

MINUTES OF THE MEETING FOR SUBJECT BOARD OF ZOOLOGY

Date: 28th July 2017

Time: 2.30 pm

Venue: Biological sciences staff room (S-16),
Ramnarain Ruia Autonomous College,
Mumbai-19

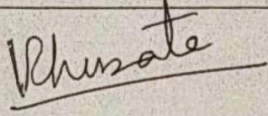
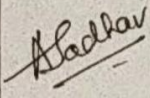
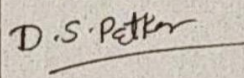
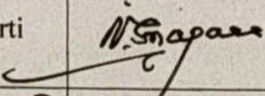
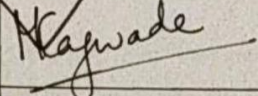
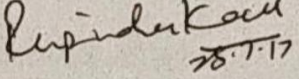
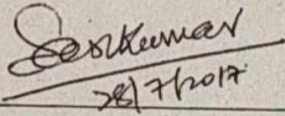
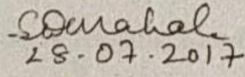
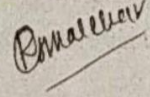
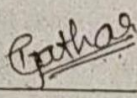
Composition of Subject Board of Zoology of Ramnarain Ruia Autonomous College as per Statute S. 626.2 of Mumbai University 2017-18

- Head of the Department – **Dr. Vaishali T. Phusate**, Associate Professor.
- Chairperson BoS in Zoology, University of Mumbai – **Dr. Anita Jadhav**,
Associate Professor,
ICL College,
Navi Mumbai.
- Two senior teachers by rotation – **Dr. Durga Patkar**, Assistant Professor.
- Three subject experts nominated by the Principal/Director –
 1. **Dr. V. N. Magare** – Principal, Kirti College and
Head, Department of Zoology, Mumbai.
 2. **Dr. Mrinalini Kagawade** – Assistant Professor,
Department of Zoology,
Elphinstone College, Mumbai.
 3. **Dr. Rupinder Kaur** – Associate Professor,
G. N. Khalsa college, Mumbai.
- Two Professional experts from Industry or any other field as the case may be –
 1. **Dr. Sasi Menon** – Director, Therapeutic drug monitoring Laboratory,
Mumbai.
 2. **Dr. Smita Mahale** – Director, National Institute for research in
Reproductive Health, Mumbai.
- Two students nominated by the Principal/Director on the basis of marks at the
preceding examination –
 1. **Miss. Radhika Malekar** (T.Y.B.Sc.)
 2. **Mr. Tejas Jathar** (T.Y.B.Sc.)

❖ All members of the board are present

Date - 28th July 2017

ATTENDANCE

Sr. no.	Member's Name	Signature
1.	Dr. Vaishali Phusate (Head, Department of Zoology, RamnarainRuia Autonomous College, Mumbai)	
2.	Dr. Anita Jadhav (Chairperson, BoS in Zoology, University of Mumbai)	
3.	Dr. Durga Patkar (Senior Teacher, Department of Zoology, RamnarainRuia Autonomous College)	
4.	Dr. V. N. Magare (Principal, Head, Department of Zoology, Kirti College, Mumbai)	
5.	Dr. Mrinalini Kagwade (Head, Department of Zoology, Elphinstone College, Mumbai)	
6.	Dr. Rupinder Kaur (Associate Professor, G. N. Khalsa College, Mumbai)	 28.7.17
7.	Dr. Sasi Menon (Director, Therapeutic drug monitoring Laboratory, Mumbai)	 28/7/2017
8.	Dr. Smita Mahale (Director, National Institute for Research in Reproductive Health, Mumbai)	 28-07-2017
9.	Miss Radhika Malekar (Student, Department of Zoology, RamnarainRuia Autonomous College, Mumbai)	
10.	Mr. Tejas Jathar (Student, Department of Zoology, RamnarainRuia Autonomous College, Mumbai)	

Objective of the meeting:

- To discuss the proposed changes in the syllabus of Zoology subject, Ramnarain Ruia Autonomous College, for F.Y.B.Sc., S.Y.B.Sc., T.Y.B.Sc., M.Sc. – I and M.Sc. – II.
- Take a note of the suggestions regarding the methodology for innovative teaching and evaluation technique in the syllabus from committee members to prepare the syllabi.
- To take a final decision based on the suggestions given by the committee members to prepare the syllabi.
- To suggest the panel of examiners to examination committee of the College.
- To discuss the research and other academic activities.

