

M. Sc. Biochemistry Program June 2011

Program Structure

Semester I			
Course Code	Course Name	Max. marks	Credits
1001C*	Biomolecules	100	4
1002C	Molecular Biology	100	4
1003C	Cell Biology & Physiology	100	4
1004C	Bioenergetics & Metabolism	100	4
1005C	Laboratory Course I	100	8
Semester II			
2001C	Bioanalytical Chemistry	100	4
2002C	Plant Biochemistry	100	4
2003C	Enzymology	100	4
2004C	Advanced Molecular Biology	100	4
2005C	Laboratory Course II	100	8
Semester III			
3001C	Biostatistics, Computers and Bioinformatics	100	4
3002C	Methods in Molecular Biology	100	4
3003C	Immunochemistry	100	4
	<i>Any one of the following</i>		
30041S**	Biomembranes and Cytoskeleton	100	4
30042S	Muscle Biochemistry and Biomembranes	100	4
30043S	Plant Biotechnology	100	4
3005C	Laboratory Course III	100	8
Semester IV			
4001C	Nutritional Biochemistry	100	4
4002C	Clinical Biochemistry	100	4
	<i>Any two of the following, one from each extended code</i>		
40031S	Biochemical & Environmental Toxicology	100	4
40032S	Medical and Environmental Biochemistry	100	4
40033S	Neurobiochemistry	100	4
40041S	Microbial Biochemistry	100	4
40042S	Genetics for Biologists	100	4
40043S	Frontier Technologies in Biosciences	100	4
4005	Project/thesis And Seminar	100	8

*Core Courses ** Specialization / Supplementary / Service courses

Note:

1. A student is expected to complete four theory courses and a practical course each semester.
2. Specialization will be provided depending upon availability of expert faculty.
3. Project assignment will begin in semester III and will be continued and completed in semester IV.

4. Seminar will begin from II Semester and continued till the IV semester of the program
5. Additional or alternative practicals may be suggested during all laboratory courses.
6. Additional or alternative text books and reading material may be suggested by teachers.

M. Sc. Biochemistry Program June 2016

Program Structure

Course Code	Course Name	Max. marks	Credits
Semester I	Foundation Courses		
1001F	Biomolecules	100	4
1002F	Molecular Biology	100	4
1003F	Cell Biology & Physiology	100	4
1004F	Bioenergetics & Metabolism	100	4
1005F	Laboratory Course I	100	8
Com-100	Constitution of India (Common Component)	50	2
Semester II	Core Courses		
2001C	Bioanalytical Chemistry	100	4
2002C	Plant Biochemistry	100	4
2003C	Enzymology	100	4
2004C	Advanced Molecular Biology	100	4
2005C	Laboratory Course II	100	8
Semester III	Core and Foundation Courses		
3001S/R	Biostatistics & Research Methodology	100	4
3002C	Methods in Molecular Biology	100	4
3003C	Immunochemistry	100	4
3004R	Review of literature for Research Project	100	4
3005C	Laboratory Course III	100	8
Semester IV	Research Methodology Oriented & Elective Courses		
4001R	Project	100	8
4002R	Seminar	100	8
	<i>Any Two of the following, one from each extended code</i>		
4003E	Microbial Biochemistry	100	4
4004E	Nutritional Biochemistry	100	4
4005E	Neurobiochemistry	100	4
4006E	Genetics for Biologists	100	4
4007E	Clinical Biochemistry	100	4
4008E	Frontier Technologies in Biosciences	100	4
4009E	Medical and Environmental Biochemistry	100	4
4010E	Biochemical & Environmental Toxicology	100	4
4011E	Plant biotechnology	100	4
Semester-I = 26, Semester-II = 24, Semester-III = 24, Semester-IV = 24			
			Total = 98 Credits

**C-Core Courses, F- Foundation Courses, S- Service Courses,
R-Research Component, E-Elective courses**

Note:

7. A student is expected to complete four theory courses and a practical course each semester.
8. Specialization will be provided depending upon availability of expert faculty.

9. Project assignment will begin in semester III and will be continued and completed in semester IV.
10. Seminar will begin from II Semester and continued till the IV semester of the program
11. Additional or alternative practicals may be suggested during all laboratory courses.
12. Additional or alternative text books and reading material may be suggested by teachers.