

Sardar Patel University
Programme- MSc
(Under Choice Based Credit System)
M.Sc. (Physics) Semester –IV
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	PS04CPHY51	Nuclear & Particle Physics	T	04	3hrs	30/10	70/28	100/40
	PS04CPHY52	Thin films & Advanced Characterization Techniques	T	04	3hrs	30/10	70/28	100/40
Elective courses	PS04EPHY51	Biophysics (CMP)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY52	Crystal Growth & Imperfections in solids (CMP)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY53	Signal Processing and Satellite communications (EC)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY54	Advanced Solid state electronic devices (EC)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY55	Computer Programming in Python and Numerical methods (CP)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY56	Computational Physics –II (CP)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY57	Biomass, Oother systems and energy storage (EST)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY58	Nuclear energy and energy strategies (EST)	T	04	3hrs	30/10	70/28	100/40
	PS04EPHY59	CMP Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY60	CMP Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY61	EC Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY62	EC Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY63	CP Practicals -I	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY64	CP Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY65	EST Practicals –I	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY66	EST Practicals -II	P	04	3hrs	30/10	70/28	100/40
	PS04EPHY67	CMP Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
	PS04EPHY68	EC Comprehensive Viva	T	01	Acc. req	-	50/20	50/20
PS04EPHY69	CP Comprehensive Viva	T	01	Acc. req	-	50/20	50/20	
PS04EPHY70	EST Comprehensive Viva	T	01	Acc. req	-	50/20	50/20	

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