VPM's B.N. Bandodkar College of Science (Autonomous), Thane

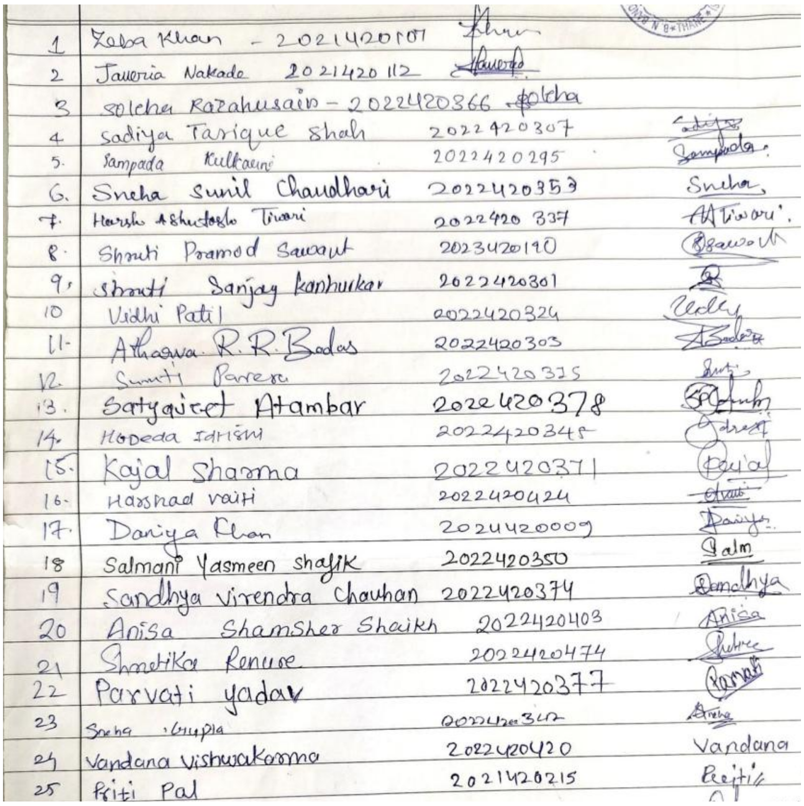
Name of activity	Hands on Training of Trypsinization for TYBSc Students
Objectives of the activity (maximum 40 words)	**1. Understanding the Concept of Trypsinization:** To provide students with a clear understanding of the process of trypsinization, including its scientific principles, applications in cell culture, and its role in detaching adherent cells from culture surfaces. **2. Mastering Cell Culturing Practices:** To give students practical experience in culturing cells, including how to maintain cell lines, apply trypsinization, and prepare cells for passaging or subculturing in various experiments. **3. Learning Cell Viability Assessment:** To enable students to assess the viability and health of cells post-trypsinization through appropriate techniques, such as using trypan blue exclusion or automated cell counters. **4. Exploring the Applications of Trypsinization in Research:** To help students understand the practical applications of trypsinization in research fields such as cell biology, biochemistry, and biomedical sciences, including its relevance in drug testing, gene expression studies, and tissue engineering.
Organizing department/s	Zoology
Collaborative institute	--
Date (DD/MM /YYYY)	20/01/2025 at 08:00 am
Venue	Department of Zoology, VPM's B. N. Bandodkar College, Thane.
Mode (Online/Offline/Hybrid)	Offline
Details of Resource person (name, designation, institute)	Dr. Abhay Morajkar, Assistant Professor, VPM's B. N. Bandodkar College of Science, Thane.
Key Participants	TYBSc Zoology Students

Remarkable outcomes/ key take-away messages (max. three)	1. **Enhanced Practical Laboratory Skills:** Students develop proficiency in handling cell cultures and performing trypsinization techniques, which are essential for a wide range of biological and biomedical research activities. This hands-on experience sharpens their lab skills, making them more competent and confident in a research setting. 2. **Improved Understanding of Cell Culture Techniques** Through the practical training, students gain a deeper understanding of cell culturing processes, including the importance of trypsinization in cell passaging, maintaining healthy cell lines, and ensuring the accuracy of experimental results. 3. **Mastery of Trypsinization Protocols** Students become proficient in the correct procedures for trypsinization, including the preparation of trypsin solutions, the timing and conditions for detaching cells, and how to stop the enzymatic activity, leading to more efficient and effective culturing practices in their future experiments.
Details of Teacher participants	M : **01** F : **00** T : **01**
Details of Student participants	M : **04** F : **21** T : **25**
Outsiders	--
In-house	26
	Faculty members: **01** Students: **25**
	Male: **04** Female: **21**
Additional information	1. **What is Trypsinization?** Trypsinization is the process of using the enzyme trypsin to detach adherent cells from the surface of culture vessels. It is essential for passaging cells in tissue culture, allowing researchers to maintain healthy cell lines. 2. **Trypsin Mechanism**: Explained how trypsin breaks down proteins on the cell surface, particularly the proteins involved in cell adhesion, allowing the cells to separate from the culture surface. Understanding the mechanism will help students grasp why timing and conditions are crucial.

Name of Coordinator	Dr. Abhay Morajkar
Flyer/ Notice	--

Geo Tagged Photos:

Attendance:



1	Zeba Khan	2021420107
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3	Soleha Razahusain	2022420366
4	Sadiya Tarique Shah	2022420307
5	Sampada Kulkarni	2022420295
6	Sneha Sunil Chaudhari	2022420353
7	Harsh Ashutosh Tiwari	2022420337
8	Shruti Pramod Sawant	2023420190
9	Shruti Sanjay Kanhurkar	2022420301
10	Vidhi Patil	2022420324
11	Atharva R.R. Bodas	2022420303
12	Smruti Parera	2022420325
13	Satyajeet Atambar	2022420378
14	Hodeda Idrishi	2022420348
15	Kajal Sharma	2022420371
16	Harshad Vaiti	2022420424
17	Daniya Khan	2024420009
18	Salmani Yasmeen Shafik	2022420350
19	Sandhya Virendra Chauhan	2022420374
20	Anisa Shamsher Shaikh	2022420403
21	Shrutika Renuse	2022420474
22	Parvati Yadav	2022420377
23	Sneha Gupta	2022420342
24	Vandana Vishwakarma	2022420420
25	Riti Pal	2021420215

Graphical Representation of Feedback