

# LESSON PLAN 2021-2022

Name of the Department : **MATHEMATICS**

(DP: Dipanwita Paul Ghosh AB: Anjana Bhattacharyya BS: Basudev Siddhya PL: Pramod Lama GL: Guest Lecturer)

Semester	Programme	Course and Name of the Paper	Topic	Teacher	No. Of hours
1	Hons	CC -1 Calculus, Geometry & Vector Analysis	Calculus	GL	25
			Geometry, Vector Analysis	PL	45
			Graphical Demonstration	BS	5
		CC-2 Algebra	Classical Algebra	DP	21
			Number Theory, Linear Algebra	AB	30
			Abstract Algebra	BS	15
			Complex Number	PL	9
1	GENERAL	CC 1/GE 1 Algebra, Differential Calculus-I, Differential Equations and Coordinate Geometry	Algebra-Polynomials	DP	5
			Algebra- Complex number, Matrix	GL	5
			Differential Calculus	AB	20
			Differential Equations	BS	10
			Coordinate Geometry	PL	20
2	HONS	CC-3 Real Analysis	Real Number, Sets	AB	30
			Sequence	PL	30
			Series	GL	10
			Graphical Demonstration	BS	5
		CC-4 Group Theory-I	Group, Normal Subgroup	DP	35
			Cyclic Group	PL	25
			Group Homomorphism	BS	15
2	General	CC/GE 2	Differential Calculus-II	AB	15

		Differential Calculus-II, Differential Equations-II, Vector Algebra, Discrete Mathematics	Differential Equations-II	BS	10
			Vector Algebra	GL	10
			Discrete Mathematics	AB	15
				PL	6
				GL	4
3	Hons	CC-5 Theory of Real Functions	Limit & Continuity of functions	AB	40
			Differentiability of Functions	PL	35
		CC-6 Ring Theory and Linear Algebra-I	Ring Theory	PL	35
			Linear Algebra-I	AB	25
			Linear Algebra-I	BS	15
		CC-7 Ordinary Differential Equation and Multivariate Calculus-I	Ordinary Differential Equation	BS	40
			Multivariate Calculus-I	BS	27
			Multivariate Calculus-I	GL	08
		SEC-A C Programming Language	C Programming Language	DP	50

3	General	CC/GE 3 Integral Calculus, Numerical Methods, Linear Programming	Integral Calculus	BS	10
			Numerical Methods	GL	25
			Linear Programming	GL	8
				AB	17
		SEC-A C Programming Language	C Programming Language	DP	30
4	Hons	CC-8 Riemann Integration and Series of Functions	Riemann Integration	PL	35
			Improper Integral, Series of Functions, Power series	AB	36
			Fourier Series	GL	4

		CC-9 Partial Differential Equation and Multivariate Calculus-II	Partial Differential Equation	BS	40
			Multivariate Calculus-II	PL	35
		CC-10 Mechanics	Coplanar Force, Couple, Friction	BS	15
			Virtual Work, Stability Kinematics, Newton Laws, Particle dynamics, Planar motion of a particle, Many particles systems, Angular momentum Principle, Energy Principle	GL	60
		SEC-B Scientific Computing with Sage Math & R	Scientific Computing with Sage Math &R	DP	50
4	General	CC-4/GE-4 Algebra-II, Computer Science & Programming, Probability & Statistics	Algebra-II	PL	10
			Computer Science & Programming	DP	25
			Probability	BS	7
			Mathematical Logic	DP	30
			Statistics	AB	18
5	Hons	CC-11 Probability & Statistics	Probability and Graphical Demonstration	BS	45
			Statistics	GL	30
		CC-12 Group Theory-II & Linear Algebra-II	Group Theory-II	BS	35
			Linear Algebra-II	AB	27
				PL	13
		DSE-A(1) Advanced Algebra DSE-A(1) Bio Mathematics	Group Theory Ring Theory	GL PL	25 50
			UNIT 1 & Graphical demonstration Unit 2 & Unit 3	BS DP	30 45
		DSE-B(1) Linear Programming & Game Theory	Definition of LPP	DP	5
			Convex Set, Hyperplane	GL	8
			Reduction of F.S. to B.F.S., Simplex, Two Phase, Duality, Transportation and Assignment, Game Theory	AB	62

5	General	DSE-A Particle Dynamics	Particle Dynamics	BS	60
		SEC A	C programming Language	DP	30
6	Hons	CC-13 Metric Space & Complex Analysis	Metric Space	AB	40
			Complex Analysis	PL	35
		CC-14 Numerical Methods	Numerical Methods	BS	55
		CC -14 (Practical) Numerical Methods Lab	Numerical Methods Lab	DP	50
		DSE-A(2) Differential Geometry	Differential Geometry	GL	75
		DSE-B(2)	Advanced Mechanics	BS	75
6	General	SEC-B Boolean Algebra	Boolean Algebra	DP	30
		DSE-B Advanced Calculus	Uniform Convergence of sequence and series of functions Power series and radius of convergence, Laplace Transformation	PL AB	26 30
			Fourier Series	GL	4