolved to replace ^{move} the
Microbiology & Immunology presently
in the Vth semester to VIth semester.
Similarly it is resolved to introduce
the Biotechnology in the Vth semester.

MEMBERS PRESENT.

1. CHAIRMAN.

Prof. K. Krishnaveni.

K. Krishnaveni
07/03/19

2. UNIVERSITY NOMINEE :

DR. K. Balakrishnan,

- ABSENT

3. SUBJECT EXPERT :

DR. P. Alagesan.

DR. C. Kandeepan.

P. Alagesan
7/3/19

- ABSENT

4. INDUSTRIALIST :

DR. M. SIVAKUMAR.

M. Sivakumar

5. ALUMNUS.

DR. M. FATHAL POLINE.

M. Fathal Poline
7/3/19

STAFF MEMBERS :

6. DR. N. RENUKA DEVI.

N. Renuka Devi
07/03/2019

7. Prof. A. JEEVALATHA.

A. Jeevalatha
7/03/19.

8. DR. S. DHARANEEDHARAN.

S. Dhara Neetharan
7/3/2019*K. Krishnaveni*

HOD

J. Sathiyabama.

DEAN

ACADEMIC AFFAIRS (SCIENCE-AIDED)
G.T.N. ARTS COLLEGE (AUTONOMOUS)
DINDIGUL - 624 005

**G.T.N. ARTS COLLEGE (Autonomous), DINDIGUL-05
DEPARTMENT OF ZOOLOGY**

ONLINE BOARD OF STUDIES

MINUTES OF THE MEETING

Date: 08.09.2020

Time: 02:00pm

Resolutions:

It is resolved to

1. Introduce the Curriculum Structure based on Outcome Based Education for B.Sc., Zoology students who have joined from the academic year 2020 – 21.
2. Ratify the updated syllabus and course content based on the ongoing Autonomous syllabi, current TANSCHER and Higher Secondary syllabi.
3. Introduce 4 Core, 2 Ancillary, 2 NME courses and Value Education and Environment and Gender studies as common courses.
4. Modify the titles of the following existing courses as below

S.No	Existing Title	New OBE Title
1	Invertebrata	Animal Diversity I- Non Chordates
2	Chordata	Animal Diversity II- Chordates
3	Cell Biology	Cell Structure and Dynamics
4	Developmental Biology	Embryology and Human Reproductive Technology.
5	Invertebrata (Allied Course)	Life and Diversity of Non Chordates
6	Chordata (Allied Course)	Life and Diversity of Chordates

5. Introduce 2 new courses under NME
 1. Pisciculture Management.
 2. Insect and Pest Management.
6. Include titles for all five units in the NME Course I – Pisciculture and Management.
7. Add the topic "Biological control of Insect Pest" in Unit - V in the NME Course II - Insect and Pest Management.
8. Modify the contents in all courses as per the suggestions given by the Board of Study members.

**Placed in the Board of Studies Meeting
held on 08.09.2020 and Approved**

J. Sethiyakumar

DEAN

**ACADEMIC AFFAIRS (SCIENCE - AIDED)
G.T.N. ARTS COLLEGE (AUTONOMOUS)
DINDIGUL - 624 005**

9. Carry over the corrections in the mapping of Course Outcomes with Programme Specific Outcomes.

Members Present:

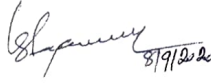
1. **Chairperson**

Dr. N. Renugadevi :


08/09/2020

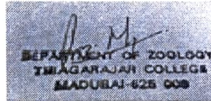
2. **University Nominee**

Dr. V. Shanmugaiah :


8/9/2020

3. **Subject Experts**

1. Dr. M. Murugappan :

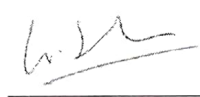


2. Dr. P. Rajaguru :



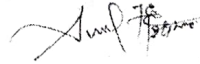
4. **Industrial Expert**

Dr. Suresh Govind :



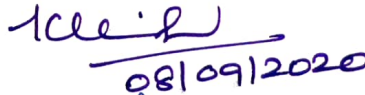
5. **Alumini Representative**

Dr. P. Senthilango :



