

DEPARTMENT OF ZOOLOGY

Minutes of the Meeting of the Members of BoS in Zoology 2022-2023

- **Date: 13th April 2023**
- **Day: Thursday**
- **Timing: 2.00 pm**
- **Mode: Zoom Room**

Meeting of the members of the Board of Studies in Zoology was held on Thursday 13th April 2023 at 2.00 pm via Zoom Meeting Platform.

Following members were present:

- 1) Dr. Sasikumar Menon: External Expert Member
- 2) Dr. Deepti Sahastrabuddhe : External Expert Member
- 3) Mr. Brijesh Verma: External Expert Member
- 4) Mrs. Sanika Gupte: Chairperson & Member
- 5) Dr. Bindu Achary: Member
- 6) Dr. Janhavi Bhagwat : Member
- 7) Dr. Geeta Joshi : Member
- 8) Mr. Deepak Poojary: Member
- 9) Mrs. Sushma Singh: Member
- 10) Mr. Bhagirat Mishra: Member

Dr. Meghana Talpade and Ms. Anju Singh could not attend the meeting due to personal unavoidable circumstances.

AGENDA :

The agenda for the meeting is as follows;

1. Syllabus revision for UG and PG courses.
2. Field trip assessment criteria.
3. Internship program for PG.
4. VAC and DSE course updates and discussion.
5. Dept. Activities for Diamond jubilee celebration.
6. Interdisciplinary activities.
7. Preparedness for NEP.
8. Any other matter in the interest of student welfare

The Board of Studies meeting was conducted by the Department of Zoology on 13th April 2023 at 2.00 p.m in the conference room. Faculty members of the Zoology dept. were present in the campus while the external expert members joined the meeting via online Zoom mode. The session began by the welcome address by Mrs. Sanika Gupte, Head, Department of Zoology and Chairperson for the BoS meeting. The Chairperson welcomed Dr. Sasikumar Menon, Mr. Brijesh Verma and Dr. Deepti Sahastrabuddhe. In her communications, she updated the members about the activities conducted by the department for the Diamond jubilee celebrations and also on the various interdisciplinary activities. She proposed and presented the NEP layout designed for the department and updated the members about the DSC pattern adopted by the institution under NEP. Since the revised F.Y.B.Sc syllabus has to be implemented with immediate effect from academic year 2023-2024, the main focus was on the same. In this context, the existing syllabus of F.Y.B.Sc was revisited and an exercise of reconstructing the F.Y.B.Sc syllabus by all the teacher members was done prior to the meeting. On the day of the meeting, the Chairperson presented a grid of the F.Y.B.Sc Zoology syllabus to elevate each topic to its next level of understanding and application related to aspects of economics, ecological significance, industrial applications, advanced techniques etc. The following discussions and revisions were made;

Point 1: Dr. Sasikumar suggested the need for assignments and case study topics based on paper 1. He emphasised on the addition of topics like ‘Dissociation constant of water’ , ‘Conduction of water and its purity’ in paper 2. His suggestions were accepted by the concerned teachers and the said topics shall be incorporated in the syllabus.

Point 2: Dr. Deepti raised her worries regarding the extensive range of topics encompassed under the Unit of Basics in Animal Biotechnology. In response, Dr. Bindu Achary, a senior faculty member in the department, clarified to her about the accuracy and practical implementation of the concepts taught in the first-year class

Point 3: The generic elective courses were also discussed in the meeting. Dr. Sasikumar and Dr. Dipti suggested that the topic of climate change should be renamed as ‘Global warming’ or ‘Green house effects’ or as ‘Recent trends in Climate Change’. Mr. Deepak Poojary presented a new course titled ‘Pet Care Management’ to the committee members and it was well received. Dr. Sasikumar commented on the need to work extensively on the implementation of the component that focused on pet training.

After several discussions, inputs and deliberations, the theory topics included under the major and minor subjects were agreed and passed by BoS members. The revised syllabus of F.Y.B.Sc shall include the topics; Systematics and Diversity of Life I, Fundamentals of Ecology shall be included in paper I and Biomolecules-I and Basics in Animal Biotechnology shall be taught in paper II in Semester I. In the second semester, topics like Systematics and Diversity of Life II and Cell biology(new) shall be incorporated in paper I while Biomolecules-II and Genetics(new) will be taught in paper II.

Point 4: The practical experiments relevant to the theory topics were incorporated. However, the practicals under Cell biology were very few. Dr. Sasikumar expressed his willingness to provide with the Electron micrographs on cell organelle - abnormalities to make the topic interesting for the F.Y. students. Mr. Deepak Poojary suggested to include the practical on 'The study of osmosis' while Mrs. Sushma Singh recommended the inclusion of 'Study of cyclosis in Paramecium'.

