Curriculum Structure of 2-year M. Sc. Programme in Physics

(w. e. f. Academic Session 2019-20)

First Semester

S. No.	Course Code	Course	Core/ Elective	Contact hours				Credit
				L	T	P	Total	
1.	19M21PH111	Classical Mechanics	Core	3	1	-	4	4
2.	19M21PH112	Mathematical Physics	Core	3	1	-	4	4
3.	19M21PH113	Quantum Mechanics	Core	3	1	-	4	4
4.	19M21PH114	Electronics	Core	3	1	-	4	4
5.	19M25PH111	Laboratory-1	Core	-	-	12	12	4
6.	19M21HS111	Presentation and Communication Skills	Core	2		-	2	Audit
		TOTAL		**14**	**4**	**12**	**30**	**20**

Second Semester

S. No.	Course Code	Course	Core/ Elective	Contact hours				Credit
				L	T	P	Total	
1.	19M21PH115	Classical Electrodynamics	Core	3	1	-	4	4
2.	19M21PH116	Atomic, Molecular and Laser Physics	Core	3	1	-	4	4
3.	19M21PH117	Statistical Mechanics	Core	3	1	-	4	4
4.	19M21PH118	Condensed Matter Physics	Core	3	1	-	4	4
5.	19M25PH112	Laboratory-2	Core	-	-	12	12	4
		TOTAL		**12**	**4**	**12**	**28**	**20**

Third Semester

S. No.	Course Code	Course	Core/ Elective	Contact hours				Cr.
				L	T	P	Total	
1.	19M21PH211	Nuclear and Particle Physics	Core	3	1	-	4	4
2	19M21PH212	Advanced Quantum Mechanics	Core	3	1	-	4	4
3.	19M21PH213	Numerical Techniques and Computer Programming	Core	3	-	-	3	3
4.	19M21PH214 Or 19M21PH215	**Special Paper-1:** Advanced Condensed Matter Physics-1 **OR** **Special Paper-1:** Optoelectronics	Core	3	-	-	3	3
5.		DE-1	Elective	3	-	-	3	3
6.	19M25PH211	Laboratory-3	Core	-	-	12	12	4
		TOTAL		**15**	**2**	**12**	**29**	**21**

Fourth Semester

S. No.	Course Code	Course	Core/ Elective	Contact hours				Cr.
				L	T	P	Total	
1.	19M21PH216 Or 19M21PH217	**Special Paper-2:** Advanced Condensed Matter Physics-2 **OR** **Special Paper-2:** Fiber Optics	Core	3	-	-	3	3
2.		DE-2	Elective	3	-	-	3	3
3.		DE-3	Elective	3	-	-	3	3
4.	19M27PH211	Dissertation	Core	-	-	20	20	10
		TOTAL		**9**	**-**	**20**	**29**	**19**

DE: Departmental Elective

Total Credits: 80