6. **Staff Members**

1. Mrs. K. Krishnaveni :


08/09/2020

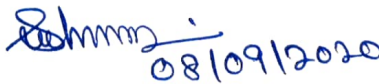
2. Mrs. A. Jeevalatha :


08/09/2020

3. Dr. S. Dharaneedharan :


08/09/2020

4. Mrs. B. Subasri :


08/09/2020


HOD

Placed in the Academic Council Meeting
held on 29.10.2020 and Approved




PRINCIPAL
G.T.N. ARTS COLLEGE
(AUTONOMOUS)
DINDIGUL - 624 005



G.T.N. ARTS COLLEGE (Autonomous), Dindigul
DEPARTMENT OF ZOOLOGY

BOARD OF STUDIES
Minutes of the Meeting

Date:09.03.2021

Time: 10:00 am

The entire course structure of the programme B.Sc Zoology under the OBE pattern for the Academic Year 2021-22 was placed before the BOS committee and approved.

The detailed syllabus of the III & IV semester courses offered under B.Sc Zoology was discussed and approved.

The new question pattern for CIA and End Semester Examination under the OBE pattern for the Academic Year 2021-22 was placed before the BOS committee and approved.

RESOLUTIONS:

It is resolved to

1. Introduce the Core Course Syllabi based on Outcome Based Education along with the blue prints for question papers and evaluation components for II year B.Sc., Zoology students who join the course from the June 2020 onwards.
2. Revamp the preamble and to shift the contents of the courses suggested by the Subject Experts and Committee Members.
3. Offer **Biotechnology** course in the final semester.
4. Include the topic '**Mode of selection**' in the content and to remove the topic '**Present Evolution of Man**' in the Core Course (20UZOC31) "Principle of Genetics and Evolutionary Biology".
5. Remove the topic '**Heat shock proteins**' and '**Genetics Mapping of *E.coli* & Yeast**' in the Core Course "**Molecular Biology**" (20UZOC34).
6. Include the topic '**Genomic DNA isolation plasmid, DNA isolation and quantification of DNA-AGE & PAGE**' (Demonstration) in Core Practical II.
7. Reduce the course content offered in the Allied Course syllabi "**Zoology for Chemist I & II**" (20UZOA31 & 20UZOA41).
8. Refer e portals like e pathsala, INFLIBNET, Shodhganga, Swayam NPTEL, etc., for providing e content to the students.
9. Offer a course on IPR to the students.
10. Introduce the new course "**Soft Skill I & II**" in the Third and Fourth Semesters respectively.
11. Introduce the new Certificate Courses "**Sericulture & Nutrition and Dietetics**" in the Third and Fourth Semesters respectively.

12. Introduce the following New Core and Ancillary Course content(III& IV Semesters)for the Academic Year 2021-22.

SEMESTER III

S.No	Course Title	Unit No	New Topics included
1	Principle of Genetics and Evolutionary Biology	I	Classical Genetics Incomplete dominance, Co dominance, Lethal alleles, Chromosome mapping, Mitochondrial inheritance
		II	Cytogenetics Edward Syndrome, Prenatal diagnostics – Amniocentesis, Chorionic Villus sampling.
		III	Human Genetics 1. Genetic Counselling 2. Genetics of Human Diseases and Inheritance Pattern
		IV	Evolution & Natural Selection Endo-symbiotic theory Kin Selection & Group Selection, Mode of selection – Stabilization, Disruptive and Directional.
	Percentage of Revision	Year 2021	42
2	Zoology for Chemist I		Microbiology Viral disease – HIV and Corona Biotechnology Vectors - pBR 322, pUC 18, Cosmid.
	Percentage of Revision	Year 2021	25

