Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2019-2020

Department of Mathematics

Duration : July - December					
Semester / Year	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-1	MTMACOR01T	Calculus, Geometry and Ordinary Differential Equation	Differential Calculus, Integral Calculus, Co-ordinate Geometry	SM	30
			Ordinary Differential Equation	DD	15
	MTMACOR02T	Algebra	Abstract Algebra, Complex number, Theory of Equation	SM	30
			Linear Algebra	DD	15
	MTMGCOR01T	Differential Calculus	Limit & Continuity, Partial Differentiation, Application of Calculus	SM	28
			Differentiation	DD	15
Sem-3	MTMACOR05T	Theory of Real Functions	Limit & Continuity, Differentiability of a function, Mean-value Theorems	SM	40
	MTMACOR06T	Group Theory I	Elementary properties of Groups, Subgroup, Cyclic group, Normal Subgroup, External direct product, Group homomorphism	SM	48
	MTMACOR07T	Numerical Methods	Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	AC	20
	MTMACOR07P	Numerical Methods (Lab)	Practical using C programming		20
	MTMSSEC01M	C Programming Language	Basics of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional arrays, Functions		10
	MTMGCOR03T	Real Analysis	Set in R	SM	12
			Real sequence, Infinite series, Sequence and series of functions	DD	25
3rd Year	5th Paper (MTMA)	Real Analysis	Riemann integration, sequence of functions, series of functions, Power series	SM	26
	6th Paper (MTMA)	Numerical Analysis,	Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	DD	20
		Probability	Probability distribution, 2 dimensional distribution, mathematical expectation, convergence in probability, limit theorem	SM	30
	7th Paper (MTMA)	Statics & Hydrostatics	Coplanar forces, friction, virtual work, forces in 3 dimension, stable & unstable equillibrium, center of pressure	DD	34
	8th Paper (MTMA)	Linear Algebra, Vector Calculus	Linear transformation, differentiation & integration of vector function	SM	20
		Numerical Analysis (Practical)		AC	40
	(MTMG)	L.P.P. & Dynamics	Basic solution, Graphical method, Simplex method, Big-M Method, duality theory; Motion in a straight line, simple harmonic motion, motion in 2 dimension	SM	28

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2019-2020

Department of Mathematics

Duration : January - June					
Semester / Year	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-2	MTMACOR03T	Real Analysis	Set in R, sequence & series	SM	48
	MTMACOR04T	Ordinary Differential Equations and Vector Calculus	Lipschitz condition and Picard's Theorem, Wronskian, System of linear differential equations, Power series solution of a differential equation, Triple product of vector, differentiation and integration of vector functions	DD	40
	MTMGCOR02T	Differential Equations	Exact differential equations. Integrating factors, Linear homogenous equations with constant coefficients, partial differential equations	DD	30
Sem-4	MTMACOR08T	Riemann Integration and Series of Functions	Riemann integration, Improper integrals, Pointwise and uniform convergence of sequence of functions, series of functions, Fourier series, Power series	SM	46
	MTMACOR09T	Multivariate Calculus	Limit and continuity of functions of two or more variables, Partial differentiation, total differentiability, Chain rule	SM	24
			directional derivatives, the gradient, method of Lagrange multipliers, Double integration, divergence and curl. line integrals, Green's theorem, Stoke's theorem	JB	24
	MTMACOR010T	Ring Theory and Linear Algebra I	Ring, integral domain, ideal, ring homomorphism, isomorphism theorems, field, vector space, subspaces, linear span, linear independence, linear transformation	SM	42
	MTMSSEC02M	Logic and Sets	Propositional & predicate logic, finite and infinite sets, counting principle, relations, Partitions, Equivalence Relations	JB	10
	MTMGCOR04T	Algebra	Equivalence relation, function, group, subgroup, cyclic group, normal subgroup, ring, field	SM	42
3rd Year	5th Paper (MTMA)	Real Analysis	Improper integrals, Fourier series, function of bounded variation	SM	25
	6th Paper (MTMA)	Statistics	Random samples, sampling distributions, estimation of parameters, bivariate samples, testing of hypothesis, theory of errors	AC	24
	7th Paper (MTMA)	Rigid Dynamics	Moments & product of inertia, D'Alembert's principle, motion in 2 dimension, conservation of linear and angular momentum	DD	30
	8th Paper (MTMA)	Numerical Analysis (Practical)		AC	20
		Tensor	Tensor Calculus	AC	10
	(MTMG)	L.P.P. & Dynamics	Transportation & assignment problem; Central orbits	SM	22

