

SYLLABI AND COURSES OF READING FOR M.Sc. PHYSICS EXAMINATION (2019-21)

SEMESTER: I

SCHEME OF TEACHING & EXAMINATION

NATURE OF COURSE	COURSE CODE	COURSE NAME/TITLE	SCHEDULE OF TEACHING (HOURS PER WEEK)			CREDITS	MARKS		
			LECTURE	TUTORIAL	PRACTICAL		INTERNAL	MULTIPLE CHOICE EXAMINATION/ PRACTICAL FILE	END SEMESTER EXAMINATION
Core	PHY04C101	Classical Mechanics	5	-	-	5	20	20	60
Core	PHY04C102	Electrodynamics-I	5	-	-	5	20	20	60
Core	PHY04C103	Electronics-I	5	-	-	5	20	20	60
Core	PHY04C104	Numerical Techniques	5	-	-	5	20	20	60
Laboratory	PHY04L101	Physics Laboratory-I	-	-	10	5	20	20	60
		TOTAL : 500	20	-	5	25	100	100	300

SYLLABI AND COURSES OF READING FOR M.Sc. PHYSICS EXAMINATION (2019-21)

SEMESTER: II

SCHEME OF TEACHING & EXAMINATION

NATURE OF COURSE	COURSE CODE	COURSE NAME/TITLE	SCHEDULE OF TEACHING (HOURS PER WEEK)			CREDITS	MARKS		
			LECTURE	TUTORIAL	PRACTICAL		INTERNAL	MULTIPLE CHOICE EXAMINATION/ PRACTICAL FILE	END SEMESTER EXAMINATION
Core	PHY04C201	Mathematical Physics	5	-	-	5	20	20	60
Core	PHY04C202	Quantum Mechanics-I	5	-	-	5	20	20	60
Core	PHY04C203	Statistical Physics	5	-	-	5	20	20	60
Core	PHY04C204	Electronics-II	5	-	-	5	20	20	60
Laboratory	PHY04L201	Physics Laboratory-II	-	-	10	5	20	20	60
		TOTAL : 500	20	-	5	25	100	100	300

SYLLABI AND COURSES OF READING FOR M.Sc. PHYSICS EXAMINATION (2019-21)
SEMESTER: III
SCHEME OF TEACHING & EXAMINATION

NATURE OF COURSE	COURSE CODE	COURSE NAME/TITLE	SCHEDULE OF TEACHING (HOURS PER WEEK)			CREDITS	MARKS		
			LECTURE	TUTORIAL	PRACTICAL		INTERNAL	MULTIPLE CHOICE EXAMINATION/ PRACTICAL FILE	END SEMESTER EXAMINATION
Core	PHY04C301	Quantum Mechanics-II	5	-	-	5	20	20	60
Core	PHY04C302	Nuclear Physics	5	-	-	5	20	20	60
Elective	PHY04E301	Condensed Matter Physics-I	5	-	-	5	20	20	60
Elective	PHY04E302	Particle Physics	5	-	-	5	20	20	60
Laboratory	PHY04L301	Physics Laboratory-III	-	-	10	5	20	20	60
Laboratory	PHY04L302	Computational Physics Laboratory-I	-	-	10	5	20	20	60
		TOTAL : 600	20	-	20	30	120	120	360

* DSE: Choose any two from following Discipline Specific Elective (DSE) subjects:

- | | |
|---|---------------------------------|
| 1. Condensed Matter Physics-I (PHY04E301) | 2. Particle Physics (PHY04E302) |
| 3. Reactor Physics (PHY04E303) | 4. Plasma Physics (PHY04E304) |

SYLLABI AND COURSES OF READING FOR M.Sc. PHYSICS EXAMINATION (2019-21)
SEMESTER: IV
SCHEME OF TEACHING & EXAMINATION

NATURE OF COURSE	COURSE CODE	COURSE NAME/TITLE	SCHEDULE OF TEACHING (HOURS PER WEEK)			CREDITS	MARKS		
			LECTURE	TUTORIAL	PRACTICAL		INTERNAL	MULTIPLE CHOICE EXAMINATION/ PRACTICAL FILE	END SEMESTER EXAMINATION
Core	PHY04C401	Electrodynamics-II	5	-	-	5	20	20	60
Core	PHY04C402	Atomic and Molecular Physics	5	-	-	5	20	20	60
Elective	PHY04E401	Experimental Techniques in Nuclear and Particle Physics	5	-	-	5	20	20	60
Elective	PHY04E402	Condensed Matter Physics-II	5	-	-	5	20	20	60
Laboratory	PHY04L401	Physics Laboratory-IV	-	-	10	5	20	20	60
Laboratory / Dissertation	PHY04L402/ PHY04D401	Computational Physics Laboratory-II / Dissertation**	-	-	10	5	20	20	60
TOTAL : 600			20	-	20	30	120	120	360

* DSE: Choose any two from following Discipline Specific Elective (DSE) subjects:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Experimental Techniques in Nuclear and Particle Physics (PHY04E401) 3. Astrophysics (PHY04E403) | <ol style="list-style-type: none"> 2. Condensed Matter Physics-II (PHY04E402) 4. Nanoscience and Technology (PHY04E404) |
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** A number of students, based on their performance in semester I & semester II, will be allotted Dissertation (PHY04D401) in semester IV, while all other students will opt Computational Physics Laboratory-II instead of Dissertation work.