SEMESTER IV

S.No	Course Title	Unit No	New Topics included
1	Molecular Biology	I	Nucleic Acids DNA polymerase and its unique types. Superhelicity and supercoiling in DNA, topology and topoisomerases.
		II	Replication Retroviral replication. DNA damage and repair – Types of DNA damage, mechanism of repair (methyl directed, excision, recombinational, SOS). Recombination – Generalized and Site-specific.
		III	Transcription & Translation RNA polymerases and different stages involved. Monocistronic and polycistronic mRNAs. Regulation of transcription – attenuation & anti-termination.
		V	Gene Transfer Plasmids - structure of F1, Col E1, pSC 101, Ti plasmid, incompatibility
	Percentage of Revision	Year 2021	63
2	Zoology for Chemist II (New Course)	I to V	Poultry farming, Aquaculture, Vermiculture, Apiculture, Sericulture
	Percentage of Revision	Year 2021	100 – NEW

As our students find the existing examination pattern very difficult we would like to replace it with the following, for approval.

Examination Pattern for Core and Allied Courses to be implemented from the Academic Year 2021-2022

Two Continuous Internal Assessment (CIA) and One End Semester Examination (ESE) is conducted. The marks are distributed as follows:

Nature of Study	CIA	ESE	Total
Theory	40	60	100
Practical	40	60	100

Continuous Internal Assessment (CIA) - UG

The pattern of question paper for Continuous Internal Assessment (CIA) for UG for III and IV semesters is as follows. The duration for the Internal test is 1½ hours. Equal importance is given to all the units.

Blue Print of the Question Paper (CIA)				Maximum Marks: 30	
Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Multiple Choice Questions	6	6	1	6
B	Paragraph Questions (Inbuilt choice)	3	3	4	12
C	Essay Questions (Open choice)	3	2	6	12
Total					30

Continuous Internal Assessment components are:

- Two internal assessment is conducted for 30 marks each
(The average of the marks of two internal assessments will be taken $((30 + 30) / 2) = 30$)
- Two Assignment to be submitted for 5 marks each
(The average of two assignments is taken for 5 marks)
- Seminar / Quiz / Group Discussion – 5 marks
(If Quiz is conducted, the average of two quizzes is taken for 5 marks)
- Third test may be allowed for absentees of anyone of the two assessments for genuine reasons.

Continuous Internal Assessment (CIA) - PG

The pattern of question paper for Continuous Internal Assessment (CIA) for PG for III and IV is as follows. The duration for the assessment is 2 hours. Equal importance is given to all the units.

Blue Print of the Question Paper (CIA)				Maximum Marks: 45	
Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Multiple Choice Questions	6	6	1	6
B	Paragraph Questions (Inbuilt choice)	5	5	3	15
C	Essay Questions (Open choice)	5	3	8	24
Total					45

Continuous Internal Assessment components are:

1. Two internal assessment is conducted for 45 marks each
(The marks of two internal assessments will be converted into 30 marks $((45+45)/3) = 30$)
2. Two Quizzes is to be conducted for 5 marks each
(The average of two quizzes is taken for 5 marks)
3. Seminar / Group Discussion – 5 marks
4. Third test may be allowed for absentees of anyone of the two assessments for genuine reasons.

End Semester Examinations (ESE)

Duration of the End Semester Examination is 3 Hours. Equal importance is given to all the units. The pattern of Question Paper for the End Semester Examination is as follows:

Blue Print of the Question Paper (UG & PG)**Maximum Marks:60**

Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Multiple Choice Questions	10	10	1	10
B	Paragraph Questions (Inbuilt choice)	5	5	4	20
C	Essay type Questions (Open choice)	5	3	10	30
Total					60

Evaluation Pattern**Under Graduate**

1. Passing minimum is 35% in external examination, out of 60 i.e. 21 out of 60 will be taken as pass mark for UG students.
2. An aggregate of 40 marks for UG (sum of Continuous Internal Assessment and End Semester Examination).

Post Graduate

1. A Passing minimum of 45% in external examination out of 60 i.e. 27 out of 60 will be taken as pass mark for PG students.
2. An aggregate of 50 marks for PG (sum of Continuous Internal Assessment and End Semester Examination).

Examination Pattern for Part IV Courses

As regards Part IV courses such as Skill Based, Non Major Elective. Value Education, and Environmental Studies Two Continuous Internal Assessment (CIA) and One End Semester Examination (ESE) is conducted .The marks are distributed as follows:

Nature of Study	CIA	ESE	Total
Theory	20	30	50
Practical	20	30	50

Continuous Internal Assessment (CIA) - UG

The pattern of question paper for Continuous Internal Assessment (CIA) for UG is as follows. The duration for the internal test is 1 hour. Equal importance is given to all the units.