Agenda of the meeting:

1. Change in F.Y.B.Sc. Theory syllabus –

- **Semester I** - The Unit 3 (Footsteps to follow) Paper ZO101, from University of Mumbai syllabus has been replaced by Unit 1 (Levels of Organization-I).
- **Semester II** - The Unit 1 and 2 (Population Ecology + Ecosystem) as Unit 3 of Paper ZO201, from University of Mumbai syllabus has been merged to Unit 2 (Population ecology and Ecosystem).
- **Semester II** - Unit 1 (Levels of Organization-II) has been added Paper ZO201.

2. Changes in F.Y.B.Sc. Practical syllabus –

- **Semester I** - Practicals related to changed Unit 1 (Levels of Organization-I) has been added to ZOP1 (course 1).
- **Semester I** - Practical (related to Bird structures) and Project on birds has been converted to one single project on Birds and Project on Butterflies has been added to ZOP1 (course 1).
- **Semester I** - Practical (study of venomous and non-venomous snakes and other reptiles) has been converted to Field visit, in ZOP1 (course 1).
- **Semester I** - Practical (Study of Transgenic animals) has been converted to Project/Assignment, in ZOP1 (course 2).
- **Semester I** - Practical (DNA fingerprinting) has been converted to Field visit to Forensic Laboratories (Kalina), in ZOP1(course 2).
- **Semester II** - Practical (Estimation of Dissolved Oxygen) added to ZOP2 (course 3).
- **Semester II** - Practical (related to Food chain and Food webs) has been converted to project in surrounding area, in ZOP2 (course 3).

- **Semester II** - Field visit to National park has been added, in ZOP2 (course 3).
 - **Semester II** - Training workshop related to Health and Hygiene has been added, to ZOP2 (course 4).
 - **Semester II** - Project (Health and hygiene education) with videographic report submission has been added, to ZOP2 (course 4).
- 3. Changes in S.Y.B.Sc. Theory syllabus –**
- No changes
- 4. Changes in S.Y.B.Sc. Practical syllabus –**
- **Semester III** - Project report on 'Human traits analysis with respect to Mendelian Inheritance' has been added to, ZOP3 (course 5).
 - **Semester IV** - Practical 'Estimation of Salinity by refractometer' has been changed to 'Estimation of Salinity by Argentometric method' from ZOP4 (course 10).
 - **Semester IV** - Project on Pollution has been added to, ZOP4 (course 10).
- 5. Changes in T.Y.B.Sc. Theory syllabus –**
- **Semester V** - Paper ZO501 (Levels of Organization: Invertebrate type study) has been changed completely with addition of different Type studies.
 - **Semester VI** - Paper ZO601 (Levels of Organization: Vertebrate type study) has been changed completely with addition of different Type studies.
- 6. Changes in T.Y.B.Sc. Practical syllabus –**
- **Semester V** - Practicals related to Hydra, Cockroach and Starfish has been added to, Practicals of ZO501.
 - **Semester V** - Practical related to 'Immunodiffusion' has been added to Practicals of ZO502.
 - **Semester V** - Practical of ' Human Trait Analysis' has been removed from, Practicals of ZO503.
 - **Semester V** - Practical related to *Drosophila* mutants has been changed to performance practical from, Practicals of ZO503.
 - **Semester VI** - Practicals related to Shark, Frog, Pigeon and Rat has been added to, Practicals of ZO601.

7. Changes in T.Y.B.Sc. AC (Marine science) Theory syllabus –

- **Semester V** -Unit 5 to Unit 8 has from University syllabus of ACMSC501, has been deleted.
- **Semester V** -(In case retained) Unit 6 (Marine science research) of ACMSC501, has been changed.
- **Semester VI** -Unit 1, Unit 6 to Unit 8 from University syllabus of ACMSC601, has been deleted.

