Shahid Matangini Hazra Government General Degree College for Women
Teaching Assignment and Lesson Plan
Academic Session: 2022-2023 Semester: Second
Course: Core Course

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Real Analysis(C3T)	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	05.04.2023	16	38
		Unit-I(Real numbers, Bolzano-Weierstrass theorem, Heine-Borel Theorem.)		09	
		Unit-II(Sequences)		10	
		Unit-III(Series)		03	
Dr. Sambhu Charan Barman	Differential Equations and Vector Calculus(C4T)	Unit-IV(Graphical Demonstration)	05.04.2023	10	38
		Unit-I(General solution of homogeneous equation of second order, Linear homogeneous and non-homogeneous equations of higher order with constant coefficients, Euler's equation, method of undetermined coefficients, method of variation of parameters)		12	
		Unit-II(Solution of simultaneous equations)		08	
		Unit-III(phase plane Power series solution of a differential equation)		06	
		Unit-IV(Triple product of vectors, vector functions, limits and		02	

		continuity, differentiation and integration of vector functions)			

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Teaching Assignment and Lesson Plan
Academic Session: 2022-2023 Semester: Second
Course: General Elective

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Algebra (GE-2T)	Unit-I (complex numbers, De Moivre's theorem, Theory of equations, Inequality)	06.04.2023	10	38
		Unit-II (Equivalence relations. Functions, Well-ordering property of positive integers, division algorithm,		09	

		Euclidean algorithm. Congruence. Principles of Mathematical induction, Fundamental Theorem of Arithmetic)			
Dr. Sambhu Charan Barman	Algebra (GE-2T)	Unit-III(solution sets of linear systems,)	07.04.2023	06	
		Unit-IV (linear transformations, Subspaces, rank of a matrix, Eigen values, eigen vectors , Cayley-Hamilton theorem)		13	

Shahid Matangini Hazra Government General
Degree College for Women
Teaching Assignment and Lesson Plan
Academic Session: 2022-2023
Semester: Second
Course: B.Sc. General

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Differential Equations (CC-2, DSC1BT)	Exact differential equations, Integrating Factors, rules to find an integrating factor, First order higher degree equations solvable for x,y,p. Methods for solving higher order differential equations. linear differential equations, solution of Linear homogeneous and non-homogeneous equations with constant co-efficients	22.04.2023	16	32
Dr. Sambhu Charan Barman	Differential Equations (CC-2, DSC1BT)	The method of variation of parameters, The Cauchy-Euler equation. Simultaneous differential equations, partial differential equations, Lagrange's method, Charpit's method, second order partial differential	23.04.2023	16	

Shahid Matangini Hazra Government General Degree College for Women
Teaching Assignment and Lesson Plan

Academic Session: 2022-2023
Semester: Fourth
Course: Core Course

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Riemann Integration and series of functions (C8T)	Unit-I(Riemann integration, Intermediate Value theorem for Integrals; Fundamental theorem)	02.03.2023	12	40
		Unit-II(Improper integrals)		08	
		Unit-III (Convergence of sequence of functions. continuity, derivability and integrability Series of functions; Cauchy criterion, Weierstrass M-Test.)		08	
		Unit-IV (Fourier series)		06	
		Unit-V(Power series)		06	
	Multivarite Calculus(C9T)	Unit-I(Functions of several variables, limit and continuity Partial differentiation, directional derivatives, the gradient, optimization)	28.05.2023	12	20
		Unit-IV(Green's theorem, Stoke's theorem, Divergence theorem)		08	
	Computer Graphics (SEC-2T)	Unit 1(rings, subrings, integral domains, fields, Ideal)	20.06.2023	06	18
		Unit 2(Ring homomorphisms,		06	

		Isomorphism theorems I, II and III, field of quotients)			
		Unit-IV (Linear transformations, , matrix representation of a linear transformation, Isomorphism)		06	
Dr. Sambhu Charan Barman	Multivariate Calculus(C9T)	Unit-II(Double integration, triple integration)	28.02.2023	12	20
		Unit-III(vector field, divergence and curl. Line integrals)		08	
	Ring Theory and Linear Algebra-I (C10T)		02.03.2023	12	40
				08	
		Unit-III (Vector spaces, subspaces, basis and dimension)		11	
				09	
	Graph Theory (SEC-2T)	Unit-I(Basic terminologies of graphs)	31.03.2023	06	18
		Unit-II(Eulerian graph, Hamiltonian graph Representation of a graph by matrix)		06	
		Unit-III (TSP, shortest path, Tree Dijkstra's algorithm, Warshall algorithm)		06	

Shahid Matangini Hazra Government General Degree
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     Teaching Assignment and Lesson Plan
Academic Session: 2022-2023 Semester: Fourth
Course: B.Sc. General

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Differential Equations (CC-4, DSC1DT)	Rings, Integral Domain, Fiels	10.03.2023	16	32
Dr. Sambhu Charan Barman	Differential Equations (CC-4, DSC1DT)	Groups, Cyclic groups the general linear group GLn (R), groups of symmetries Subgroups, Cosets, Index of subgroup, Lagrange's theorem, Normal subgroups: Quotient groups.	11.03.2023	16	

Shahid Matangini Hazra Government General Degree College for Women
Teaching Assignment and Lesson Plan
Academic Session: 2022-2023
Semester: Sixth
Course: Core Course

Name of the Teacher	Title of the teaching assignment	Dividing the assignment into number of units along with detailed lesson plan as per the university syllabus	Date of commencement of the assignment	Number of classes required to complete each unit	Total number of classes required to complete the assignment
Deepankar Das	Ring Theory and Linear Algebra-II (C14T)	Unit-I(Ring & Field)	11.02.2023	15	45
		Unit-II(Dual spaces & Eigen Spaces)		15	
		Unit-III(Inner product spaces, Least square approximation & Spectral theorem)		15	
	Number Theory (DSE3T)	Unit-I(prime counting function, linear congruences, residues, Chinese remainder theorem, Fermat's little theorem, Wilson's theorem)	29.03.2023	15	42
		Unit-II (Dirichlet product, Mobius Inversion formula, greatest integer function, Euler's phi-function, Euler's theorem, reduced set of residues)		14	
		Unit-III(primitive roots for primes and composite numbers, Euler's criterion, Legendre symbol quadratic congruence's, Public key encryption, RSA encryption and decryption)		13	
	Bio-Mathematics (DSE4T)		09.05.2023	14	42
				13	
				15	
Dr. Sambhu Charan Barman	Metric Space and Complex Analysis (C13T)	Unit-I (Sequences in metric spaces)	10.01.2023	08	46

		Unit-II (continuous mapping, Connectedness, Compactness)		12		
		Unit-III(limit, continuity of functions of complex variable)		06		
		Unit-IV(Analytic functions, differentiation and integration of functions of complex variable)		08		
		Unit-V(Convergence of sequences and series)		07		
		Unit-VI(absolute and uniform convergence of power series)		05		
	Mathematical Modelling (DSE4T)	Unit-I(solution of Bessel's equation and Legendre's equation, Laplace transform)	27.01.2023	22	44	
		Unit-II(Monte Carlo simulation modelling, Simulation, optimization modelling, Linear programming model, sensitivity analysis)		22		