SARDAR PATEL UNIVERSITY,

VALLABH VIDYA NAGAR

(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)

Syllabus with effect from the Academic Year 2024-25

PROGRAMME STRUCTURE

Master of Science in Biomedical Science

MSc (Biomedical Science) Semester: III

Programme outcome (PO) -for MSc Biomedical Science programme	Master of Science program provides extended theoretical and practical knowledge of different science subjects. Master of science at Sardar Patel University is designed keeping the overall back ground preparation in mind for the student to either seek a job or to become a entrepreneur. The students, after completion of bachelor of science can select the masters programme in the subject they have had at the final year or in related discipline (depending upon eligibility criteria prescribed by the university). **Programme outcomes: At the end of the program, the students will be able to** 1. Have a deep understanding of both the theoretical and practical concepts in the respective subject. 2. Understand laboratory processes and use scientific equipment's and work independently. 3. Develop research temperament as a consequence of their theory and practical learning. 4. Communicate scientific information in oral and written form. 5. Understand the issues related to nature and environmental contexts and think rationally for sustainable development. 6. The students are able to handle unexpected situation by critically analyzing the problems
Program Specific Outcome (PSO) – For MSc Biomedical Science Semester-I	After completion of the program students can apply their expertise in laboratory work, as experts and consultant in research, education and management of health care industry, laboratories that deal with diagnosis, prevention and control of infectious and communication diseases, food testing laboratories, appear for CSIR-UGC NET (JRF& Lectureship) and industries based on pharmaceutical and biotechnology.

Course Type	Course Code	Course Title	Theory/ Practical	Credit	Contact Hrs./ Weeks	Exam duration in Hrs.	Component of Marks		
							Internal	External	Total
							Total/ Passing	Total/ Passing	Total/ Passing
Core Course	PT03CBMC51	Genetic Engineering	Theory	4	4	3	30/12	70/28	100/40
	PT03CBMC52	Clinical Biochemistry	Theory	4	4	3	30/12	70/28	100/40
	PT03CBMC53	Nanotechnology and its Applications in Biomedical Science	Theory	4	4	3	30/12	70/28	100/40
	PT03CBMC54	Practical based on PT03CBMC51 and PT03CBMC52	Practical	4	8	3.5	30/12	70/28	100/40
	PT03CBMC55	Practical based on PT03CBMC53 and PT03EBMC51	Practical	4	8	3.5	30/12	70/28	100/40
	PT03CBMC56	Comprehensive Viva	--	1	2	--		50/20	50/20
Elective Course	PT03EBMC51	Clinical Pharmacology & Toxicology	Theory	4	4	3	30/12	70/28	100/40
	PT03EBMC52	Biosafety and IPR	Theory	4	4	3	30/12	70/28	100/40
	PT03EBMC53	Methods in biology	Theory	4	4	3	30/12	70/28	100/40

Credits (per semester*)

Theory + Seminar	16
Practical	08
Comprehensive Viva	01
Total	25