



Course Code	PS01CBIC55	Title of the Course	LAB-I
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none">1. To learn chemistry of water molecule.2. To learn preparation of buffer.3. To learn fundamental cell biology techniques, Microscopy and staining.4. To learn how to culture cells.
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PS01CBIC55 (Lab 2 A)

1. Qualitative analysis of carbohydrates.
2. Qualitative analysis of amino acids.
3. To titrate amino acid and calculate pKa value.
4. Quantitative estimation of amino acids.
5. To study the various stage of mitosis in plant cells.
6. To study the different organelles in the cell.
7. Growth curve of yeast cells.
8. Cell counting and Viability assay using Trypan blue.
9. Microscopy
10. Gram staining.

PS01CBIC55 (Lab 2B)

Practicals related to elective papers.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Grow bacteria and yeast cells in lab.





SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))
Syllabus with effect from the Academic Year 2021-2022

2.	Prepare buffer, separate biomolecules using suitable chromatographic techniques.
3	Carry out Cell counting and viability assay

References:

1	Thimmaiah S. K. (2012). Standad Methods of Biochemical Analysis. Kalyani Publishes, New Delhi, India.
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