Blue Print of the Question Paper (CIA)**Maximum Marks: 15**

Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Paragraph Questions	5	5	2	10
B	Essay type Questions (open choice)	2	1	5	5
Total					15

Continuous Internal Assessment components are:

- Two internal tests are conducted for 15 marks each
(The average of the marks of two internal assessments will be taken
 $((15+15) / 2) = 15$)
- One Assignment is to be submitted for 5 marks

End Semester Examinations (ESE)

Duration of the End Semester Examination is 3 Hours. Equal importance is given to all the units. The pattern of Question Paper for the End Semester Examination is as follows:

Blue Print of the Question Paper (UG)**Maximum Marks: 30**

Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Paragraph Questions	5	5	3	15
B	Essay type Questions (open choice)	5	3	5	15
Total					30

Evaluation Pattern**Under Graduate**

- Passing minimum is 35% in external examination, out of 30 i.e. 11 out of 30 will be taken as pass mark for UG students.
- An aggregate of 40 marks for UG (sum of Continuous Internal Assessment and End Semester Examination).

Examination Pattern for Value Added Courses

As regards Extra Credit Value Added Courses, the study material will be prepared by the course teacher. One Internal Assessment will be conducted for 25 marks and the End Semester Examination will be conducted for 50 marks and the evaluation will be made by the course teacher. The marks are distributed as follows:

Nature of Study	IA	ESE	Total
Theory	20	30	50
Practical	20	30	50

Continuous Internal Assessment (IA)

The pattern of question paper for Continuous Internal Assessment (CIA) for UG is as follows. The duration for the internal test is 1 hour. Equal importance is given to all the units.

Nature of Study	CIA	ESE	Total
Theory	20	30	50
Practical	20	30	50

Continuous Internal Assessment (IA)

The pattern of question paper for Internal Assessment (IA) is as follows. The duration for the internal test is 1 hour. Equal importance is given to all the units.

Blue Print of the Question Paper (CIA)				Maximum Marks: 15	
Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Paragraph Questions	5	5	2	10
B	Essay type Questions (open choice)	2	1	10	10
Total					20

End Semester Examinations (ESE)

Duration of the End Semester Examination is 3 Hours. Equal importance is given to all the units. The pattern of Question Paper for the End Semester Examination is as follows:

Blue Print of the Question Paper

Maximum Marks: 30

Sections	Types of questions	No. of questions	No. of questions to be answered	Marks for each question	Total Marks
A	Paragraph Questions	5	5	3	15
B	Essay type Questions (open choice)	5	3	5	15
Total					30

Evaluation Pattern

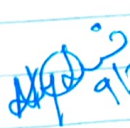
Under Graduate

1. Passing minimum is 35% in external examination, out of 30 i.e. 11 out of 30 will be taken as pass mark for UG students.
2. An aggregate of 40 marks for UG (sum of Continuous Internal Assessment and End Semester Examination).

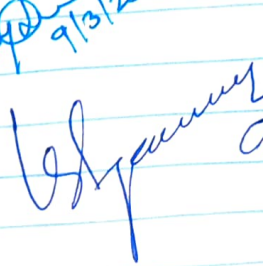
MEMBERS PRESENT:

1. CHAIR PERSON:

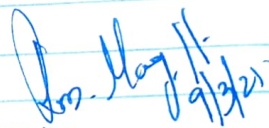
DR. N. RENUKA DEVI


 9/3/2021

2. UNIVERSITY NOMINEE:

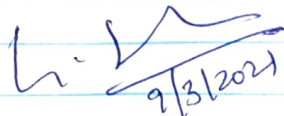
DR. V. SHANMUGAIAH
ASSISTANT PROFESSORDEPARTMENT OF MICROBIAL TECHNOLOGY,
MKU, MADURA

