

M. Sc. Physics (Four Semesters Programme)
Scheme and Syllabi w.e.f. Session 2016-17 (Revised)

New

Semester-I

Type of course	Course Code	Title of Course	Teaching Hours per week	Credits	Internal Assessment/ Evaluation	End term Examination	Total	Duration of Exam. (Hrs.) Theory/ Practical
Core	PHY-101	Mathematical Physics	4	4	30	70	100	3
Core	PHY-102	Classical Mechanics	4	4	30	70	100	3
Core	PHY-103	Electronics-I	4	4	30	70	100	3
Core	PHY-104	Quantum Mechanics-I	4	4	30	70	100	3
Core	PHY-105	Physics Lab. – I (General)	8	4	-	100	100	4
Core	PHY-106	Physics Lab. – II (Electronics)	8	4	-	100	100	4
	PHY-107	Seminar	1	1	25	-	25	-
Total				25			625	

Semester-II

Type of course	Course Code	Title of Course	Teaching Hours per week	Credits	Internal Assessment/ Evaluation	End term Examination	Total	Duration of Exam. (Hrs.) Theory/ Practical
Core	PHY-201	Solid State Physics	4	4	30	70	100	3
Core	PHY-202	Classical Electrodynamics-I	4	4	30	70	100	3
Core	PHY-203	Electronics-II	4	4	30	70	100	3
Core	PHY-204	Quantum Mechanics-II	4	4	30	70	100	3
Core	PHY-205	Physics Lab. – III (General)	8	4	-	100	100	4
Core	PHY-206	Physics Lab. – IV (Electronics)	8	4	-	100	100	4
	PHY-207	Seminar	1	1	25	-	25	-
Total				25			625	

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Semester-III

Type of course	Course Code	Title of Course	Teaching Hours per week	Credits	Internal Assessment/ Evaluation	End term Examination	Total	Duration Exam. (H Theory/ Practical)
Core	PHY-301	Statistical Mechanics	4	4	30	70	100	3
Core	PHY-302	Classical Electrodynamics-II	4	4	30	70	100	3
Any one of the following discipline electives (PHY-303A or PHY-303B)								
Discipline elective	PHY-303A	Laser & Spectroscopy-I	4	4	30	70	100	3
	PHY-303B	Computational Physics-I						
Any one of the following discipline electives (PHY-304A or PHY-304B)								
Discipline elective	PHY-304A	Materials Science-I	4	4	30	70	100	3
	PHY-304B	Optical Fibers & Optoelectronic Devices-I						
Any one of the following discipline electives (PHY-305A or PHY-305B)								
Discipline elective	PHY-305A	Physics Lab. -V(A) (Laser & Spectroscopy-I)	8	4	-	100	100	4
	PHY-305B	Physics Lab. -V(B) (Computational Physics-I)						
Any one of the following discipline electives (PHY-306A or PHY-306B)								
Discipline elective	PHY-306A	Physics Lab. - VI (A) (Materials Science-I)	8	4	-	100	100	4
	PHY-306B	Physics Lab. - VI (B) (Optical Fibers & Optoelectronic Devices-I)						
	PHY-307	Seminar	1	1	25	-	25	-
Total				25			625	

Semester-IV

Type of course	Course Code	Title of Course	Teaching Hours per week	Credits	Internal Assessment/ Evaluation	End term Examination	Total	Duration Exam. (H Theory/ Practical)
Core	PHY-401	Nuclear & Particle Physics	4	4	30	70	100	3
Core	PHY-402	Atomic & Molecular Physics	4	4	30	70	100	3
Same discipline elective is to be taken as in third semester								
Discipline elective	PHY-403A	Laser & Spectroscopy-II	4	4	30	70	100	3
	PHY-403B	Computational Physics-II						
Same discipline elective is to be taken as in third semester								
Discipline elective	PHY-404A	Materials Science-II	4	4	30	70	100	3
	PHY-404B	Optical Fibers & Optoelectronic Devices-II						
Same discipline elective is to be taken as in third semester								
Discipline elective	PHY-405A	Physics Lab. - VII(A) (Laser & Spectroscopy-II)	8	4	-	100	100	4
	PHY-405B	Physics Lab. - VII (B) (Computational Physics-II)						
Same discipline elective is to be taken as in third semester								
Discipline elective	PHY-406A	Physics Lab. - VIII (A) (Materials Science-II)	8	4	-	100	100	4
	PHY-406B	Physics Lab. VIII (B) (Optical Fibers & Optoelectronic Devices-II)						
	PHY-407	Seminar	1	1	25	-	25	-
Total				25			625	

Verified
11/11/24