

Minutes of the Meeting of the Members of BoS in Botany SH 2022-2023

DATE: 31/3/2023 DAY: Friday TIMING: 11.00 AM onwards Mode: Hybrid Mode

Meeting of the members of Board of Studies in Botany was held on Friday, 31st March, 2023 at 11.00 am via Hybrid mode using Zoom Meeting Platform.

Following members were present:

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

Agenda

1. To read and confirm the minutes of the meeting of BOS in Botany held on 23/9/2022
2. To apprise the members with the final draft of TYBSc Botany syllabus with increased credits and provision for project based learning as finalized in the last BOS meeting for its implementation from AY 2023-2024.
3. To apprise the members with the final draft of PG program of ESDM syllabus as finalized in the last BOS meeting for its implementation from AY 2023-2024.
4. To apprise the members with the final draft of syllabus of PGDP on DAN as finalized in the last BOS meeting for its implementation from AY 2023-2024.
5. Update on VAC for 2022-2023.
6. Curriculum feedback from the stakeholders and action taken report
7. Innovative pedagogies for Teaching, Learning & Evaluation.
8. Proposed grid for the FY study program with Botany as Major subject starting from AY 2023-2024 in alignment for NEP 2020.
9. Any other matter.

The Chairman extended a warm welcome to all the members and experts on the panel and continued with the meeting as per the agenda.

Item 1: The minutes of the meeting held on 23th September, 2022 were read and confirmed.

Item 2,3,4: The Chairman apprised the members with the final draft of TYBSc Botany syllabus with increased credits and the provision for project based learning finalised in the previous BoS meeting for its implementation from the academic year 2023-2024. He presented the list of projects that students would complete in Sem V and Sem VI under mentorship of the teachers from the department. The experts appreciated the variations in selection of project titles and the scope for a student to get familiar with new avenues of the subject through these projects. The Chairman also apprised the members with the final draft of PG Program of EsDM syllabus finalised in the previous meeting of BoS for its implementation from the academic year 2023-2024. He also presented the final draft of the syllabus of Post Graduate Diploma Course on Dietetics & Applied Nutrition that was finalised in the previous BoS meeting for its implementation from the academic year 2023-2024.

Item 5: Chairman gave an update on Value Added Courses (VAC) completed by the department in 2022-2023. He informed the members that the dept offered three value added courses for the students of not only Botany but across all the faculties. These three VACs were-1) Flower Arrangement, 2) Mushroom Cultivation and 3) Intellectual Property Rights. Each of the courses in its own unique way helped in catering to the aesthetic skills, entrepreneur skills and research skills of the student participants. For many non science students, it opened a whole new world of artistic and aesthetic use of flowers for different occasions and curiosity of how mushrooms grow with the simplest of the raw materials required to grow them. IPR made them aware of patents, patent rights, Patent Act 1970 and its amendments. Every course was designed and delivered for 30 contact hours with evaluation at the end of the course and successful students shall be give acknowledgment of the same in their grade card as Additional 2 Credits earned by the candidate.

Item 6: The Chairman presented the analysis of curriculum feedback received from the students, alumni, peer teachers and industry. While students demanded for more field trips to be the part of learning process, alumni currently working in different fields suggested having more DSE to understand applied aspects of each topic while learning the curriculum. Peer teachers suggested incorporating topics like distillation methods, extraction protocols, advanced biostatistics and CME's from IVD industry. The feedback from industry experts emphasised more on internship, good laboratory practices, SOPs, expertise in instrumental handling and effective communication as necessary skill sets for industry placement.

Item 7: The Chairman informed the members that post pandemic, in 2022-2023, regular engagement of students in practicals for long hours became quite challenging as students are more used to only mobile apps for learning and their concentration span has reduced drastically. Innovation that has amalgamation of both the conventional learning method and

technological edge would be better teaching aid for the present generation. In this regard, Chairman presented the departmental innovative methodologies for the effective teaching learning evaluation.