8. Changes in T.Y.B.Sc. AC (Marine science) Practical syllabus –

- **Semester V** -Practical (Chemical analysis of sea water) of ACMSC5P1, has been modified.
- **Semester VI** -Practicals (COD and Mangrove plants) has been added to, ACMSC6P1.

9. Changes in M.Sc I (Semester I and Semester II) and M.Sc. II (Semester III and Semester IV) [Theory and Practical] syllabus –

- No changes

Meeting:

Opening sentence was given by Dr. Vaishali Phusate, and all members present introduced themselves. Dr. Vaishali Phusate briefly introduced the proposed changes in the syllabus. Agenda of the meeting was provided to all the members present for the meeting. Clarity was given to all members regarding 'Changes in the syllabus to be discussed in the meeting will be just for Ramnarain Ruia Autonomous College' and pattern of implementation of changes for all three years of B.Sc. and two years of M.Sc. (Zoology) was discussed.

Points discussed:

1. Change in F.Y.B.Sc. Theory syllabus –

- Semester I - The Unit 3 (Footsteps to follow) Paper ZO101, from University of Mumbai syllabus has been replaced by Unit 1 (Levels of Organization-I).

Suggestions given:

- Typographic mistake in unit wise distribution has to be changed accordingly.
- Triploblastic coelomate organization (Phylum: Mollusca and Phylum: Echinodermata) from Semester II Unit 1, to be merged in Semester I Unit 1.
- Reframe the heading/title of Semester I, Unit 1 as **Levels of Organization: Non-chordates**.

Decision made:

- Removal of Unit 3 (Footsteps to follow) from syllabus of University of Mumbai was approved by everyone.
- Inclusion of Unit 1 (Levels of Organization: Non-chordates) in Semester I was accepted by all members.
- Semester II - The Unit 1- Population ecology and Unit 2 - Ecosystem, from syllabus of University of Mumbai has been merged as Unit 2 (Population ecology and Ecosystem).

Suggestions given:

- Biogeochemical cycles: Sulfur cycle should be added to the list.
- Biogeochemical cycles should be taught with respect to current ecological issues.
- IUCN nomenclature for rare and endangered species should be introduced.
- Typing mistake with section of 'Population and community ecology', needs to be corrected.

Decision made:

- Unit 2 (Population ecology and ecosystem) was permitted and approved with above mentioned additions to the subunits.
- **Semester II - Unit 1 (Levels of Organization-II) has been added Paper ZO201.**

Suggestions given:

- Unit should start from Hemichordata and cover all chordates.

Decision made:

- Inclusion of Unit 1 (Levels of Organization: Chordates) covering all chordates was accepted by all members.

2. Changes in F.Y.B.Sc. Practical syllabus –

- **Semester I - Practicals related to changed Unit 1 - Levels of Organization: Non-chordates has been added to ZOP1 (course 1).**

Suggestions given:

- Practicals related to Level of organization and classification in Non-chordates should be included in Semester I to complement theory unit.
- Examples of animals for each phylum should be added in the syllabus.

Decision made:

- Inclusion of practicals related to Level of organization and classification of Non-chordates with examples of animals for each phylum to complement theory unit was approved.
- **Semester I - Practical (related to Bird structures) and Project on birds has been converted to one single project on Birds and Project on Butterflies/Insects has been added to ZOP1 (course 1).**

Suggestions given:

- Confirm marks distribution for internal assessment for project and change in paper accordingly.
- Project can be done in groups.
- Mention specificity of Local area for project to avoid ambiguousness in area selection.
- Guidance should be given to the student to prepare appropriate observation table before going on field.

- **Semester V-Practical of 'Human Trait Analysis' has been removed from, Practicals of ZO503 and has been included in S.Y.B.Sc. Semester III, Course 5.**

Decision made:

- Omission approved.
- **Semester V-Practical related to *Drosophila* mutants has been changed to performance practical from, Practicals of ZO503.**

Suggestions given:

- This practical should be turned into project.
- Teach students to maintain the culture, monitoring traits, keep a record and submit the report.
- *Drosophila* mutants can be outsourced from Sophia College.

Decision made:

- *Drosophila* practical will be a project and will be reframed accordingly.
- **Project component for Semester V and Semester VI – Each student will prepare Project proposal and carry out the project work.**

Decision made:

- Each student will prepare Project proposal and carry out the project work. This decision was approved by everyone.

