

Minutes of the Meeting of the Members of BoS in Botany 2021-2022

DATE: 23rd September' 22 DAY: Friday TIMING: 10:30 am onwards MODE: Hybrid

Meeting of the members of BoS in Botany was held on Friday, 23rd September, 2022 at 10:30 am by hybrid mode using Zoom Meeting Platform.

Following members were present:

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| 1) Dr. Himanshu Dawda | Chairman |
| 2) Dr. Nisha Muni | Member |
| 3) Capt. Pravin Nayak | Member |
| 4) Dr. Anil Avhad | Member |
| 5) Dr. Veena Kelkar | Member |
| 6) Dr. Dan Bahadur Singh | Member |
| 7) Dr. Karishma Rajbhar | ESDM Coordinator and Member |
| 8) Ms. Namrata Jaiswal | Member |
| 9) Ms. Ruchira Javkar | Member |
| 10) Ms. Aishwarya Parab | Member |
| 11) Dr. Bhavana Narula | VC Nominee Subject Expert |
| 12) Dr. T.R Ganpathi | Subject Expert |
| 13) Dr. Vinay Raole | Subject Expert – Other University |
| 14) Dr. Usha Mukundan | Subject Expert – Invitee |
| Leave of Absence : | |
| 15) Dr. Priya Chatterjee | Illustrious Alumni and Industry Expert |
| 16) Dr. Vaishali Gode | Alumni from the Industry facilitating Placement |
| 17) Dr. Mrunalini Date | Subject Expert – Invitee |

Agenda:

1. To read and confirm the minutes of the meeting held on 12th March, 2022.
2. To discuss revision of T.Y.B.Sc. Botany syllabus to be implemented from the Academic year 2023-2024.
3. Distribution of Credits.
4. Revision of MSc ESDM & PG Dip. DAN syllabi.
5. Analysis of curriculum feedback and action taken report.
6. Departmental Preparedness for NEP.
7. Any other matter.

The Chairman welcomed all members on the Board of Studies of Botany and proceeded as per the agenda set for the meeting.

Item 1: The minutes of the meeting held on 12th March 2022 were read and confirmed.

Item 2: The Chairman placed in front of the house the proposal for the revision of TYBSc Botany syllabus for its implementation from the Academic year 2023-2024. The Chairman presented a grid of Curriculum in Botany covering the entire syllabus from First year to Third year, topic wise, along with applied aspects of each topic. In light of revised syllabi of FY and SY and implemented in 2021-2022 and 2022-2023 respectively, care was taken to elevate each topic to its next level of understanding in TY. Incorporation of following topics in different core subject papers theory and practical was proposed: Life cycle of *Batrachospermum*, Nodal Anatomy, Ultra-structure and functions of Endoplasmic Reticulum Ribosomes, Golgi bodies, Study of angiosperm families Musaceae, Zingiberaceae and Cannaceae, Technique of Northern Blotting, Technique of Western Blotting, Study of *Foeniculum vulgare* in Pharmacognosy, Life cycle of *Marselia*, Study of angiosperm families Nyctaginaceae, Pontederiaceae and Graminae, Types of PCR, Biosynthesis of Starch, Plant Indicators, Respiration and addition of one more metabolic disorder Alkaptonuria in addition to the existing list of disorders. With due deliberations, members accepted the proposed changes in the syllabus and approved for its further implementation from academic year 2023-2024.

Item 3: The Chairman shared with the members that in progression from 120 to 132 Academic Credits adopted by the college under autonomy from academic year 2021-2022 in a phase wise manner, after having completed 2 credits in FY and 4 credits in SY, the proposed TY syllabus will have accommodation of 3 additional academic credits per Semester. He put forth the proposal of achieving these 3 credits in the split of 2+1 wherein 2 credits will be taken care of by the addition of above mentioned additional topics and therefore the existing credits total of each core subject of Botany which is 2.5 will be elevated to 3 credits. Additional 1 credit per semester will be through mini project under the mentorship of different teacher members of department of Botany. The chairman further shared with the members that the exercise of revisiting every unit to look for the scope in addition of new topic/subtopic has indirectly helped in identifying units which were under credited so far considering the quantum of learning in those units.

Item 4: The Chairman informed the members that apart from two conventional MSc programs, One in Plant physiology & Biochemistry and the second in Cytogenetics & Plant Molecular Biology, , the department of Botany from academic year 2020-2021 also has MSc program in Environmental Science & Disaster Management (ESDM). The external faculty on board for ESDM proposed reorganization of topics in the environment component of the syllabus in having environmental biology and modeling in Environmental Science to be taught before addressing the issue of environmental pollution and its control majors. The respective practicals will also be reshuffled. With regards to the Disaster Management component of the syllabus, BMC authorities are consulted for their suggestions as they have a separate Disaster Management Cell after 2017 rain deluge and floods in the city of Mumbai. Following topics are to be incorporated in the revised syllabus as suggested by

BMC authorities: Industrial Safety Management, industrial and legal framework, Phases of disaster management, Man-made disasters like building/bridge collapse/air/road/rail accidents/ bomb blast/ industrial accidents, CBRN, forest fire, role of Information Technology (GIS, GPS etc) in the preparedness for disaster.

