Annexure-5.2 A

MGM SCHOOL OF BIOMEDICAL SCIENCES, NAVI MUMBAI

(A constituent unit of MGM Institute of Health Sciences)

(Deemed University u/s 3 of UGC Act 1956)

Grade "A" Accredited by NAAC

Sector 1, Kamothe, Navi Mumbai-410209

SYLLABUS

FOR

CHOICE BASED CREDIT SYSTEM

M.Sc. MOLECULAR BIOLOGY

(As per **CHOICE BASED CREDIT SYSTEM** With effect

From the Academic Year 2018-2019)

Semester I							
	Syllabus Ref. No.	**Subject**	**Credits**	**Teaching hours**	**Marks**		
	Theory				**Internal Assessment**	**Semester Exam**	**Total**
	MB 101 T	Cell Biology	4	4	20	80	100
	MB 102 T	Molecular Immunology	4	4	20	80	100
	MB 103 T	Molecular Enzymology	4	4	20	80	100
	MB 104 T	Metabolic Engineering	4	4	20	80	100
	Practical						
	MB 101 P	Cell Biology	2	4	10	40	50
	MB 102 P	Molecular Immunology	2	4	10	40	50
	MB 103 P	Molecular Enzymology	2	4	10	40	50
	MB 104 P	Metabolic Engineering	2	4	10	40	50
		Total	24	32	120	480	600

Semester II							
	Syllabus Ref. No.	**Subject**	**Credits**	**Teaching hours**	**Marks**		
	Theory				**Internal Assessment**	**Semester Exam**	**Total**
	MB 105 T	Gene and Protein Science	4	4	20	80	100
	MB 106 T	Bioinformatics & Computational biology	4	4	20	80	100
	MB 107 T	DNA Recombinant Technology	4	4	20	80	100
	CC 001 T	Research Methodology and Biostatistics (Core Course)	4	4	20	80	100
	Practical						
	MB 105 P	Gene and Protein Science	2	4	10	40	50
	MB 106 P	Bioinformatics &Computational biology	2	4	10	40	50
	MB 107 P	DNA Recombinant Technology	2	4	10	40	50
	CC 001 P	Research Methodology and Biostatistics (Core Course)	2	4	10	40	50
		Total	24	32	120	480	600

Semester III							
	Syllabus Ref. No.	**Subject**	**Credits**	**Teaching hours**	**Marks**		
	Theory				**Internal Assessment**	**Semester Exam**	**Total**
	MB 108 T	Genomics	4	4	20	80	100
	MB 109 T	Proteomics	4	4	20	80	100
		Core Elective course**	4	4	20	80	100
	MB 110 T	Nanobiotechnology					
	MB 111 T	Molecular Diagnostics					
	MB 112 T	Drug discovery					
	MB 113	Dissertation/Project Proposal*	6	12	50	-	50
	Practical						
	MB 108 P	Genomics	2	4	10	40	50
	MB 109 P	Proteomics	2	4	10	40	50
	MB 110 P MB 111 P MB 112 P	Core Elective Practical Nanobiotechnology Molecular diagnostics Drug discovery	1	2	10	40	50
	MB 114	Seminar*	1	2	50	0	50
		Total	24	36	190	360	550

Semester IV							
	Syllabus Ref. No.	**Subject**	**Credits**	**Teaching hours**	**Marks**		
	Theory				**Internal Assessment**	**Semester Exam**	**Total**
	******	**General Elective**	4	4	100	-	100
	GE 001 T	Analytical Instrumentation					
	GE 002 T	Bioethics, Biosafety , IPR & Technology transfer					
	GE 003 T	Quality Assurance & Quality Control					
	MB 113	Dissertation / Project*	18	36	-	200	200
	Practical						
	MB 115 P	Educational Tour / Field Work/Industrial Visit/Hospital Visit*	2	0	50	-	50
		Total	24	40	150	200	350