 9/3/2021

3. SUBJECT EXPERTS:

1. DR. R. M. MURUGAPPAN
DEAN CURRICULUM & DEVELOPMENT,
ASSOCIATE PROFESSOR & HEAD
P.G. & RESEARCH DEPT OF ZOOLOGY,
THIAGARAJAR COLLEGE, MADURA

 9/3/21
2. DR. P. RAJAGURU,
ASSOCIATE PROFESSOR
DEPT. OF ZOOLOGY
SRI SRNM COLLEGE,
SATTUR

ABSENT

3. INDUSTRIAL EXPERT:

DR. SURESH GOVINDAN
N. RAMA VARIER AYURVEDA FOUNDATION,
AVN GROUP,
175, VILLACHERY MAIN ROAD
MUNIYANDIPURAM, MADURA

 9/3/2021

4. ALUMNI REPRESENTATIVE.

MS. R. LAVANYA,
M.Sc

R. Lavanya

6. STUDENT REPRESENTATIVE : *Nafiya Parveen*
 BELVI. N. ASHIYA PARVEEN
 III B.SC, ZOOLOGY
 GTN ARTS COLLEGE
 DINDIGUL.

7. STAFF MEMBERS :

1. MRS. K. KRISHNAVENI : *K. Krishnaveni*
2. MRS. A. JEEVALATHA : *A. Jeevalatha*
3. DR. S. DHARANEEDHARAN : *S. Dharaneedharan*
4. MRS. B. SUBASRI : *B. Subasri*
5. Miss. K. SOUNDARAVALLI : *K. Soundaravalli*

Placed in the Board of Studies Meeting
 held on 9/3/2021 and Approved

Placed in the Academic Council Meeting
 held on 30/6/2021 and Approved

J. Sathyaabama

DEAN

ACADEMIC AFFAIRS (SCIENCE - AIDED)
 G.T.N. ARTS COLLEGE (AUTONOMOUS)
 DINDIGUL - 624 005

B. Balaganesan 30/6/21

PRINCIPAL

G.T.N. ARTS COLLEGE
 (AUTONOMOUS)
 DINDIGUL - 624 005

DEPARTMENT OF ZOOLOGY

Board of Studies Minutes

1. The Board of Studies Meeting was held on 28.04.2022 at Department of Zoology.

2. **Chair Person – Dr. N. Renuga Devi**, Assistant Professor and Head

3. Members List

Chair Person:

Dr. N. Renuga Devi

Assistant Professor and Head

Department of Zoology

G.T.N. Arts College

Dindigul

University Nominee:

Dr. M. R. Rajan

Professor and Head

Department of Biology

Gandhigram Rural University

Gandhigram – 624 302

Subject Expert - I

Dr. P B Harathi

Assistant Professor of Zoology

PSGR Krishnammal College

Coimbatore

Subject Expert - II

Dr. M. Pradhap

Assistant Professor of Zoology

Arignar Anna Government Arts College

Namakkal – 02

Industrialist:

Dr. Suresh Govindan

Research Head,

N.RamaVarier Ayurveda Foundation, AVN., Group,

175, Villachery Main Road,

Muniyandipuram, Madurai-04

Alumnus:

Dr. T. Jeyalalitha,

Assistant Professor of Zoology

PG and Research Department of Zoology

Arulmigu Palani Andavar College of Arts and Culture

Palani – 624 601

Recently passed out:

Ms. P. Vidhya Bharathi

M.Sc., II Year
Department of Biology
Gandhigram Rural University
Gandhigram – 624 302

Current Third Year:

Mr. S. Abishek, (Student Representative)

19UZOR013

Department of Zoology

G.T.N. Arts College (Autonomous)

Dindigul.