In practicals based on paper 2, the teachers also opted to have experiments on quantitative assays along with qualitative studies. Mr. Brijesh kumar gave inputs on vitamin B12 quantitative assays, use of lab grade amylase for studies on enzymology, use of urine strips for glucose detection. Dr. Janhavi furnished details on Biuret and Ninhydrin tests for protein quantification. Mrs. Sushma added on the quantitative estimation of Vitamin C by iodometric method. Dr. Sasikumar suggested for the demonstration of working of spectrophotometer. The quorum decided to implement these practicals after its workability in consideration with the student ratio and material availabilities.

Point 5: During the discussion on topics under the Generic Elective course, Dr. Sasikumar opined to modify the title of Laboratory safety, units and measurements as 'Orientation to GLP'. The members took decision to shift this topic under the DSE program in consideration with the specific subject related contents.

In place, topic of life style diseases was introduced as generic. The members suggested appropriate and relevant titles like 'Disease-free style of living' or Healthy lifestyles to be used in place of 'life style diseases/ Common disorders or diseases' to give it a more positive approach. The discussion on F.Y.B.Sc syllabus came to an end and the Chairperson gave her concluding remarks by assuring a quality curriculum for the F.Y.B.Sc students under NEP.

Point 6 : Incorporation of Internship studies in the PG syllabus was of significant requisite. To achieve the same, reconstruction of the PG syllabus (both M.Sc-I and M.Sc-II) was done by the faculty. Mr. Deepak Poojary presented a grid of M.Sc-I syllabus and elaborated on the infusion of few and relevant biotechnology topics from Semester IV to Semester I. He also put forth the shuffling of topics under semester I. The M.Sc-I students of academic year 2023-24 will take up the revised syllabus and the M.Sc-II students of 2023-2024 batch will be undertaking projects and field study instead of seminars and assignments as internal component of 160 marks. The whole task was executed to include the internship activities in semester IV which will be a mandate from academic year 2024-2025.

In view of the above, Dr. Sasikumar suggested about internship outside Mumbai to places like Palghar, Panvel etc. He along with Mr. Brijesh recommended for collaborations and MoU's with hospitals, central pathology labs and other organisations to fulfil the internship requirements of the students. Their suggestions were welcomed by the teachers and with due deliberation the BoS members permitted the necessary changes to be incorporated in the syllabus of M.Sc.-I and implemented in academic year 2023-2024.

Point 7: M.Sc-II Oceanography syllabus had also to be reconstructed in accordance with the Mumbai University syllabus that includes mainstream subject and excluded biotechnology topics. Dr. Geeta Joshi presented in detail, the topics to be incorporated in Semester III under Oceanography. She highlighted on the re-naming of certain units and also discussed the necessary changes in the revised syllabus. The revised syllabi for M.Sc-II Oceanography will have the contents as below;

Paper I : Unit I: General Oceanography, Unit 2: Oceanographic Instruments ,Unit 3: Physical Oceanography -I , Unit 4: Physical Oceanography -II

Paper II : Unit I- Chemical Oceanography ,Unit II- Marine Pollution, Unit III: Marine Resources, Unit IV: Biological Oceanography

Paper III: Unit I: Planktology I, Unit II: Planktology-II, Unit III: Commercial Fisheries of India, Unit IV: Economics of Fishery and Fishery Management

Paper IV: Unit I: Biotechnology in Fishery, Unit II: Statistical tools and Biometric Studies, Unit III: Aquaculture-I, Unit IV: Aquaculture -II.

Followed by discussions on Oceanography, the syllabus on Animal Physiology was also revisited.

Dr. Janhavi Bhagwat updated the members about the Animal Physiology syllabi upgradation in the previous academic year. She however, clarified that there would be the rearrangements of the topics as per the requirements for all papers in semester III. The revised and upgraded PG syllabus passed by the BoS shall be subjected to further proceedings and finally implemented in the academic year 2024-2025.

Mrs. Sushma Singh, proposed the vote of thanks to Dr. Sasikumar Menon, Dr. Deepti Sahastrabuddhe, Mr. Brijesh Verma and also to Dr. Meghana Talpade , Ms.Anju Singh for their valuable inputs, constant guidance and support in framing a syllabus that would impart impeccable knowledge, enhance skill-based learning, motivate research, project work, internships and other activities for an overall development of every individual student. Mrs. Singh also expressed her thanks to the Principal, Director and all the teachers for their contributions. Mr. Bhagirat Mishra efficiently handled the technical aspects for the smooth conduction of the meeting. In view of the proposed agenda all parameters were discussed and with no other matter for discussion, the meeting ended at 4.00 pm with the permission of the esteemed BoS members.

Mrs. Sanika Gupte
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