

MANGALORE UNIVERSITY
M Sc DEGREE PROGRAMME IN PHYSICS: SEMESTER SCHEME
 (Effective from the Academic year 2022- 2023)

COURSE PATTERN AND SCHEME OF EXAMINATION

SEMESTER	Description of the Papers	Teaching Hrs/ week	Credit Hard(H)/Soft(S)/ Open elective(OE)	Max Marks: Exam + IA = Total
I SEMESTER				
PHH 401	Methods of Mathematical Physics - I	4	4 H	70 + 30
PHH 402	Quantum Mechanics I	4	4 H	70 + 30
PHH 403	Classical Mechanics	4	4 H	70 + 30
PHH 404	Electrodynamics	4	4 H	70 + 30
PHP 405	Physics Practicals I (General)	6	3 S	70 + 30
PHP 406	Physics Practicals II (General)	6	3 S	70 + 30
II SEMESTER				
PHH 451	Mathematical Physics II	4	4 H	70 + 30
PHH 452	Quantum Mechanics II	4	4 H	70 + 30
PHH 453	Nuclear and Radiation Physics	4	4 H	70 + 30
PHH 454	Condensed Matter Physics and Electronics	4	4 H	70 + 30
PHE 455	Energy studies	3	3S (OE)	70 + 30
PHP 456	Physics Practicals III (General)	6	3 S	70 + 30
PHP 457	Physics Practicals IV (Electronics)	6	3 S	70 + 30

III SEMESTER				
PHH 501	Atomic and Molecular Physics	4	4 H	70 + 30
PHH 502	Thermodynamics and Statistical Physics	4	4 H	70 + 30
PHS 503	Condensed Matter Physics I	4	4 S	70 + 30
PHS 504	Electronics I	4	4 S	70 + 30
PHS 505	Nuclear Physics I	4	4 S	70 + 30
PHS 506	Condensed Matter Physics II	4	4 S	70 + 30
PHS 507	Electronics II	4	4 S	70 + 30
PHS 508	Nuclear Physics II	4	4 S	70 + 30
PHE 509	Radiation Sources and Hazards	3	3 S (OE)	70+30
PHP 510	Condensed Matter Physics - Practicals I	6	3 S	70 + 30
PHP 511	Electronics - Practicals I	6	3 S	70 + 30
PHP 512	Nuclear Physics – Practicals I	6	3 S	70 + 30
PHP 513	Condensed Matter Physics - Practicals II	6	3 S	70 + 30
PHP 514	Electronics - Practicals II	6	3 S	70 + 30
PHP 515	Nuclear Physics – Practicals II	6	3 S	70 + 30
IV SEMESTER				
PHH 551	Lasers, Vacuum Techniques and Cryogenics	4	4 H	70 + 30
PHH 552	Astrophysics and Relativity	4	4 H	70 + 30
PHS 553	Condensed Matter Physics III	4	4 S	70 + 30
PHS 554	Electronics III	4	4 S	70 + 30
PHS 555	Nuclear Physics III	4	4 S	70 + 30
PHS 556	Condensed Matter Physics IV	4	4 S	70 + 30
PHS 557	Electronics IV	4	4 S	70 + 30
PHS 558	Nuclear Physics IV	4	4 S	70 + 30
PHP 559	Project work	8	4 H	70+30