

STRUCTURE OF THE SYLLABUS FOR 2 YEAR PG PROGRAMME**ROYAL SCHOOL OF APPLIED AND PURE SCIENCES****M.Sc.(H) Physics**

1st SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PHY014C101	Classical Mechanics & Theory of Relativity	4
PHY014C102	Quantum Mechanics – I	4
PHY014C103	Mathematical Physics	4
PHY014C104	Nuclear & Particle Physics	4
PHY014C115	Physics Lab-I	4
SWAYAM CODE 1	Swayam 1	3/4/5
TOTAL CREDIT FOR 1st SEMESTER		20 + 3/4/5
2nd SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PHY014C201	Condensed Matter Physics	4
PHY014C202	Electrodynamics	4
PHY014C203	Quantum Mechanics – II	4
PHY014C204	Plasma and Space Physics	4
PHY014C215	Physics Lab - II	4
SWAYAM CODE 2	Swayam 2	3/4/5
TOTAL CREDIT FOR 2nd SEMESTER		20 + 3/4/5
TOTAL CREDIT FOR 1st YEAR = 40 + 6/8/10		
3rd SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
PHY014C301	Atomic and Molecular Physics	4
PHY014C302	Statistical Mechanics	4
PHY014C303	Physics of Nanomaterials	4
PHY014C304	Advanced Condensed Matter Physics	4
PHY014C321	Project- I	8
SWAYAM CODE 3	Swayam 3	3/4/5
TOTAL CREDIT FOR 3rd SEMESTER		24 + 3/4/5
OR 3rd SEMESTER (For students with 3rd and 4th Semester Research)		
PHY014C322	RESEARCH PROJECT – PHASE I	24 + 3/4/5

4th SEMESTER		
COURSE CODE	COURSE TITLE	CREDIT
	Dissertation (students with research in 4th Sem)	
<i>(for 'Coursework only' in lieu of Research)</i>		
PHY014C401	Laser and Raman Spectroscopy	4
PHY014C402	Semiconductor Devices	4
PHY014C403	Nonlinear Optics and photonics	4
PHY014C404	Astrophysics	4
PHY014C421	Project- II	12
SWAYAM CODE 4	Swayam 4	3/4/5
OR 4th SEMESTER (For students with 3rd and 4th Semester Research)		
PHY014C422	RESEARCH PROJECT – PHASE 2	28 + 3/4/5
TOTAL CREDIT FOR 2nd YEAR = 52+ 6/8/10		