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2020-2021

Department of Mathematics

Duration : July - December					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-1	MTMACOR01T	Calculus, Geometry and Ordinary Differential Equation	Differential Calculus, Integral Calculus, Co-ordinate Geometry	SM	30
			Ordinary Differential Equation	JB	15
	MTMACOR02T	Algebra	Abstract Algebra, Complex number, Theory of Equation	SM	30
			Linear Algebra	JB	15
	MTMGCOR01T	Differential Calculus	Limit & Continuity, Partial Differentiation, Application of Calculus	SM	22
			Differentiation	JB	15
Sem-3	MTMACOR05T	Theory of Real Functions	Limit & Continuity, Differentiability of a function, Mean-value Theorems	SM	40
	MTMACOR06T	Group Theory I	Elementary properties of Groups, Subgroup, Cyclic group, Normal Subgroup, External direct product, Group homomorphism	SM	48
	MTMACOR07T	Numerical Methods	Algorithms, Convergence, Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	JB	20
	MTMACOR07P	Numerical Methods (Lab)	Practical using C programming		20
	MTMSSEC01M	C Programming Language	Basics of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional arrays, Functions		10
	MTMGCOR03T	Real Analysis	Set in R	SM	12
			Real sequence, Infinite series, Sequence and series of functions	JB	25
Sem-5	MTMACOR11T	Partial Differential Equations, Applications of Ordinary Differential Equations	Partial Differential Equations, Heat equation, Wave equation and Laplace equation, Cauchy problem, Central force	JB	32
	MTMACOR12T	Group Theory II	Automorphism, Internal direct product, finite abelia group, Group Action, Class equation, Sylow theorem, simple group, Class equation, Sylow theorem, simple group	SM	40
	MTMADSE01T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, Transportation problem, Assignment problem, Game theory	SM	48
	MTMADSE02T	Number Theory	Linear diophantine equation, prime number, Linear congruence, Chinese remainder theorem, arithmatic function, Euler theorem, primitive roots	SM	42
	MTMGDSE01T	Matrices	Vector space, linear independence, rank of matrix, eigen value, eigen vector, solutions of linear homogeneous and non-homogeneous equations	JB	30

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2020-2021

Department of Mathematics

Duration : January - June					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-2	MTMACOR03T	Real Analysis	Set in R, sequence & series	SM	48
	MTMACOR04T	Ordinary Differential Equations and Vector Calculus	Lipschitz condition and Picard's Theorem, Wronskian, System of linear differential equations, Power series solution of a differential equation, Triple product of vector, differentiation and integration of vector functions	JB	40
	MTMGCOR02T	Differential Equations	Exact differential equations. Integrating factors, Linear homogenous equations with constant coefficients, partial differential equations	SM	30
Sem-4	MTMACOR08T	Riemann Integration and Series of Functions	Riemann integration, Improper integrals, Pointwise and uniform convergence of sequence of functions, series of functions, Fourier series, Power series	SM	46
	MTMACOR09T	Multivariate Calculus	Limit and continuity of functions of two or more variables, Partial differentiation, total differentiability, Chain rule	SM	24
			directional derivatives, the gradient, method of Lagrange multipliers, Double integration, divergence and curl. line integrals, Green's theorem, Stoke's theorem	JB	24
	MTMACOR010T	Ring Theory and Linear Algebra I	Ring, integral domain, ideal, ring homomorphism, isomorphism theorems, field, vector space, subspaces, linear span, linear independence, linear transformation	SM	42
	MTMSSEC02M	Logic and Sets	Propositional & predicate logic, finite and infinite sets, counting principle, relations, Partitions, Equivalence Relations	JB	10
	MTMGCOR04T	Algebra	Equivalence relation, function, group, subgroup, cyclic group, normal subgroup, ring, field	SM	42
Sem-6	MTMACOR13T	Metric Spaces and Complex Analysis	Open ball, open & closed set, sequence, Cauchy sequence, completeness, compactness, connectedness	SM	24
			Cauchy-Riemann equation, analytic function, contour integrals, Cauchy integral formula, Liouville's theorem, Lorentz series	JB	30
	MTMACOR14T	Ring Theory and Linear Algebra II	Polynomial rings, PID, UFD, Euclidean domain	SM	20
			dual space, dual basis, transpose of linear transformation, eigen spaces of a linear operator, Caley-Hamilton theorem, inner product spaces and norms, Grams-Schmidt orthogonalisation process	JB	24
	MTMADSE04T	Theory of Equations	General properties of a polynomial, Descarte's rule of sign, Cardon's method, Ferarri's method, Starm's theorem	SM	30
	MTMADSE06T	Mechanics	Statics & Rigid Dynamics	SM	34
	MTMGDSE04T	Linear Programming	Basic solution, Graphical method, Simplex method, Big-M Method, duality theory	JB	32

