

STRUCTURE OF THE SYLLABUS FOR 2 YEAR PG PROGRAMME**SCHOOL NAME: ROYAL SCHOOL OF APPLIED AND PURE SCIENCES****DEPARTMENT NAME: MATHEMATICS****PROGRAMME NAME: MASTER OF SCIENCE (M.Sc.)**

1ST SEMESTER				
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
MAT014C101	Mathematical Methods	400	4	4-0-0
MAT014C102	Linear Algebra	400	4	4-0-0
MAT014C103	Real Analysis and Lebesgue Measure	400	4	4-0-0
MAT014C104	Ordinary Differential Equations	400	4	4-0-0
MAT014C105	Classical Mechanics and Tensor	400	4	4-0-0
SWAYAM CODE 1	Swayam 1	400	3/4/5	
TOTAL CREDIT FOR 1ST SEMESTER			20+3/4/5	
2ND SEMESTER				
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
MAT014C201	Partial Differential Equations	500	4	4-0-0
MAT014C202	Numerical Analysis and Computational Programming	500	4	4-0-0
MAT014C203	Algebra	500	4	4-0-0
MAT014C204	Topology	500	4	4-0-0
MAT014C205	Complex Analysis	500	4	4-0-0
SWAYAM CODE 2	Swayam 2	500	3/4/5	
TOTAL CREDIT FOR 2ND SEMESTER			20+3/4/5	
TOTAL CREDIT FOR 1ST YEAR=40+6/8/10				
3RD SEMESTER				
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
MAT014C301/ MAT014C302	Graph Theory / Mathematical Logic	500	4	4-0-0
MAT014C303/ MAT014C304	Functional Analysis / Algebraic Topology	500	4	4-0-0
MAT014C305/ MAT014C306/ MAT014C307	Continuum Mechanics / Relativity / Differential Geometry	500	4	4-0-0
MAT014C308/ MAT014C309/ MAT014C310	Number Theory and Cryptography / Financial Mathematics / Advanced Ring Theory	500	4	4-0-0
MAT014C331	Research Project-I	500	8	0-0-8
SWAYAM CODE 3	Swayam 3	500	3/4/5	
TOTAL CREDIT FOR 3RD SEMESTER			24+3/4/5	
4TH SEMESTER				
COURSE CODE	COURSE TITLE	LEVEL	CREDIT	L-T-P
MAT014C401	Measure Theory and Fuzzy Set Theory	500	4	4-0-0
MAT014C402	Operation Research and Machine Learning	500	4	4-0-0
MAT014C403/ MAT014C404	Operator Theory / Dynamical System and Fractional Calculus	500	4	4-0-0
MAT014C405/ MAT014C406/ MAT014C407	Fluid Dynamics / Probability and Statistics / Bio-Mathematics	500	4	4-0-0
MAT014C431	Research Project-II	500	12	0-0-12
SWAYAM CODE 4	Swayam 4	500	3/4/5	
TOTAL CREDIT FOR 4TH SEMESTER			28+3/4/5	
TOTAL CREDITS FOR 2ND YEAR = 52+6/8/10				