Rayat Shikshan Sanstha's

Mahatma Phule Mahavidyalaya, Pimpri Pune-17

Best Practice-I

1. Title of the practice: Intercollegiate Micro-Fest 2023-2024

2. Objectives of the Practice:-

- To increase interest about Microbiology among students and to introduce them to various avenues of Microbiology.
- To learn and understand basic concept in Microbiology through various activities viz; Rangoli, Poster and model and Quiz competition.
- To understand microbes and their role and their utility in day to day life to solve global challenges.
- To aim to answer many important global challenges by understanding microbes.
- To increase competency among students to organize events

3. The Context:

The employment of microbiologists is projected to grow by nearly 8 percent over the next decade, keeping pace with the average growth across all professions. This rising demand for skilled microbiologists highlights the need to address global challenges in the field. The existing syllabus, however, falls short in equipping students to tackle these challenges effectively.

microbiologists, the including industrial In future. microbiologists and mycologists, will play a vital role in the quest for cleaner energy sources. They will conduct rigorous research to develop alternative energy solutions such as biofuels and biomass. microbiologists contribute significantly Additionally, will to agriculture by developing genetically engineered crops that offer

higher yields and reduce the dependence on chemical fertilizers and pesticides. Furthermore, their expertise will be crucial in discovering innovative ways to protect public health and preserve the environment.

The "Micro-fest" activity organized by the Department of Microbiology encompasses a wide range of topics in microbiology. Introducing a postgraduate program within the department would further enhance the scope and impact of this initiative. Plans are also underway to scale up these activities to state and national levels in the future, transforming the Microfest into a broader platform for showcasing advancements in microbiology.

4. The Practice:-

The Microbiology Fest is an annual event organized by the Department of Microbiology, managed entirely by its students. The responsibility for planning and executing the event lies with the final-year B.Sc. Microbiology students, who form the core organizing team. A student-led managing committee oversees all activities and handles the financial aspects of the event. This committee, comprising a secretary, treasurer, and other members, is selected from among the students.

The fest features a diverse array of activities designed to enhance both subject-specific skills and broader competencies. Students take the initiative to plan events, which include guest lectures by distinguished faculty members from academic and research institutions. Competitions such as agar art, essay writing, topic presentations (seminars), poetry readings, scientific rangoli, and scientific poster displays are integral parts of the program.

These activities not only deepen students' understanding of microbiology but also foster critical skills like creative thinking, effective communication, teamwork, and collaboration, preparing them for future professional and academic challenges.

5. Evidence of success:

The Department of Microbiology organized "Inter-Collegiate Microfest-2024" on 27th February 2024, featuring inter-collegiate competitions like Poster, Microtoon, Agar Art, Poetry, and Quiz. Prof. Nusarat Shaikh, the Chief Guest, emphasized hard work and minimal mobile use during her keynote address. Distinguished guests, including Mrs. Sushma Khopkar, Dr. Jayashree Magdum, and Dr. Madhav Sarode, also addressed students. Six colleges participated, with 73 students competing across events judged by experienced faculty. The valedictory function featured Dr. Lumbini Yadav, who highlighted research's role in national growth. Students and faculty praised the fest's impact on skill development, teamwork, and subject understanding, making it a grand success.

6. Problems encountered and Resources required:

Microfest, organized annually by Microbiology students and self-funded through fundraising, remains limited in scope due to financial constraints, restricting broader participation

HAVIDYALAYA

Rayat Shikshan Sanstha's

Mahatma Phule Mahavidyalaya, Pimpri Pune-17

Best Practice -II

1. Title of the Practice: "Promoting Scientific Temper through Artistic Expression: Scientific Theme-Based Rangoli"

2. Objectives of the Practice

- 1. To cultivate scientific temper and creativity among students.
- 2. To provide an innovative platform for integrating science and art.
- 3. To enhance students' understanding of scientific concepts through visual representation.
- 4. To foster teamwork, collaboration, and cultural expression.

3. The Context

Scientific awareness and creative thinking are critical in holistic education. The challenge lies in bridging the gap between theoretical knowledge and practical understanding while making it engaging. Using Rangoli as a medium not only celebrates cultural heritage but also transforms scientific concepts into visually appealing designs, encouraging broader appreciation and comprehension of science.

4. The Practice

The Rangoli activity provides a creative platform for students to explore and showcase scientific concepts through art. A specific scientific theme, such as space exploration, the periodic table, environmental sustainability, is thoughtfully chosen to inspire and engage participants.

Students are organized into teams and given a detailed briefing about the selected theme. Each team conceptualizes and designs their Rangoli using eco-friendly materials such as colored powders, flowers, or seeds, emphasizing sustainability. Their designs must include a title and a concise explanation of the scientific principle they depict, bridging the gap between creativity and education.

During college events like science fairs, cultural festivals, teams proudly present their Rangoli. This platform not only highlights their artistic ingenuity but also demonstrates their understanding of scientific concepts. Judging is based on innovation, scientific accuracy, aesthetic appeal, and teamwork, encouraging students to excel in multiple domains.

This activity fosters a unique blend of science and art, enhancing critical thinking, collaboration, and environmental consciousness. By transforming complex scientific ideas into visually captivating art, it deepens students' understanding while promoting cultural and academic enrichment in an engaging and memorable way.

5. Evidence of Success

- Enhanced participation in science-related activities.
- Positive feedback from expert's assessors and visitors.
- Improved understanding of scientific concepts among students, as evidenced by their ability to explain their Rangoli designs.
- Recognition and awards won by students at intercollegiate competitions showcasing scientific Rangoli.

6. Problems Encountered and Resources Required

- Ensuring the scientific accuracy of the concepts.
- Managing time constraints during preparation.
- Procuring eco-friendly and cost-effective materials.

Resources Required:

- Colored powders, biodegradable materials, and other art supplies.
- Access to scientific experts or faculty for validating concepts.
- Space for creating and displaying Rangoli.