Faculty Members:

Dr. K. Krishnaveni, M.Sc., M.Phil., Ph.D Assistant Professor and Dean of Mentor & Mentee

Dr. A. Jeevalatha, M.Sc., M.Phil., SET, Ph.D Assistant Professor

Dr. S. Dharaneedharan, M.Sc., M.Phil., Ph.D Assistant Professor

Mrs. B. Subasri, M.Sc., B.Ed., M.Phil., SET Assistant Professor

4. Agenda:

1. Approval of UG V and VI Semester Syllabus
2. Approval of UG practical syllabus modification (inclusion and deletion) under DBT Star College Scheme (For Semesters I to IV)
3. Any other matter

Minutes:

It is resolved to

❖ **Introduce New Courses for the upcoming semesters**

Sl.No	Course Code & Course Title	Change of Content in Percentage
1.	20UZOC51 Research Methodology	100%
2.	20UZOE51 Endocrinology	100%
3.	20UZOE52 Nanobiology	100%
4.	20UZOE53 Biodiversity and Conservation Biology	100%
5.	20UZOS52 Bio-fertilizer and Organic Farming	100%
6.	20UZOE61 Clinical Pathology & Laboratory Techniques	100%
7.	20UZOE62 Food, Nutrition & Public Health	100%
8.	20UZOE63 Insect Diversity	100%
9.	20UZOS61 Intellectual Property Right	100%

10.	20UZOS62 Basic Bioinformatics	100%
11.	20UZOC6S Project	100%

The Title of the Courses is same/changed and the topics are changed

Sl. No.	Course Code & Course Title	Change of Content in Percentage
1.	20UZOC51 Biostatistics and Research Methodology	50%
2.	20UZOC52 Human Anatomy and Physiology	70%
3.	20UZOC53 Biotechnology and rDNA Technology	40%
4.	20UZOS51 Aquaculture	40%
5.	20UZOC61 Biochemistry	30%
6.	20UZOC62 Applied Microbiology	70%
7.	20UZOC63 Immunology and Immuno technology	60%

❖ **Recommendations of Board of Studies by the curriculum review committee and decision of the Board of Studies with regard to Syllabus revision are as follows:**

Semester	Course Code & Course Title	Unit No	Changes proposed	Revision of BoS
V	20UZOC51 Biostatistics and Research Methodology	I	Suggested to combine Unit I & II	Approved
		II	Shit Unit III to Unit I	Approved
		III	Suggested to include Correlation, regression and Chi Square Test	Approved
	20UZOC52 Human Anatomy and Physiology	I	Suggested to include the topic Pancreas	Approved
		II	Suggested to include the topic COVID 2	Approved
		III	Suggested to include the topic Lymphatic System	Approved
		IV	Suggested to include the topics Cranial Nerves, Spinal Nerves and Sensory Organs	Approved
	20UZOC53 Biotechnology and rDNA Technology	I	Suggested to include scope and history of Biotechnology; also to include steps involved in gene cloning	Approved

	20UZOE51 Endocrinology	-	Suggested to include Feed back Mechanism, Metamorphosis in Amphibians, mention the names of the hormones, their functions and diseases	Approved
	20UZOE52 Nanobiology	-	No Suggestions	Approved
	20UZOE53 Biodiversity & Conservation Biology	-	No Suggestions	Approved
	20UZOS51 Aquaculture	I - V	Suggested to change the title Occupational Zoology as Aquaculture and asked include aquaculture related topics	Approved
VI	20UZOS52 Bio-fertilizer and Organic farming	-	Title of the course can be changed as Bio fertilizer and Organic farming	Approved
		II	Suggested to include <i>Pseudomonas</i> and <i>B.thurungians</i>	Approved
		IV	Unit V can be changed as Unit IV Title can be changed as Bio fertilizer production	Approved
		V	Suggested to include Panjakavium.	Approved
		Project	No Suggestions	Approved
	20UZOC61 Biochemistry	V	Suggested to include instrumentation instead of Hormone Biochemistry	Approved
	20UZOC62 Applied Microbiology	Suggested to change course titles Microbiology as Applied Microbiology		Approved
		I	-	Approved
		II	Suggestions were made to reorder the pure culture techniques	Approved
		III	It was suggested to include food quality control	Approved

