

Progressive Education Society's
Modern College of Arts, Science and Commerce,
Shivajinagar, Pune 5

(An Autonomous College Affiliated to Savitribai Phule Pune University)

Framework of Syllabus

For

M.Sc. (Mathematics)

(2019-20 Course)

(with effect from 2019-20)

CIA:Continuous Internal Evaluation

Semester 1 (Part I)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-1	19ScMatP101	Real Analysis	5	4	50	50	100
CCT-2	19ScMatP102	Advanced Calculus	5	4	50	50	100
CCT-3	19ScMatP103	Group Theory	5	4	50	50	100
CCT-4	19ScMatP104	Numerical Analysis	5	4	50	50	100
Elective – I (Any one of the following two)							
DSEP-1	19ScMatP105	Ordinary Differential Equations	5	4	50	50	100
	19ScMatP106	Graph Theory					
Total			25	20	250	250	500

Semester 2 (Part I)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-5	19ScMatP201	Complex Analysis	5	4	50	50	100
CCT-6	19ScMatP202	General Topology	5	4	50	50	100
CCT-7	19ScMatP203	Ring Theory	5	4	50	50	100
CCT-8	19ScMatP204	Linear Algebra	5	4	50	50	100
Elective – II (Any one of the following two)							
DSEP-2	19ScMatP205	Partial Differential Equations	5	4	50	50	100
	19ScMatP206	Integral Equations and Transforms					
Total			25	20	250	250	500

Semester 3 (Part II)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-9	19ScMatP301	Applied Combinatorics	5	4	50	50	100
CCT-10	19ScMatP302	Functional Analysis	5	4	50	50	100
CCT-11	19ScMatP303	Field Theory	5	4	50	50	100
CCT-12	19ScMatP304	Commutative algebra	5	4	50	50	100
Elective – III (Any one of the following two)							
DSEP-3	19ScMatP305	Operations Research	5	4	50	50	100
	19ScMatP306	C Programming Language					
Total			25	20	250	250	500

Semester 4 (Part II)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-13	19ScMatP401	Number Theory	5	4	50	50	100
CCT-14	19ScMatP402	Differential Geometry	5	4	50	50	100
CCT-15	19ScMatP403	Lattice Theory	5	4	50	50	100
CCT-16	19ScMatP404	Fourier Series and Boundary Value Problems	5	4	50	50	100
Elective – IV (Any one of the following two)							
DSEP-4	19ScMatP405	Probability and Mathematical Statistics	5	4	50	50	100
	19ScMatP406	Computational Geometry					
Total			25	20	250	250	500