ST JOSEPH'S UNIVERSITY, BENGALURU

DEPARTMENT OF MATHEMATICS

B.Sc. – CREDIT STRUCTURE (A.Y. 2027–30)

Semester	Core 1 (Theory+Practical)	Core 2 (Theory+Practical)	Core 3 (Theory+Practical)	Paper 4 Swayam NPTEL	Lang 1	Lang 2	Foundation Courses	Electives	Practical Knowledge / Skill	Elementary research methodology	Total Credits per semester
Sem 1	3+2	3+2	3+2		3	3	2				23
Sem 2	3+2	3+2	3+2	2	3	3	2				25
Sem 3	3+2	3+2	3+2		3	3		2			23
Sem 4	3+2	3+2	3+2	2	3	3		2			25
Sem 5	3+2	3+2	3+2		-	-			2+2+2		21
Sem 6	3+2	3+2	3+2		-	-			2+2+2	2	23
Total Credits	**30**	**30**	**30**	**4**	**12**	**12**	**4**	**4**	**12**	**2**	**140**

Credits from 6 semesters	**140**
Additional Credits	**14**
Total	**154**

ST JOSEPH'S UNIVERSITY, BENGALURU

DEPARTMENT OF MATHEMATICS

2. DETAILED PAPER-WISE STRUCTURE

Semester	Category	Paper	Paper Code and Title	Teaching Hours	Credits	Total Marks
I	Theory	Paper I	MT1127: Calculus and Linear Algebra-I	45	3	100
I	Practical	Paper I P	MT1P127: Mathematics Practical-I	44	2	50
II	Theory	Paper I	MT2127: Real Analysis-I and Ordinary Differential Equations-I	45	3	100
II	Practical	Paper I P	MT2P127: Mathematics Practical-II	44	2	50
III	Theory	Paper I	MT3127: Multivariable Calculus and Series	45	3	100
III	Practical	Paper I P	MT3P127: Mathematics Practical-III	44	2	50
IV	Theory	Paper I	MT4127: Real Analysis-II and Partial Differential Equations	45	3	100
IV	Practical	Paper I P	MT4P127: Mathematics Practical-IV	44	2	50
V	Theory	Paper I	MT5127: Group Theory and Complex Analysis	45	3	100
V	Practical	Paper I P	MT5P127: Mathematics Practical-V	44	2	50
V	Practical	SEC-1	Probability & Statistics — computational; distributions, inference (Python/R)	44	2	50
VI	Theory	Paper I	MT6127: Linear Algebra II and Ring Theory	45	3	100
VI	Practical	Paper I P	MT6P127: Mathematics Practical-VI	44	2	50
V	Practical	SEC-2	Linear Algebra for ML — SVD, PCA, least-squares, projections (NumPy/PyTorch)	44	2	50
SEMESTER I TOTAL					**5**	**150**
SEMESTER II TOTAL					**5**	**150**
SEMESTER III TOTAL					**5**	**150**
SEMESTER IV TOTAL					**5**	**150**
SEMESTER V TOTAL					**7**	**200**
SEMESTER VI TOTAL					**7**	**200**

GRAND TOTAL: 34 CREDITS | 1000 MARKS