

Syllabus titles for MSc Integrated Biotechnology Programmes as per approved format of faculty meeting held on 30/03/2017 and subsequent Board of Studies meeting on 3/4/2017

Type of course	Course Code	Name of Course	T/P	Credit	Exam Duration	Component of Marks		
						Internal	External	Total
						Total/Passing	Total/Passing	Total/Passing
Semester - I								
Core - 1	PS01CIGB21	Chemistry of Life	T	4	3 hrs	30/10	70/28	100/40
	PS01CIGB22	Practicals based on PS01CIGB21	P	2	2 hrs	-	50/20	50/20
Core - 2	PS01CIGB23	Plant and Animal Sciences(Group A)	T	4	3 hrs	30/10	70/28	100/40
	PS01CIGB24	Practicals based on PS01CIGB23	P	2	2 hrs	-	50/20	50/20
	PS01CIGB25	Biomathematics (For Group B)	T	4	3 hrs	30/10	70/28	100/40
	PS01CIGB26	Practicals based on PS01CIGB25	P	2	2 hrs	-	50/20	50/20
Core - 3	PS01CIGB27	Microbiology	T	4	3 hrs	30/10	70/28	100/40
	PS01CIGB28	Practicals based on PS01CIGB27	P	2	2 hrs	-	50/20	50/20
Ability Enhancement	PS01AIGB21	English I (Soft Skill Comunication)	T	2	2 hrs	15/05	35/14	50/20
Skill Enhancement	PS01SIGB21	Fundamentals of Laboratory Practices	P	2	2 hrs	-	50/20	50/20
Total Credit				22				
Semester - II								
Core - 1	PS02CIGB21	Cell Biology	T	4	3 hrs	30/10	70/28	100/40
	PS02CIGB22	Practicals based on PS02CIGB21	P	2	2 hrs	-	50/20	50/20
Core - 2	PS02CIGB23	Biochemistry	T	4	3 hrs	30/10	70/28	100/40
	PS02CIGB24	Practicals based on PS02CIGB23	P	2	2 hrs	-	50/20	50/20
Core - 3	PS02CIGB25	Bio Physics	T	4	3 hrs	30/10	70/28	100/40
	PS02CIGB26	Practicals based on PS02CIGB25	P	2	2 hrs	-	50/20	50/20
Ability Enhancement	PS02AIGB21	English II (Soft Skill Communication)	T	2	2 hrs	15/05	35/14	50/20
Skill Enhancement	PS02SIGB21	Environmental Science	T	2	2 hrs	15/05	35/14	50/20
Total Credit				22				
Semester - III								
Core 1 - Paper - I	PS03CIGB21	Plant Physiology	T	4	3 hrs	30/10	70/28	100/40
	PS03CIGB22	Practicals based on PS03CIGB21	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - II	PS03CIGB23	Animal Physiology	T	4	3 hrs	30/10	70/28	100/40
	PS03CIGB24	Practicals based on PS03CIGB23	P	2	2 hrs	-	50/20	50/20
Core 2 - Paper - I	PS03CIGB25	Gene organization, Replication and Repair	T	4	3 hrs	30/10	70/28	100/40
	PS03CIGB26	Practicals based on PS03CIGB25	P	2	2 hrs	-	50/20	50/20

Core 2 - Paper - II	PS03CIGB27	Virology	T	4	3 hrs	30/10	70/28	100/40
	PS03CIGB28	Practicals based on PS03CIGB27	P	2	2 hrs	-	50/20	50/20
Ability Enhancement	PS03AIGB21 (T)	Computer in Biology	T	2	2 hrs	15/05	35/14	50/20
Skill Enhancement	PS03SIGB21 (T)	Microbial QC in food and Pharma Industry	T	2	2 hrs	15/05	35/14	50/20
	Total Credit			28				

Semester - IV								
Core 1 - Paper - I	PS04CIGB21	Plant Tissue Culture	T	4	3 hrs	30/10	70/28	100/40
	PS04CIGB22	Practicals based on PS04CIGB21	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - II	PS04CIGB23	Animal Cell Culture	T	4	3 hrs	30/10	70/28	100/40
	PS04CIGB24	Practicals based on PS04CIGB23	P	2	2 hrs	-	50/20	50/20
Core 2 - Paper - I	PS04CIGB25	Gene Expression and Regulation	T	4	3 hrs	30/10	70/28	100/40
	PS04CIGB26	Practicals based on PS04CIGB25	P	2	2 hrs	-	50/20	50/20
Core 2 - Paper - II	PS04CIGB27	Developmental Biology	T	4	3 hrs	30/10	70/28	100/40
	PS04CIGB28	Practicals based on PS04CIGB27	P	2	2 hrs	-	50/20	50/20
Ability Enhancement	PS04AIGB21	Bioinstrumentation	T	2	2 hrs	15/05	35/14	50/20
Skill Enhancement	PS04SIGB21	Entrepreneurship Development	T	2	2 hrs	15/05	35/14	50/20
	Total Credit			28				

Semester - V								
Core 1 - Paper - I	PS05CIGB21	Immunology	T	4	3 hrs	30/10	70/28	100/40
	PS05CIGB22	Practicals based on PS05CIGB21	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - II	PS05CIGB23	Genetics - I	T	4	3 hrs	30/10	70/28	100/40
	PS05CIGB24	Practicals based on PS05CIGB23	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - III	PS05CIGB25	Genetic Engineering - I	T	4	3 hrs	30/10	70/28	100/40
	PS05CIGB26	Practicals based on PS05CIGB25	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - IV (Discipline Specific Elective)	PS05CIGB27	Fermentation Technology	T	4	3 hrs	30/10	70/28	100/40
	PS05CIGB28	Practicals based on PS05CIGB27	P	2	2 hrs	-	50/20	50/20
	Total Credit			24				

Semester - VI								
Core 1 - Paper - I	PS06CIGB21	Enzymology	T	4	3 hrs	30/10	70/28	100/40
	PS06CIGB22	Practicals based on PS06CIGB21	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - II	PS06CIGB23	Genetics - II	T	4	3 hrs	30/10	70/28	100/40
	PS06CIGB24	Practicals based on PS06CIGB23	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - III	PS06CIGB25	Genetic Engineering - II	T	4	3 hrs	30/10	70/28	100/40
	PS06CIGB26	Practicals based on PS06CIGB25	P	2	2 hrs	-	50/20	50/20
Core 1 - Paper - IV (Discipline Specific Elective)	PS06CIGB27	Biostatistics	T	4	3 hrs	30/10	70/28	100/40
	PS06CIGB28	Practicals based on PS06CIGB27	P	2	2 hrs	-	50/20	50/20
	Total Credit			24				

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