- ❖ **Proofreading of curriculum should be done before copy goes on the website.**
- ❖ **Approval is needed from Subject board members for inclusion of Restriction Enzymes in topic 'Enzymes involved in Genetic engineering', ZO503, Unit 2.**

7. Changes in T.Y.B.Sc. AC (Marine science) Theory syllabus –

- **Semester V -Unit 5 to Unit 8 has from University syllabus of ACMSC501, has been deleted.**

Decision made:

- Retention of only four units, Unit 1 (Zonation of sea and marine biodiversity), Unit 2 (Physical Oceanography and Ocean related climatic changes), Unit 3 (Chemical Oceanography), and Unit 4 (Oceanographic instruments) and omission of other optional units were accepted by all committee members.
- **Semester VI -Unit 1, Unit 6 to Unit 8 from University syllabus of ACMSC601, has been deleted.**

Decision made:

- Retention of Unit 2 (Marine value added products), Unit 3 (Introduction to quality control, preservation and processing), Unit 4 (Fish pathology), and Unit 5 (New avenues) from syllabus of University of Mumbai with rearranged Unit numbers and omission of other optional units were approved by all committee members.

8. Changes in T.Y.B.Sc. AC (Marine science) Practical syllabus –

- **Semester V -Practical (Chemical analysis of sea water) of ACMSC5P1, has been modified.**

Suggestions given:

- Numbering of the practicals in ACMSC5P1 should be revised and rearranged.
- In practical 'Study of Zooplanktons', the names of the zooplanktons should be mentioned from different classes/orders.
- In question paper pattern of ACMSC5P1, question 4a should be reframed 'Submission of five original photographs of different sea shores/ crafts/ gears/ marine organisms/ sea weeds along with brief technical note'.

Decision made:

- Addition of Nitrates and CO₂ estimation for Chemical analysis of Sea water, in Semester V (ACMSC5P1) Practical was approved by everyone.
- Practical 'Study of zooplanktons: Lucifer, Mysis, Fish eggs, Sagitta, Doliolaria larva, Zoea and copepods' was approved.
- Reframing of question 4a, in question paper pattern of ACMSC5P1 as 'Submission of five original photographs of different sea shores/ crafts/ gears/ marine organisms/ sea weeds along with brief technical note' was approved.

- Semester VI - Practicals (COD and Mangrove plants) has been added to, ACMSC6P1.

Suggestions given:

- Reframe the words of practical 'Identification of Common edible marine fauna'.
- Addition of aquaculture fishes in the same practical as new sub-topic.
- In question paper pattern of ACMSC6P1, Question 1. Identification, the specimens at different spots should not be mentioned.
- Change the word 'Estimation' to 'Estimate' in question paper pattern wherever applicable.
- In question paper pattern of ACMSC6P1, Question 3. Identify and draw Foraminiferan shells' should be reframed as 'Identify and draw Foraminiferan shells from the given samples.
- In question paper pattern of ACMSC6P1, Question 3. 'Identify and comment on fish diseases and their remedial measures (any 3)' should be reframed as 'Identify the fish disease depicted in the photograph and comment on their remedial measures'.

Decision made:

- Change of practical 'Identification of Common edible marine fauna' to 'Study of common marine fauna' was accepted by all members.
- Addition of Cray fish, *Scylla seratta*, *Macrobrachium rosenbergii*, Mussel culture, pearl culture to the practical 'Study of common marine fauna' as a sub-topic was approved by all members.
- Addition of 'Estimation of Chemical Oxygen Demand (COD) was accepted.
- Addition of 'Identification of common Mangrove plants' was approved by all committee members.
- Deletion of practical 'Identification of feeding habits of fish by studying jaws and gills' was permitted by everyone.
- Change in Question 1 of question paper pattern of ACMSC6P1, as 'Identify and describe spots from 'a' to 'e' was approved.
- Change in Question 3 of question paper pattern of ACMSC6P1, as 'Identify and draw Foraminiferan shells from the given samples. (any 3)' was approved.
- Change in Question 3 of question paper pattern of ACMSC6P1, 'Identify the fish disease depicted in the photograph and comment on their remedial measures' was approved.

