Sardar Patel University
Programme- MSc
(Under Choice Based Credit System)
M.Sc. (Physics) Semester –III
Syllabus with effect from June-2022-23

Course Type	Course code	Name of the Course	T/P	Credit	Exam duration in hrs	Components of Marks		
						Internal	External	Total
						Total/passing	Total/passing	100/passing
Core Courses	PS03CPHY51	Advanced quantum mechanics	T	04	3hrs	30/10	70/28	100/40
	PS03CPHY52	Physics of Nano materials	T	04	3hrs	30/10	70/28	100/40
Elective courses	PS03EPHY51	Crystallography and Materials science (CMP)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY52	Magnetic and Optical Properties of condensed matter (CMP)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY53	Microwave communication: Electronics and Technology (EC)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY54	Microprocessors: Programming, Interfacing and Applications (EC)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY55	Computer Programming in Fortran 90 and Numerical methods (CP)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY56	Computational Physics –I (CP)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY57	Solar energy & Geothermal energy (EST)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY58	Wind energy and Ocean energy (EST)	T	04	3hrs	30/10	70/28	100/40
	PS03EPHY59	CMP Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY60	CMP Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY61	EC Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY62	EC Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY63	CP Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY64	CP Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY65	EST Practicals –I	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY66	EST Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS03EPHY67	CMP Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
	PS03EPHY68	EC Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
	PS03EPHY69	CP Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
	PS03EPHY70	EST Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
	PS03EPHY71	Semiconductor Processing for Integrated Circuits (EC) (Effect from June : 2025)	T	04	3hrs	30/10	70/28	100/40

CMP: Condensed Matter Physics   EC : Electronics and Communication
CP : Computational Physics   EST: Earth Science and Technology