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2021-2022

Department of Mathematics

Duration : July - December					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-1	MTMACOR01T	Calculus, Geometry and Ordinary Differential Equation	Differential Calculus, Integral Calculus, Co-ordinate Geometry	SM	30
			Ordinary Differential Equation	JB	15
	MTMACOR02T	Algebra	Abstract Algebra, Complex number, Theory of Equation	SM	30
			Linear Algebra	JB	15
	MTMGCOR01T	Differential Calculus	Limit & Continuity, Partial Differentiation, Application of Calculus	SM	22
			Differentiation	JB	15
Sem-3	MTMACOR05T	Theory of Real Functions	Limit & Continuity, Differentiability of a function, Mean-value Theorems	SM	40
	MTMACOR06T	Group Theory I	Elementary properties of Groups, Subgroup, Cyclic group, Normal Subgroup, External direct product, Group homomorphism	SM	48
	MTMACOR07T	Numerical Methods	Algorithms, Convergence, Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	JB	20
	MTMACOR07P	Numerical Methods (Lab)	Practical using C programming		20
	MTMSSEC01M	C Programming Language	Basics of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional arrays, Functions		10
	MTMGCOR03T	Real Analysis	Set in R	SM	12
			Real sequence, Infinite series, Sequence and series of functions	JB	25
Sem-5	MTMACOR11T	Partial Differential Equations, Applications of Ordinary Differential Equations	Partial Differential Equations, Heat equation, Wave equation and Laplace equation, Cauchy problem, Central force	JB	32
	MTMACOR12T	Group Theory II	Automorphism, Internal direct product, finite abelia group, Group Action, Class equation, Sylow theorem, simple group, Class equation, Sylow theorem, simple group	SM	40
	MTMADSE01T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, Transportation problem, Assignment problem, Game theory	SM	48
	MTMADSE02T	Number Theory	Linear diophantine equation, prime number, Linear congruence, Chinese remainder theorem, arithmatic function, Euler theorem, primitive roots	SM	42
	MTMGDSE01T	Matrices	Vector space, linear independence, rank of matrix, eigen value, eigen vector, solutions of linear homogeneous and non-homogeneous equations	JB	30

