

SCHEME OF EXAMINATION

Subject Code	Subject	Hrs of Instruction	Exam Duration (Hrs)	Max Marks			Credit Points
				CA	CE	Total	
First Semester							
Part A							
18PPHM101	Core I : Mathematical Physics	6	3	25	75	100	5
18PPHM102	Core II: Classical Mechanics	6	3	25	75	100	5
18PPHM103	Core III: Statistical Mechanics	6	3	25	75	100	5
18PPHM104	Core IV: Condensed Matter Physics	6	3	25	75	100	5
18PPHMP101	Core Practical I: Advanced Physics Practical I	5	4	40	60	100	3
Non-credit							
18PLS101	Career Competency Skills I	1	-	-	-	-	-
Total		30		500			23
Second Semester							
Part A							
18PPHM201	Core V: Quantum Mechanics I	6	3	25	75	100	5
18PPHM202	Core VI : Electromagnetic Theory	6	3	25	75	100	5
	Elective I	5	3	25	75	100	4
18PPHMP201	Core Practical II: Advanced Physics Practical II	5	4	40	60	100	3
18PCSPHI201	IDC I: Computer Graphics and Multimedia	3	3	25	75	100	2
18PCSPHIP201	IDC Practical I: Multimedia Tools	2	3	40	60	100	2
Part B							
18PVE201	Value Education: Human Rights	2	3	25	75	100	2
Non-credit							
18PLS201	Career Competency Skills II	1	-	-	-	-	-
Total		30		700			23

Subject code	Subject	Hrs of Instruction	Exam Duration (Hrs)	Max Marks			Credit Points
				CA	CE	Total	
Third Semester							
Part A							
18PPHM301	Core VII: Quantum Mechanics II	6	3	25	75	100	5
18PPHM302	Core VIII: Advanced Electronics	6	3	25	75	100	4
18PPHM303	Core IX: Microprocessor and Microcontroller	5	3	25	75	100	4
	Elective II	5	3	25	75	100	4
18PPHMP301	Core Practical III: Advanced Electronics Practical	4	3	40	60	100	3
Optional Papers							
18PECPHI301	IDC II: Modern Biomedical Instrumentation	4	3	25	75	100	4
18PBCPHI301	IDC II: Molecular Biophysics						
Total		30		600			24
Fourth Semester							
Part A							
18PPHM401	Core X: Spectroscopy	6	3	25	75	100	4
18PPHM402	Core XI: Nuclear and Particle Physics	6	3	25	75	100	4
18PPHM403	Core XII : Computational Physics	6	3	25	75	100	4
18PPHMP401	Core practical IV: Computation using MATLAB	3	3	40	60	100	2
18PPHPR401	Project & Viva-Voce	5	-	50	150	200	6
Total		26		600			20
Grand total				2400			90

ELECTIVE I

Students shall choose any one subject as an elective from the following subjects in the second semester.

S.No	Subject code	Subject
1	18PPHEL201	Modern Optics
2	18PPHEL202	Nonlinear Dynamics
3	18PPHEL203	Biomaterials

ELECTIVE II

Students shall choose any one subject as an elective from the following subjects in the third semester.

S.No	Subject code	Subject
1	18PPHEL301	Physics of Nanoscale
2	18PPHEL302	Crystal Growth and Thin Film Physics
3	18PPHEL303	Instrumental Methods of Analysis

FOR COURSE COMPLETION

Students should complete

- Two elective subjects in II and III semester.
- Two IDC in II and III semester.
- Human Rights as value education in II semester.
- Project at the end of IV semester.

TOTAL CREDIT DISTRIBUTION

Components	Total Marks		Credits
Part A			
Core	12X100	1200	7 X 5 = 35 5 X 4 = 20
Elective	2 X 100	200	2 X 4 = 08
Core practical	4 X 100	400	3 X 3 = 09 1 X 2 = 02
Inter Disciplinary Course theory	2 X 100	200	1 X 4 = 04 1 X 2 = 02
Inter Disciplinary Course practical	1 X 100	100	1 X 2 = 02
Project & Viva-Voce	1 X 200	200	1 X 6 = 06
Part B			
Value Education	1 X 100	100	1 X 2 = 02
Total		2400	90