9. Changes in M.Sc I and M.Sc. II (Theory and Practical) syllabus – No changes: Syllabus of University of Mumbai to be followed as it is.

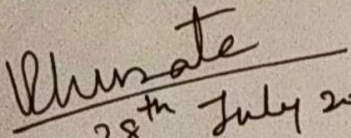
Decision made:

- Approved as it is by all committee members.

Extra Suggestions:

- Some exercise can be included as a part of internal assessment to equip students for Competitive exams.
- Online test
- A group of students can be selected on the basis of their interest level and should be encouraged to do internships at various institutes.

Since all the agenda were discussed, therefore the meeting was concluded and vote of thanks was given by Dr. Vaishali T. Phusate.


28th July 2017

Dr. Vaishali T. Phusate.
Associate Professor and Head,
Department of Zoology

Ramnarain Ruia Autonomous College

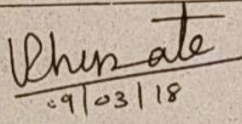
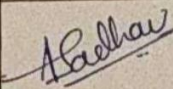
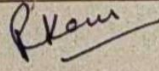
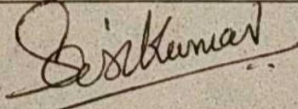
Department of Zoology


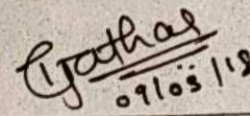
Second Subject Board Meeting

Attendance

Date: 9th March 2018

Signature of Members of Subject Board of Zoology:

Sr. no.	Member's Name	Signature
1.	Dr. Vaishali Phusate (Head, Department of Zoology, Associate Professor, Ramnarain Ruia Autonomous College, Mumbai)	 09/03/18
2.	Dr. Anita Jadhav (Chairperson, BoS in Zoology, University of Mumbai)	
3.	Dr. Durga Patkar (Assistant Professor, Department of Zoology, Ramnarain Ruia Autonomous College)	
4.	Dr. V. N. Magare (Principal, Kirti College & Head, Department of Zoology, Mumbai)	Absent
5.	Dr. Mrinalini Kagwade (Assistant Professor, Department of Zoology, Elphinston College, Mumbai)	Absent
6.	Dr. Rupinder Kaur (Associate Professor, G. N. Khalsa College, Mumbai)	
7.	Dr. Sasi Menon (Director, Therapeutic drug monitoring Laboratory, Mumbai)	
8.	Dr. Smita Mahale (Director, National Institute for Research in Reproductive Health, Mumbai)	Out of Mumbai

9.	Miss Radhika Malekar (Student, Department of Zoology, RamnarainRuia Autonomous College, Mumbai)	
10.	Mr. Tejas Jathar (Student, Department of Zoology, RamnarainRuia Autonomous College, Mumbai)	

S.P. Mandil's Ramnarain Ruia Autonomous College

Department of Zoology

Second Subject Board meeting

Date: 9th March 2018

Time: 2.00pm onwards

Venue: Department of Zoology, S-17

Agenda of the meeting:

1. To discuss and approve changes in syllabus of F.Y.B.Sc., S.Y.B.Sc., and T.Y.B.Sc.
2. To discuss and approve changes in syllabus of T.Y.B.Sc. applied component.
3. To discuss and approve Question paper pattern

Minutes of the meeting

Dr. Vaishali Phusate, Head, Department of Zoology, addressed all the present committee members and initiated the meeting by explaining the agenda of the meeting. The discussion started with F.Y.B.Sc. syllabus.

F.Y.B.Sc. Syllabus

Cloning example Dolly in Paper II semester I, Rather than specifying just Dolly, include natural and artificial examples. Keep Dolly, specify more examples that needs to be included. Specify examples, like, Dolly, Mouse strains, Macaque strains, Natural, mainly seen in plants.

Clonig – Artificial and Natural, with example like..

Blotting techniques to be added. Add as Principles of Blotting (All three – Southern, Northern and Western)

Semester II –Paper I - addition of three new National parks – Approved

Semester II- Paper II – Addition of all types of Anemia – Specify five types of Anemia to be included. Deletion of Rickets because there was and Addition of new subtopic as Importance of vitamins.