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2021-2022

Department of Mathematics

Duration : January - June					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-2	MTMACOR03T	Real Analysis	Set in R, sequence & series	SM	48
	MTMACOR04T	Ordinary Differential Equations and Vector Calculus	Lipschitz condition and Picard's Theorem, Wronskian, System of linear differential equations, Power series solution of a differential equation, Triple product of vector, differentiation and integration of vector functions	JB	40
	MTMGCOR02T	Differential Equations	Exact differential equations. Integrating factors, Linear homogenous equations with constant coefficients, partial differential equations	SM	30
Sem-4	MTMACOR08T	Riemann Integration and Series of Functions	Riemann integration, Improper integrals, Pointwise and uniform convergence of sequence of functions, series of functions, Fourier series, Power series	SM	46
	MTMACOR09T	Multivariate Calculus	Limit and continuity of functions of two or more variables, Partial differentiation, total differentiability, Chain rule	SM	24
			directional derivatives, the gradient, method of Lagrange multipliers, Double integration, divergence and curl. line integrals, Green's theorem, Stoke's theorem	JB	24
	MTMACOR010T	Ring Theory and Linear Algebra I	Ring, integral domain, ideal, ring homomorphism, isomorphism theorems, field, vector space, subspaces, linear span, linear independence, linear transformation	SM	42
	MTMSSEC02M	Logic and Sets	Propositional & predicate logic, finite and infinite sets, counting principle, relations, Partitions, Equivalence Relations	JB	10
	MTMGCOR04T	Algebra	Equivalence relation, function, group, subgroup, cyclic group, normal subgroup, ring, field	SM	42
Sem-6	MTMACOR13T	Metric Spaces and Complex Analysis	Open ball, open & closed set, sequence, Cauchy sequence, completeness, compactness, connectedness	SM	24
			Cauchy-Riemann equation, analytic function, contour integrals, Cauchy integral formula, Liouville's theorem, Lorentz series	JB	30
	MTMACOR14T	Ring Theory and Linear Algebra II	Polynomial rings, PID, UFD, Euclidean domain	SM	20
			dual space, dual basis, transpose of linear transformation, eigen spaces of a linear operator, Caley-Hamilton theorem, inner product spaces and norms, Grams-Schmidt orthogonalisation process	JB	24
	MTMADSE04T	Theory of Equations	General properties of a polynomial, Descarte's rule of sign, Cardon's method, Ferarri's method, Starm's theorem	SM	30
	MTMADSE06T	Mechanics	Statics & rigid dynamics	SM	34
	MTMGDSE04T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, duality theory	JB	32

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2022-2023

Department of Mathematics

Duration : July - December					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-1	MTMACOR01T	Calculus, Geometry and Ordinary Differential Equation	Differential Calculus, Integral Calculus, Co-ordinate Geometry	SM	30
			Ordinary Differential Equation	NP	15
	MTMACOR02T	Algebra	Abstract Algebra, Complex number, Theory of Equation	SM	30
			Linear Algebra	NP	15
	MTMGCOR01T	Differential Calculus	Limit & Continuity, Partial Differentiation, Application of Calculus	SM	22
			Differentiation	NP	15
Sem-3	MTMACOR05T	Theory of Real Functions	Limit & Continuity, Differentiability of a function, Mean-value Theorems	SM	40
	MTMACOR06T	Group Theory I	Elementary properties of Groups, Subgroup, Cyclic group, Normal Subgroup, External direct product, Group homomorphism	SM	48
	MTMACOR07T	Numerical Methods	Algorithms, Convergence, Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	NP	20
	MTMACOR07P	Numerical Methods (Lab)	Practical using C programming		20
	MTMSSEC01M	C Programming Language	Basics of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional arrays, Functions		10
	MTMGCOR03T	Real Analysis	Set in R	SM	12
			Real sequence, Infinite series, Sequence and series of functions	NP	25
Sem-5	MTMACOR11T	Partial Differential Equations, Applications of Ordinary Differential Equations	Partial Differential Equations, Heat equation, Wave equation and Laplace equation, Cauchy problem, Central force	NP	32
	MTMACOR12T	Group Theory II	Automorphism, Internal direct product, finite abelia group, Group Action, Class equation, Sylow theorem, simple group, Class equation, Sylow theorem, simple group	SM	40
	MTMADSE01T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, Transportation problem, Assignment problem, Game theory	SM	48
	MTMADSE02T	Number Theory	Linear diophantine equation, prime number, Linear congruence, Chinese remainder theorem, arithmatic function, Euler theorem, primitive roots	SM	42
	MTMGDSE01T	Matrices	Vector space, linear independence, rank of matrix, eigen value, eigen vector, solutions of linear homogeneous and non-homogeneous equations	NP	30

