STRUCTURE OF THE SYLLABUS FOR 2 YEAR PG PROGRAMME

SCHOOL NAME - ROYAL SCHOOL OF APPLIED AND PURE SCIENCES DEPARTMENT NAME - PHYSICS PROGRAMME NAME - M.Sc. in PHYSICS

COURSE CODE	1 st SEMESTER COURSE TITLE	LEVEL	CREDIT	L-T-P
PHY014C101	Classical Mechanics & Theory of Relativity	400	4	4-0-0
PHY014C102	Quantum Mechanics – I	400	4	4-0-0
PHY014C103	Mathematical Physics	400	4	4-0-0
PHY014C104	Nuclear & Particle Physics	400	4	4-0-0
PHY014C115	Physics Lab-I	400	4	0-0-8
SWAYAM CODE 1	Swayam 1	400	3/4/5	
	TOTAL CREDIT FOR 1 st	SEMESTER	20 + 3/4/5	
	2 nd SEMESTER			
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
PHY014C201	Condensed Matter Physics	400	4	4-0-0
PHY014C202	Electrodynamics	400	4	4-0-0
PHY014C203	Quantum Mechanics – II	400	4	4-0-0
PHY014C204	Plasma and Space Physics	400	4	4-0-0
PHY014C215	Physics Lab - II	400	4	0-0-8
SWAYAM CODE 2	Swayam 2	400	3/4/5	
	TOTAL CREDIT FOR 2 nd		20 + 3/4/5	
	TOTAL CREDIT FOR 1 st YEAR =	40 + 6/8/10		
	3 rd SEMESTER			
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
PHY014C301	Atomic and Molecular Physics	500	4	4-0-0
PHY014C302	Statistical Mechanics	500	4	4-0-0
PHY014C303	Physics of Nanomaterials	500	4	4-0-0
PHY014C304	Advanced Condensed Matter Physics	500	4	4-0-0
PHY014C331	Project- I	500	8	0-0-0
SWAYAM CODE 3	Swayam 3	500	3/4/5	
5 MILLIN CODE 5	TOTAL CREDIT FOR 3 rd			
	OR 3 rd SEMESTER (For students with 3 rd and 4 th Semest	er Research)		
	•	-		1
	RESEARCH PROJECT – PHASE I	500	24 + 3/4/5	0-0-0
	•	500	24 + 3/4/5	0-0-0
COURSE CODE	RESEARCH PROJECT – PHASE I 4 th SEMESTER			
COURSE CODE	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research)	500 LEVEL	24 + 3/4/5 CREDIT	0-0-0 L-T-P
COURSE CODE	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem)	LEVEL		
	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K	LEVEL Research)	CREDIT	L-T-P
PHY014C401	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy	LEVEL Research) 500	CREDIT 4	L-T-P 4-0-0
PHY014C401 PHY014C402	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices	LEVEL Research) 500 500	CREDIT 4 4	L-T-P 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics	LEVEL Research) 500 500 500	CREDIT 4 4 4 4	4-0-0 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403 PHY014C404	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics Astrophysics	LEVEL Research) 500 500 500 500 500	CREDIT 4 4 4 4 4	4-0-0 4-0-0 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403 PHY014C404 PHY014C431	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics Astrophysics Project- II	LEVEL <i>Research</i>) 500 500 500 500 500 500	CREDIT 4 4 4 4 12	L-T-P 4-0-0 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403 PHY014C404 PHY014C431	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics Astrophysics Project- II Swayam 4	LEVEL Research) 500 500 500 500 500	CREDIT 4 4 4 4 4	4-0-0 4-0-0 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403 PHY014C404 PHY014C404 PHY014C403 PHY014C404 PH	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics Astrophysics Project- II	LEVEL Research) 500 500 500 500 500 500 500 50	CREDIT 4 4 4 4 12	4-0-0 4-0-0 4-0-0 4-0-0
PHY014C401 PHY014C402 PHY014C403 PHY014C404 PHY014C431	RESEARCH PROJECT – PHASE I 4 th SEMESTER COURSE TITLE Dissertation (students with research in 4 th Sem) (for 'Coursework only' in lieu of K Laser and Raman Spectroscopy Semiconductor Devices Nonlinear Optics and photonics Astrophysics Project- II Swayam 4 OR 4 th SEMESTER	LEVEL Research) 500 500 500 500 500 500 500 50	CREDIT 4 4 4 4 12	4-0-0 4-0-0 4-0-0 4-0-0