The Chairman informed the members that along with wide range of UG, PG and Ph.D. programs being offered to students for vertical mobility, the college also has many PG Diploma course to provide horizontal mobility to students. Out of 4 such programs, 2 are coordinated by Department of Botany of which PG Diploma in Dietetics and Nutrition will have a minor change in redistribution of topics as proposed by the faculty. In Semester I, the Unit I of Food Service Management in Hospitals and Other Institutions will have topic on Purchase and Storage. As a result, topic of Food Service Institutions will be shifted to Food Service Management in the unit II in Semester II.

The experts appreciated the efforts taken by the department to obtain feedback from industry faculty as they better understand the practicality and utility of topics in the curriculum contributing to the comprehensive learning of the subject.

Item 5: The Chairman shared with the members the analysis of curriculum feedback taken from the students, Alumni, peer teachers from other colleges and industry. While every stakeholder appreciated the efforts taken to reorganize the syllabi as per the grid incorporating the applied aspects of every topic, industry feedback proposed to have more practicals to be incorporated for every concept. The Chairman informed all the members that the experiments under DBT Star College Status, practicals of Discipline Specific Electives, etc offer wide exposure to students in learning by doing. Additionally, suggestion given by the industry to amalgamate both traditional and modern aspects of the subject was achieved by the department by incorporating more study of analytical techniques and use of different instruments, *Grandma's Pouch*, *Prakruti Nidan* etc.

Item 6: The Chairman shared with the members the departmental preparedness for the New Educational Policy (NEP) and different aspects of the policy to make education a process of learning for living and living for learning. He thanked the members for their valuable inputs in making the curriculum multi-disciplinary and flexible so as to expand the subject horizons. He said that the NEP demands for a very robust curriculum that can cater to the multiple entry and the multiple exit of students. He also mentioned to the members that the institution has started the process to register itself for the Academic Bank of Credits (ABC) with National Academic Depository (NAD). He informed the members that during pandemic, the college identified itself as a Local Chapter for *Swaayam* – NPTEL and a wide range of *Coursera* courses were offered free of cost to students. This inculcated in students the confidence for self-learning and identifying their own potential in searching for the required and relevant information and problem solving. This would certainly go a long way

under NEP which speaks about student empowerment at every level of learning. One of the underlying features of NEP is to impart skills to students at every level of learning. The Chairman expressed satisfaction in this regard by stating that under progression from 120 to 132 credits, our students too are acquiring life skills, subject skills enhancement in learning of core subject and project-based learning. He further informed the members that the Department of Botany through its activities have been nurturing the traditional Indian knowledge of craft, cookery, health, nutrition, medicine via activities like the exhibition of "Ganesh-Patri" prior to Ganpati festival, exhibition of Wild vegetables, exhibition of Warli arts, Jam Jelly Pickle making etc.

In the second year of PG studies every student completes a Semester long internship in an industry. This gives them an exposure of working in industrial setup and applying their knowledge in problem solving. It also serves as an exercise to bridge the gap between academic and industry that ultimately helps in placement of students. The Chairman further informed the members that through "PAVO" Nature Club of the Department of Botany students engage themselves into the activities of beach cleaning, mangrove conservation, tree sensing, QR Code for campus trees and BMC gardens and have started a Seed bank of indigenous species. New Education Policy emphasizes on character building through community services and further acknowledging the same during the studentship by award of credits. Lastly, the Chairman shared with the members that in the time to come, the Department would incorporate software like SPSS, r-programming, AutoCAD etc. in the curriculum to keep students engrossed with trends in use of technology in plant sciences.

Item 7: The Chairman shared with the members that out of three Discipline Specific Electives proposed by the Department for second year students in the academic year 2022-2023, Discipline Specific Elective on 'Plant Propagation' and Discipline Specific Elective on 'Post Harvest Technology' are being conducted successful through blended mode of teaching. The third Discipline Specific Elective on Aesthetic Botany received large number of inquiries for registrations from both students and teachers of other discipline of science as well as from faculty of Commerce and Arts. The department therefore decided to convert this Discipline Specific Elective into Value Added Course which can accommodate everyone interested and will be taken up by the department as this year's value added course in March 2023.

The experts appreciated the efforts taken by the department to popularize the subject and at the same time providing students required knowledge of the subject that would make them employable.

Towards the end of the meeting, discussion was initiated by Prof. Dr. Vinay Raole on preparedness of the department for BSc Hon. Program in Botany. The Chairman said that the department would certainly like to take it as a challenge and would like to work towards

making the subject more applied and job-offering by creating opportunities for students for both entrepreneurship and self sustainability which is the need of the hour. The strong research culture that the department of Botany has in its fabric would come to use in designing of the curriculum to the level that any Honors Study Program should have and the linkages established by the department with other research institutions both in India and overseas would also come to our rescue in terms of intellectual inputs. He requested all members of the BoS to give their valuable suggestions in this regard to which the members and experts gave their consent.

There being no other matter, the meeting ended with a vote of thanks to the Chair.



Prin. Dr. Himanshu Dawda
Chairman