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2022-2023

Department of Mathematics

Duration : January - June					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-2	MTMACOR03T	Real Analysis	Set in R, sequence & series	SM	48
	MTMACOR04T	Ordinary Differential Equations and Vector Calculus	Lipschitz condition and Picard's Theorem, Wronskian, System of linear differential equations, Power series solution of a differential equation, Triple product of vector, differentiation and integration of vector functions	NP	40
	MTMGCOR02T	Differential Equations	Exact differential equations. Integrating factors, Linear homogenous equations with constant coefficients, partial differential equations	SM	30
Sem-4	MTMACOR08T	Riemann Integration and Series of Functions	Riemann integration, Improper integrals, Pointwise and uniform convergence of sequence of functions, series of functions, Fourier series, Power series	SM	46
	MTMACOR09T	Multivariate Calculus	Limit and continuity of functions of two or more variables, Partial differentiation, total differentiability, Chain rule	SM	24
			directional derivatives, the gradient, method of Lagrange multipliers, Double integration, divergence and curl. line integrals, Green's theorem, Stoke's theorem	NP	24
	MTMACOR010T	Ring Theory and Linear Algebra I	Ring, integral domain, ideal, ring homomorphism, isomorphism theorems, field, vector space, subspaces, linear span, linear independence, linear transformation	SM	42
	MTMSSEC02M	Logic and Sets	Propositional & predicate logic, finite and infinite sets, counting principle, relations, Partitions, Equivalence Relations	NP	10
	MTMGCOR04T	Algebra	Equivalence relation, function, group, subgroup, cyclic group, normal subgroup, ring, field	SM	42
Sem-6	MTMACOR13T	Metric Spaces and Complex Analysis	Open ball, open & closed set, sequence, Cauchy sequence, completeness, compactness, connectedness	SM	24
			Cauchy-Riemann equation, analytic function, contour integrals, Cauchy integral formula, Liouville's theorem, Lorentz series	NP	30
	MTMACOR14T	Ring Theory and Linear Algebra II	Polynomial rings, PID, UFD, Euclidean domain	SM	20
			dual space, dual basis, transpose of linear transformation, eigen spaces of a linear operator, Caley-Hamilton theorem, inner product spaces and norms, Grams-Schmidt orthogonalisation process	NP	24
	MTMADSE04T	Theory of Equations	General properties of a polynomial, Descarte's rule of sign, Cardon's method, Ferarri's method, Starm's theorem	SM	30
	MTMADSE06T	Mechanics	Statics & rigid dynamics	NP	34
	MTMGDSE04T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, duality theory	SM	32

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2023-2024

Department of Mathematics

Duration : July - December					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-1	MTMDSC101T	Number Theory	Well ordering principle, congruence relation, Euler phi function	SM	30
		Algebra	Classical Algebra, Complex number, Theory of Equation	SM	30
			Matrix Theory	NP	30
	MTMCOR101T	Classical Algebra	Complex number, Theory of Equation, inequality	SM	20
		Abstract Algebra	Relation, mapping, group theory, Ring, Field	SM	20
		Linear Algebra	Matrix, Vector space	NP	15
Sem-3	MTMACOR05T	Theory of Real Functions	Limit & Continuity, Differentiability of a function, Mean-value Theorems	SM	40
	MTMACOR06T	Group Theory I	Elementary properties of Groups, Subgroup, Cyclic group, Normal Subgroup, External direct product, Group homomorphism	SM	48
	MTMACOR07T	Numerical Methods	Algorithms, Convergence, Errors, Transcendental and Polynomial equations, System of linear algebraic equations, Interpolation, Numerical differentiation & Integration, Ordinary Differential Equations	NP	20
	MTMACOR07P	Numerical Methods (Lab)	Practical using C programming		20
	MTMSSEC01M	C Programming Language	Basics of Computer Programming, Fundamentals of Programming, Statements, Arrays, Multi-dimensional arrays, Functions		10
	MTMGCOR03T	Real Analysis	Set in R	SM	12
			Real sequence, Infinite series, Sequence and series of functions	NP	25
Sem-5	MTMACOR11T	Partial Differential Equations, Applications of Ordinary Differential Equations	Partial Differential Equations, Heat equation, Wave equation and Laplace equation, Cauchy problem, Central force	NP	32
	MTMACOR12T	Group Theory II	Automorphism, Internal direct product, finite abelia group, Group Action, Class equation, Sylow theorem, simple group, Class equation, Sylow theorem, simple group	SM	40
	MTMADSE01T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, Transportation problem, Assignment problem, Game theory	SM	48
	MTMADSE02T	Number Theory	Linear diophantine equation, prime number, Linear congruence, Chinese remainder theorem, arithmatic function, Euler theorem, primitive roots	SM	42
	MTMGDSE01T	Matrices	Vector space, linear independence, rank of matrix, eigen value, eigen vector, solutions of linear homogeneous and non-homogeneous equations	NP	30

