

**M.Sc Physics (Semester Pattern)**  
**CURRICULUM , SYLLABUS AND SCHEME OF EXAMINATIONS**

(With effect from the academic year 2010-2011)

(Passed in the BOS meeting held on 12-03-2014)

**SEMESTER I**

Subject Code	Subject	Credit/ Hrs. per week	Duration of University Exam	Marks		Total Marks
				CIA	External Exam	
PH1411	Mathematical Physics	5	3 hrs	40	60	100
PH1412	Classical Mechanics & Statistical Mechanics	5	3	40	60	100
PH1413	Laser and Spectroscopy	5	3	40	60	100
PH142L1	Practical – I –General	5*	To be continued in Semester II			
PH142L2	Practical - II - Electronics	5*	To be continued in Semester II			
<b>SEMESTER II</b>						
PH1421	Electromagnetic Theory	5	3	40	60	100
PH1422	Quantum Mechanics – I	5	3	40	60	100
PH1423	Solid State Physics – I	5	3	40	60	100
PH1424	Electronics	5	3	40	60	100
PH142L1	Practical – I – General	-	4	40	60	100
PH142L2	Practical - II - Electronics	-	4	40	60	100
<b>SEMESTER III</b>						
PH1431	Digital electronics and microprocessors	5	3	40	60	100
PH1432	Quantum Mechanics – II	5	3	40	60	100
PH1433	Solid State Physics – II	5	3	40	60	100
PH1434	Nuclear and Particle Physics	5	3	40	60	100
PH143L3	Practical – III (Advanced Physics)	5	4	40	60	100

\* total credits for one year

SEMESTER IV

Subject Code	Subject	Credit/ Hrs. per week	Duration of University Exam	Marks		Total Marks
				CIA	External Exam	
PH1441	Nano Physics	5	3	40	60	100
PH1442	Numerical methods and C Programming (Elective)	5	3	40	60	100
PH1443	Energy Physics (Elective)					
PH1444	Ultrasonics & Applications (Elective)					
PH1445	Crystal Growth (Elective)					
PH1446	Advanced Instrumentation (Elective)					
PH144P1	Project	20	-	80	80	160
	Viva		-	-	40	40
Total		100				1800