		IV	Suggestions were made to remove the topic Soil Microbiology as it was already included in the Course Bio fertilizer. Instead of that Industrial Microbiology was introduced.	Approved
		V	It was suggested to remove few topics in Agricultural Microbiology which were included in the Course Bio Fertilizer and few diseases were removed.	Approved
	20UZOC63 Immunology and Immunotechnology	I	Suggested to include the basic history and organs of immune systems	Approved
		II	Suggested to include immune components, cytokine, Immune response	Approved
		III	Suggested to include monoclonal antibodies	Approved
		IV	Suggested to change transplantation immunotechnology to transplantation immunology	Approved
		V	Suggested to change Vaccine technology to immunotechnology – principles and techniques	Approved
	20UZOE61 Clinical Pathology & Laboratory Techniques	I	Compound Microscope and Phase Contrast Microscope can be included	Approved
		II	Normal Values of Clinical Samples can be included	Approved
		III	Suggested to include Hepatitis	Approved
		IV	The topic Different types of Anaemia was included	Approved
		V	-	Approved
	20UZOE62 Food Nutrition &		Suggested to shuffle the unit I as III, II as I	Approved

	Public Health		and III as II	
		II	To add Neutraceuticals and Food supplement SCP.	Approved
		III	-	Approved
		IV	Suggested to include Micro and Macronutrients, deficiency diseases and fortified food	Approved
		V	Suggested to change the topic name as communicable and non – communicable diseases.	Approved
	20UZOE63 Insect Diversity	-	-	Approved
	20UZOS61 Intellectual Property Right	-	-	Approved
	20UZOS62 Basic Bioinformatics	I	Suggested to include only the basics of Bioinformatics	Approved
		II	Suggested to change as Sequence alignment	Approved
		III	Suggested to change as Sequence analysis	Approved
		IV	Suggested to change as Genomics and Proteomics	Approved
		V	Suggested to change as Phylogenetic Methods and Applications	Approved

UG Practical Syllabus under DBT Star College Scheme

		Changes Proposed		
Semester	Course Code & Course Title	Inclusion: DBT New Practical	Deletion: Redundancy Practical	Revision of BoS
II	20UZOC2P Core Practical - I	Identify the morphology of the insects present in our college campus. (Group) Squash preparation of salivary gland of Chironomous larvae for Polytene chromosome		Approved

		(Individual) Prepare the tissue samples for microscopic observation (Individual) Developmental stages in Chick embryo (Individual)		
IV	20UZOC4P Core Practical - II	Genomic DNA extraction, Estimation of Nucleic acids (Demo) Electrophoresis separation of DNA and protein (Demo)		Approved
VI	20UZOC6P Core Practical - III	Estimation of Haemoglobin by Haemoglobinometer (Individual) Estimation of carbohydrates, protein and lipids in the given samples (Individual) Estimation of pH in the given samples (Individual)		Approved
	20UZOC6Q Core Practical - IV	Analysis of human blood total and differential count of RBC, WBC (Individual) Estimate the oxygen saturation of the blood and the pulse rate among the III B.Sc., Zoology students (Individual) Effect of insulin level on human blood glucose (Individual) Comparative study of soil bacterial diversity inside the college campus.(Group) Assessment of bacterial diversity in dye effluent samples in and around Chinnalapatti, Dindigul.(Group) Assessment of bacterial diversity in Dindigul Tannery effluent samples. (Group) Antibiotic sensitivity Test	NIL	Approved

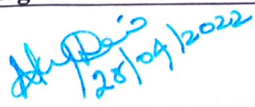

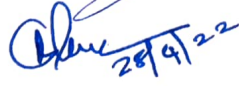

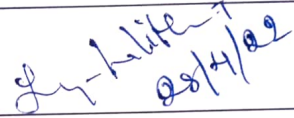
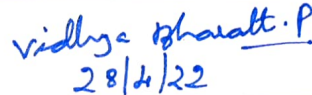
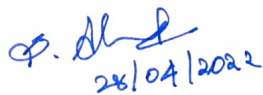

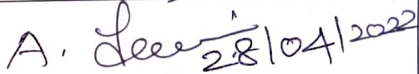
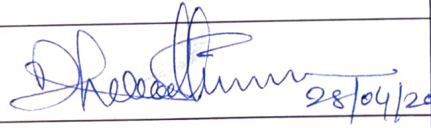
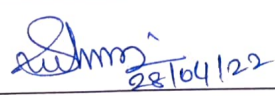