Rishi Bankim Chandra College for Women

Academic Calendar for the Session : 2023-2024

Department of Mathematics

Duration : January - June					
Semester	**Course Code**	**Name of the Course**	**Description**	**Name of Teacher**	**No. of classes**
Sem-2	MTMDSC202T	Limit, Continuity, Differentiability	Successive differentiation, Euler's theorem, mean value theorem	SM	33
		Integral Calculus	Reduction formula, Beta & Gamma function	SM	15
		Application of Calculus	Tangent and normal, curvature, Asymptote, envelopes, volume and surfece area of solids of revolution	NP	40
	MTMCOR202T	Limit, Continuity, Differentiability	Successive differentiation, Euler's theorem, mean value theorem	SM	25
		Integral Calculus	Reduction formula, Beta & Gamma function	SM	10
		Application of Calculus	Tangent and normal, curvature, Asymptote, envelopes, volume and surfece area of solids of revolution	NP	30
Sem-4	MTMACOR08T	Riemann Integration and Series of Functions	Riemann integration, Improper integrals, Pointwise and uniform convergence of sequence of functions, series of functions, Fourier series, Power series	SM	46
	MTMACOR09T	Multivariate Calculus	Limit and continuity of functions of two or more variables, Partial differentiation, total differentiability, Chain rule	SM	24
			directional derivatives, the gradient, method of Lagrange multipliers, Double integration, divergence and curl. line integrals, Green's theorem, Stoke's theorem	NP	24
	MTMACOR010T	Ring Theory and Linear Algebra I	Ring, integral domain, ideal, ring homomorphism, isomorphism theorems, field, vector space, subspaces, linear span, linear independence, linear transformation	SM	42
	MTMSSEC02M	Logic and Sets	Propositional & predicate logic, finite and infinite sets, counting principle, relations, Partitions, Equivalence Relations	NP	10
	MTMGCOR04T	Algebra	Equivalence relation, function, group, subgroup, cyclic group, normal subgroup, ring, field	SM	42
Sem-6	MTMACOR13T	Metric Spaces and Complex Analysis	Open ball, open & closed set, sequence, Cauchy sequence, completeness, compactness, connectedness	SM	24
			Cauchy-Riemann equation, analytic function, contour integrals, Cauchy integral formula, Liouville's theorem, Lorentz series	NP	30
	MTMACOR14T	Ring Theory and Linear Algebra II	Polynomial rings, PID, UFD, Euclidean domain	SM	20
			dual space, dual basis, transpose of linear transformation, eigen spaces of a linear operator, Caley-Hamilton theorem, inner product spaces and norms, Grams-Schmidt orthogonalisation process	NP	24
	MTMADSE04T	Theory of Equations	General properties of a polynomial, Descarte's rule of sign, Cardon's method, Ferarri's method, Starm's theorem	SM	30
	MTMADSE06T	Mechanics	Statics & rigid dynamics	NP	34
	MTMGDSE04T	Linear Programming	Basic solution, Graphical method, Simplex method, M-Method, duality theory	SM	32