DSE delivery through 4-quadrant pedagogy- multiple means of learning

VAC through Learn-Do-Learn mechanism- experiential learning

Quiz, Crossword, Oral presentation, Information search through books, as different methods of learning- horns their thinking ability

Continuous evaluation through short surprise tests- importance of daily preparation

Assignments in Google Classrooms- time bound assignments- Time management

Practical assignment in Google Classroom- LIVE

(Prepare slide- photograph it-label it-add your comments and post in Google Classroom) – peer learning & competitiveness

For example- Dissect the flower and upload the image as reference image in Google Classroom

Item 8: The Chairman presented a broad outline of proposed FY study program with Botany as major subject under NEP 2020 implementation from AY 2023-2024. He shared with the members that for all aided study programs, the institute has adopted DSC (Department/Subject Specific Core courses) grid in its totality. With Botany as Major, combination of different Minor subjects will be offered and the basket of the Generic Electives (Open electives) will have contribution from each of the department so as to have wide range of electives offered to the student to choose from. The Chairman informed the members that the department will contribute to the basket on GEC upon receiving further clarity on it from the university authorities.

The Chairman further informed the members that along with the conventional Three Year UG program, the department shall also offer Four Year BSc (Honors) program in Botany and Five Year Integrated PG program. The Chairman expressed view that for the successful and progressive implementation of NEP2020 in progressive manner, the syllabus grid for entire study program including Five Year Integrated PG program will have to be taken into consideration as the immediate task and urged the experts for their kind support in terms of their inputs needed in the beginning of the next academic year which is the year of implementation of NEP2020. Meanwhile, the dept members start working on syllabus grid and developing modules of generic electives to be offered by the dept. The experts gave their consent on the same.

Item 9: Any other matter

- a. **Revision of PG syllabus:** The Chairman proposed to revise MSc Sem I and Sem II curriculum to be implemented from the academic year 2023-2024. He informed that the detailed curriculum will be designed and will be circulated to all the Experts for their valuable suggestions before the finalization of the draft syllabus.

- b. Research:** The Chairman informed the house about 4 research publications from the department in AY 2022-2023, two by his PhD student, one by PhD student cum staff in the department and one review article by the PhD student cum staff in the department.
- c. Patents:** The Chairman shared with the house that Ms Susmita Gudulkar, student of the department from 2016-2020 and currently working as Senior Product Development Designer, Indulekha, Hindustan Unilever, Mumbai has submitted four patents of which on after the examination is granted to her on 'Novel Natural Oral Care Composition'. He added that Ms Susmita is currently pursuing her PhD under his guidance and her hard work and focus has brought her this laurel.
- d. Student engagement in Community Services:** The Chairman informed the members that the *Pavo* Nature Club of the department, coordinated by Dr Anil Avhad completed about 20 activities of student engagement in Community Services. He stated that NEP2020 encourages the community engagement of students in Nation building with harmony between different sections of the society and therefore such activities shall be undertaken by the department every year. He shared the list of different programs done by *Pavo* NC.

1. Beach Cleanup
2. Eco-friendly Lantern making workshop
3. Ecovation- Creating paper pens and storage boxes
4. Online webinar on water foot prints
5. Seminar on Mangrove Ecosystems
6. Sea Shore walks (in association with United Ways, Mumbai)
7. Teaching BMC school children about environment (in association with Apni Pathshala Foundation)
8. Tree plantation drive (in association with Muskurate Raho Organization)
9. First aid for stray animals (in association with Citizen for animal protection)
10. Kalasarg- coloring activity for school children
11. Sita Ashoka seed rescue at BKC
12. VRUKSHA Bandhan- Pledge to protect our green siblings
13. National Nutrition Week celebration through 'Nourish and Flourish' activity
14. Poster competition on World Population Day
15. Skill enhancement programme on Mobile Photography & Image editing
16. Home composting workshop
17. Workshop on Kitchen gardening
18. Water audit on campus
19. Eco-friendly Holi

The experts acknowledged the efforts taken by each member of the department in thinking of small size projects that students can do in the dept lab during their final year. They also appreciated the dept preparedness for NEP2020, the wide range of VAC that the department is currently offering. This would attract students to the subject of Botany, make them more conscious and committed towards the conservation of nature, offer them the opportunity for skill based learning and tapping entrepreneurship potential in them. Industry Expert Dr T R Ganapathi and VC Nominee Dr Bhavana Narula suggested that department should again start the certificate course in 'Plant Tissue Culture' as the dept has required expertise in the field. Dr Narula further added that Botany department of R J

College has been instrumental in benefiting large number of Mumbai University Botany students to get an insight into the technique of growing plants in laboratory and their commercial and research adaptive methodologies. The Chairman accepted the suggestion and added that department shall offer this certificate course from the coming academic year onwards.

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

Dr Himanshu Dawda
Chairman