Shifting of Swine flu and dengue to unit 3 in contagious diseases

Diabetes shifted from unit 3 to vitamins. And Addition of both types of diabetes.

Deletion of BMI and its significance from theory and cover only in practical

Addition of Anthropometry – Basic principles and applications of Anthropometry – approved

No changes in Unit 2

Addition of all types of Hepatitis in unit 3- too vast? Is it practical to include all? Oral cancer should be there, but teaching this topic is important.

Can put diseases for identification in practical and those can be removed from theory. Like, oral cancer, TB, bronchitis. - approved

Can remove prevention, And diagnosis and symptoms can be clubbed together. Symptoms and Precaution should be removed. Rather than remedy put Management/treatment

Hepatitis and its types should be included - approved

S.Y.B.Sc. Syllabus

Semester III Paper II Unit I

Instead of eliminating the topic Cockroach and Hydra as it is going to be implemented in T.Y.B.Sc syllabus.

Change the sentence 'with ref to' and provide examples related to each organism provided.

Change the example Cockroach to Housefly.

Nutritional apparatus has to be precisely taught with reference its feeding adaptations giving examples.and add the sentence -Structure and functions: Invertebrates-eg:Amoeba- Pseudopodia, Hydra-Tentacles, Earthworm-Suction, Cockroach-biting and chewing,. Eg. Vertebrates-Fish, Reptiles-Calotes

Nutritional apparatus of Coelenterate/ Annelid/ Arthropod as new sub-unit.

The topic Amphioxus, Bivalves, Pigeon and Ruminant has to be shuffled to Practicals.

Functional Physiology with respect to Man as reframed sub-unit.

The sub-unit 1.3 Comparative Study of Excretory and Osmregulatory Systems with respect to: title had to be input.

Semester III Paper II Unit II

2.1 Sub-unit – The topic ' Rabbit' has to be added and pigeon and frog should be deleted.

2.2. Structure and mechanism of heart in Human needs to be deleted.

Addition of the topic in sub-unit 2.2: Physiology of Human Heart

Semester III Paper II Unit III

Addition of the topic In Sub-Unit 3.1: Chemical and electrical and Feedback mechanism in Endocrine regulation sub-topic was approved.

Semester III Practical Paper II

Addition of operculum movement of fish in the practicals

Hydra feeding-Tentacular feeding (not available then documentation-photos/videos)

Feeding apparatus of Prawn and Sepia-Radula

Letter to the Ethical committee about the List of animals required for the practicals and confirm that the animals from the market has to be in dead condition. Ethical committee permission has to be granted for the same.

Semester III Practical Paper I

Addition:

Polyploidy in Garlic

Drumstick in Human neutrophil

Finger printing Lifting techniques, Patterns and pedigree analysis.

Deletion:

Mitosis using Onion root tip

Mounting of Barr bodies

Semester III Practical Paper III

Addition to the Major question:

Quantitative estimation of Lipid content from two samples of milk.

The question measurement of density of milk (reduce less samples) has to be merged with the question -making of paneer and calculate the amount of paneer obtained as major question.

Semester IV Paper I Theory

Unit 1: Addition of the topic: Evolution of Man rather than Horse

Unit 3: Current leading institutions in India to be given as Practical Assignment.

Plagiarism topic has to diversify into sub-topics which need to mention as concept, its types and different ways of committing plagiarism and Ethics and prevention, Detection of plagiarism. This topic has to be shuffled to Practical paper I.

Unit 3.1: Process of science : No changes– Input of case studies and provide project proposal for review

Semester IV Practical Paper I

Current leading institutions in India to be given as Practical Assignment.

Plagiarism topic has to diversify into sub-topics which need to mention as concept, its types and different ways of committing plagiarism and Ethics and prevention, Detection of plagiarism.

SYBSc. Semester IV Paper II Unit 2

Addition was approved

2.1 Disorder of the endoplasmic reticulum: Cystic fibrosis

2.2 Congenital disorders of glycosylation,2.3

SYBSc. Semester IV Paper II Unit 3

Reframing of the unit:

3.1 Water as an universal solvent should be added

3.2 Chemistry of water molecule

3.3 Properties of water molecule: osmoregularity, polarity, surface tension

Connect its significance to living organisms

SYBSc. Semester IV Paper III

Objective and desired objectives has to be changed according to the changes in the pattern according to the change in the syllabus.