		(Group)		
	20UZOC6R Core Practical - V	Isolation and characterization of DNA from Soil microbial samples (Group) Isolation of DNA from students blood samples (Individual) Isolation and characterization of protein from bacteria and yeast. (Group) Separation of DNA using agarose gel electrophoresis (Group) Isolation of genomic and plasmid DNA (Group) Blotting Techniques – Western (Group)		Approved

Resolutions:

1. The proposed V and VI semester UG syllabus has been accepted and approved by BoS.
2. It is resolved to introduce 10 new courses with new titles in the V & VI semesters respectively.
3. It is resolved to introduce Project (Compulsory) and Internship (Non-mandatory) in the V & VI semesters respectively.
4. It is resolved to include the topics Correlation, regression and Chi Square Test in the III Unit of the Course Biostatistics and Research Methodology.
5. It is resolved to include the topics Pancreas, COVID 19, Lymphatic Systems, Cranial Nerves, Spinal Nerves and Sensory Organs in the course Human Physiology and Anatomy.
6. It is resolved to include the topics History and Scope of Biotechnology, steps involved in gene cloning, in the course Biotechnology and rDNA Technology.
7. It is resolved to include the topics Feedback mechanism, Metamorphosis in Amphibians, names of the hormones, their functions and diseases in the Course Endocrinology.
8. It is resolved to change the title of Occupational Zoology as Aquaculture.


9. It is resolved to change the title of Bio fertilizer as Bio fertilizer and Organic farming and to include *Pseudomonas* and *B.thurungians* and Panjakavium.
10. It is resolved to include the topic Instrumentation instead of Hormone Biochemistry.
11. It is resolved to include the topic food quality control and to add a unit Industrial Microbiology instead of Soil Microbiology.
12. It is resolved to include the topics Basic History and Organs of Immune Systems, Immune Components, Cytokine, Immune response and Monoclonal Antibodies.
13. It is resolved to include the topics Compound Microscope, Phase Contrast Microscope, Normal Values of Clinical Samples, Hepatitis and Different types of Anaemia.
14. It is resolved to include the topics Micro and Macronutrients, deficiency diseases and fortified food
15. It is resolved to introduce Value Added Courses **Vermitechnology** and **Beekeeping** are introduced for V& VI Semesters.
16. On the whole 50 % of revision is made for the V Semester and 53 % VI Semester.
17. The proposed inclusion and deletion of UG DBT Star College Scheme Practicals have been accepted and approved by the BoS.
18. These modifications will be implemented from the Academic year 2022-2023 onwards.

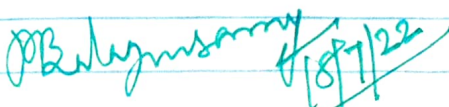
Members Present

Sl.No	Name of the Member	Signature
1.	Chairperson Dr. N. Renuga Devi	 28/04/2022
2.	University Nominee Dr.M.R.Rajan	
3.	Subject Expert I Dr.P BHarathi	
4.	Subject Expert II Dr. M. Pradhap	 28/4/22
5.	Industrial Expert Dr. Suresh Govindan	
6.	Alumni Representative (Staff) Dr. T. Jeyalalitha	 28/4/22
7.	Alumni Representative (Student) Ms. P. VidyaBharathi	 28/4/22
8.	Student Representative Mr. S. Abishek	 28/04/2022
9.	Staff Members	
	1. Dr. K. Krishnaveni	 28/04/2022
	2. Dr. A. Jeevalatha	 28/04/2022
	3. Dr. S. Dharaneedharan	 28/04/2022
	4. Mrs. B. Subasri	 28/04/22
	5. Ms. K. Soundravalli	 28/04/22

Placed in the Board of Studies Meeting
held on 28.4.2022 and Approved

Placed in the Academic Council Meeting
held on 18/7/2022 and Approved


DEAN 28.4.2022
ACADEMIC AFFAIRS (SCIENCE-AIDED)
T.N. ARTS COLLEGE (AUTONOMOUS)
DINDIGUL - 624 005


18/7/22