

M.Sc Physics
COURSE PATTERN AND SCHEME OF EXAMINATION

| Course Code | Title of the Course | Instructions Hours/Week (Hrs) | Duration of Exam (Hrs) | Marks | | | Credits |
|-----------------------|--|-------------------------------|------------------------|-------|-------------------|-------|-----------|
| | | | | IA | Semester End Exam | Total | |
| Semester - I | | | | | | | |
| PS1FPHC500 | Mathematical Physics I | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC501 | Classical Mechanics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC502 | Quantum Mechanics I | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC503 | Electronics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPRM500 | Research Methodology and Ethics | 3 | 2 ½ | 40 | 60 | 100 | 3 |
| PS1FPSP521 | General Physics Experiments I | 6 | 3 | 40 | 60 | 100 | 3 |
| PS1FPSP522 | Electronics Experiments I | 6 | 3 | 40 | 60 | 100 | 3 |
| | | | | | | | 25 |
| Semester - II | | | | | | | |
| PS1FPHC550 | Mathematical Physics II | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC551 | Classical Electrodynamics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC552 | Quantum Mechanics II | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC553 | Condensed Matter Physics I | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPSP571 | General Physics Experiments- II | 6 | 3 | 40 | 60 | 100 | 3 |
| PS1FPSP572 | Electronics Experiments - II | 6 | 3 | 40 | 60 | 100 | 3 |
| PS1FPOE589 | Physics of the Universe | 3 | 2 ½ | 40 | 60 | 100 | 3 |
| | | | | | | | 25 |
| Semester - III | | | | | | | |
| PS1FPHC600 | Condensed Matter Physics II | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC601 | Thermodynamics and Statistical Physics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPSC621 | Relativity and Cosmology | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPSP621 | General Physics Experiments- III | 6 | 3 | 40 | 60 | 100 | 3 |
| PS1FPSP622 | Computational Physics Practicals | 6 | 3 | 40 | 60 | 100 | 3 |
| PS1FPOE639 | Experimental Techniques | 3 | 2 ½ | 40 | 60 | 100 | 3 |
| | | | | | | | 21 |
| Semester - IV | | | | | | | |
| PS1FPHC650 | Atomic and Molecular Physics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPHC651 | Nuclear and Particle Physics | 4 | 2 ½ | 40 | 60 | 100 | 4 |
| PS1FPPR686 | Project | 8 | 3 | 40 | 60 | 100 | 4 |
| PS1FPSC672 | Lasers, Vacuum techniques and Nonlinear Optics | 3 | 2 ½ | 40 | 60 | 100 | 3 |
| PS1FPSC673 | Condensed Matter Physics III | 3 | 2 ½ | 40 | 60 | 100 | 3 |
| PS1FPSP671 | General Physics Experiments - IV | 6 | 3 | 40 | 60 | 100 | 3 |
| | | | | | | | 21 |