Unit 1: Addition of Types and Pattern of Cleavage

Addition of topic Types of Blastulae with examples based on comparative study.

SYBSc. Semester IV Paper III Unit 3:

No changes.

SYBSc. Semester IV Paper III Practical

Addition of Fate maps-Vital staining in Practicals.

T.Y.B.Sc. Syllabus

Semester V – Paper I – Unit I change in title – approved

Inclusion of water vascular system. It should be done under

Paper II – No change Unit 4 subunit 3 Tumor and transplantation – Introduction and types of grafts. Immunologic basis of graft rejection – MHC compatibility. Rest delete.

Immunomodulator – only one example of drug.

Delete Tumor antigens and immune surveillance. Just keep Immunotherapy in cancer.

Paper III – Modification in PCR techniques – Principles, working and applications of thermocycler. Addition of Introduction to RTPCR. Deletion of Variants. SNP and their applications. Application subunit can be deleted. Genetic counseling – cytosocial and ethical aspects. Modify.

Changes in Tissue culture subunit 4 – modification approved.

Hydra practical –staining of nerve endings by methylene blue stain

Arrange a workshop for Hydra/for microtomy/fish instead of practicals.

Garlic root tip polyploidy – swell and burst technique. – Chromosome spread can be printed and arranged. –Karyotype spread instead of analysis. Inclusion of practical.

Semester VI – Paper I Unit I Economic importance included – approved

Urinogenital system should be kept as it is

Addition of Osteology – Vast – Just introduction –Not needed.

Deletion of Skin – Modify as epidermal structure – can not delete

Paper II – Addition of Enzyme specificity – Include it before Active site concept.

Deletion of Serine protease –Approved

Mechanism of enzyme action should be included with active site

Hill equation – deletion approved

Modification in Acclimatisation and acclimation – should be understood as a part of homeostasis

So no change needed.

Addition of terminologies in thermoregulation and osmoregulation approved – but need to specify. Add it as specific terms.

Addition of L.S of kidney – approved

Deletion of Pancreas – Approved

Addition of Leishmania as protozoal disease – not approved, instead put antamoeba

Deletion of pigmentation and Addition of inhales, injected and ingested pigments – approved

Necrosis should change the position – arrange the order

Deletion of applied pathology – Link applied and forensic together. Modify as applied pathology and its applications. Mention clinical pathology briefly. Tumor pathology add.

Deletion from bioinformatics not needed.

Assignments can be given to them for bioinformatics.

Parametric and non-parametric tests, Regression and correlation – remove from theory put in practicals

Include type I and Type II errors in testing the hypothesis.

Sustainable development by case studies modify accordingly Specific case studies with mentions. Do not remove just modify with current case studies

Rest all approved from Paper IV

T.Y.B.Sc. Applied component Syllabus Semester V

All changes approved

T.Y.B.Sc. Applied component Syllabus Semester VI

All changes approved

Semester V – practical – Remove pH, CO₂, salinity. Keep the remaining topics.

Question paper patterns

Theory question paper

All changes approved

Class test: All changes approved.

FYBSc Theory question paper patterns:

All changes approved.

FY and SY theory pattern - APPROVED

TY theory pattern – changes in Q.3 A– increase options -5 marks each

TYBSc Paper IV Semester V

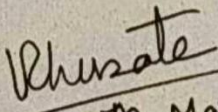
Add 5 marks for the journal and research paper proposal for 20 Marks.

Research paper review of the Research Paper Proposal as an option for Research Paper Presentation in Semester V and Semester VI. The review of the paper has to be presented and work has to be done based upon any five bibliography of the research project.;

The teacher has to provide the topic of the research project which he/she is going to do the review and present further.

TYBSc Semester VI - 5 marks for journal and 20 marks for Research Paper presentation

Since all the agenda were discussed, therefore the meeting was concluded and vote of thanks was given by Dr. Vaishali T. Phusate.


9th March 2018

Dr. Vaishali T. Phusate.

Associate Professor and Head,

Department of Zoology.