

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

PROGRAMME STRUCTURE

M.Sc. Biotechnology Semester: I

| Programme Outcome (PO) - For M.Sc. Biotechnology Programme | On successful completion of the Masters in Biotechnology course, the student will be able to: Demonstrate an ability for in depth analytical and critical thinking to identify and solve problems related to Biotechnology in industry, medicine and Agriculture Comprehend and integrate theoretical and practical skills Demonstrate mastery in handling sophisticated laboratory equipment and their appropriate applications. Become a professional suitable to be employed in industry as well as academic institutions Understand professional and ethical responsibility. |
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| Programme Specific Outcome (PSO) - For MSc Biotechnology Semester - I | Students will be able to demonstrate and apply their knowledge of cell structure and functions both at organelle and molecular level and solve the problems related to the field of biotechnology Students will be exposed to basic physiological and metabolic processes and their relevance in Biotechnology |

To Pass(1) At least 40% marks in each paper at the University Examination and 40% aggregate marks in Internal and External Assessment.(2) At least 33% Marks in each paper in Internal Assessment.





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| Course Type | Course Code | Name Of Course | Theory/ Practical | Credit | Exam | Component of Marks | | |
|---------------------------------|-------------|--|----------------------|--------|----------|--------------------|----------|-------|
| | | | | | Duration | Internal | External | Total |
| | | | | | in hrs | Total | Total | Total |
| Core Course | PS01CBIT51 | Molecular Biology | Т | 4 | 3 | 30 | 70 | 100 |
| | PS01CBIT52 | Intermediary Metabolism | Т | 4 | 3 | 30 | 70 | 100 |
| | PS01CBIT53 | Cell Biology | Т | 4 | 3 | 30 | 70 | 100 |
| | PS01CBIT54 | Practical | Р | 4 | 3 | 30 | 70 | 100 |
| | PS01CBIT55 | Practical | Р | 4 | 3 | 30 | 70 | 100 |
| | PS01CBIT56 | Viva-Voce | = | 1 | | II | 50 | 50 |
| Elective Course (Any One) | PS01EBIT51 | Phytoresource utilization and conservation | Т | 4 | 3 | 30 | 70 | 100 |
| | PS01EBIT52 | Biomolecules and Bioenergetics | Т | 4 | 3 | 30 | 70 | 100 |
| | PS04EBIT53 | Microbial Physiology | Т | 4 | 3 | 30 | 70 | 100 |
| | PS01EBIT54 | Fundamentals of microbiology | Т | 4 | 3 | 30 | 70 | 100 |

