



MUGBERIA GANGADHAR MAHAVIDYALAYA

P.O.—BHUPATINAGAR, Dist.—PURBA MEDINIPUR, PIN.—721425, WEST BENGAL, INDIA

NAAC Re-Accredited B+Level Govt. aided College

CPE (Under UGC XII Plan) & NCTE Approved Institutions

DBT Star College Scheme Award Recipient

E-mail : mugberia_college@rediffmail.com // www.mugberiangangadharmahavidyalaya.ac.in

Dept of Mathematics (UG & PG)

Syllabus Planning & Distribution

Academic session : 2023-24

(Odd & Even Semesters)

Course Duration: 14 Weeks

Date: 11.09.2023

UG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours	
SEM I (NEP)	C1T	Calculus, Geometry & Differential Equations	75 (CA-05 CIA-10 End SEM - 60)	4	Dr. Kalipada Maity	Differential equations Unit-IV	2	28	
					Debraj Manna & Hiranmay Manna	Differential Calculus (Unit-I)	1+1 =2	28	
					Santu Hati	Integral Calculus (Unit-III)	2	28	
					Suman Giri	Geometry (Unit-II)	3	42	
	SEC	MATLAB Theory & Practical	50	3	Subham Maity	All units	4	56	
	MDC	IT		75	4	Dr. Manoranjan De	Units	2	28
						Madhumita Giri	Units	1	14

	GE1	Calculus, Geometry & Differential Equation	75 (CA-05 CIA-10 End SEM - 60)	4	Debraj Manna	Units -1, 2, 4	5	70
	Minor-C1	75 (CA-05 CIA-10 End SEM - 60)	4	Madhumita Giri	Units	1	14
					Subham Maity	Units	1	14
SEM III	C5T	Theory of Real Functions & Introduction to Metric Spaces	75 (CA-05 CIA-10 End SEM - 60)	6	Dr. Kalipada Maity	Metric Spaces	2	28
					Bikash Panda	Theory of Real Functions (Continuity)	3	42
					Hiranmay Manna	Theory of Real Functions (Limit & Differentiability)	3	42
	C6T	Group Theory I	75 (CA-05 CIA-10 End SEM - 60)	6	Debraj Manna	Units 2 & 3	3	42
					Suman Giri	Units 1, 4 & 5	3	42
	C7T	Numerical Methods	55 (CA-05 CIA-10 End SEM - 40)	4	Dr. Manoranjan De	Theory part of Numerical Methods	4	56
			20	2	Santu Hati	Practical Part using MATLAB	2	28
	SEC I	Logic & Sets	50 (CA-05 CIA-05 End SEM - 40)	2	Madhumita Giri	All Units	2	28
	Pure Pass C7 (DSC 1C)	Real Analysis	75 (CA-05 CIA-10 End SEM -	6	MD, DM, HM, BP	All Units	4	56

			60)					
	Pure SEC I	Logic & Sets	50 (CA-05 CIA-05 End SEM - 40)	2	Suman Giri	All Units	1	14
SEM V	C11	Partial Differential Equations & Applications	75 (CA-05 CIA-10 End SEM - 60)	6	Suman Kr. Giri	Unit 4 (Dynamics)	3	42
					Santu Hati	Units 1,2,3	3	42
	C12	Group Theory II	75 (CA-05 CIA-10 End SEM -60)	6	Hironmay Manna	Units-1, 3	3	42
					Bikash Panda	Units-2, 4	3	42
DSE-1	Probability and Statistics	75 (CA-05 CIA-10 End SEM -60)	6	Debraj Manna	Unit 1,2,3	4	56	
				Madhumita Giri	Unit 4 (Statistics)	3	42	
DSE 2	Linear Programming	75 (CA-05 CIA-10 End SEM -60)	6	Dr. Manoranjan De	Unit 2,3	4	56	
				Subham Maity	Unit 1	2	28	

MugberiaGangadharMahavidyalaya Dept of Mathematics (UG & PG)

(Even Semester)

Course Duration : 14 Weeks

UG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
	Major-2	Algebra	75 (CA-05	6	Dr. Kalipada,	all		

SEM II (NEP)			CIA-10 End SEM - 60)		Maity, Suman Kumar Giri, Santu Hati			
	SEC-02	MATLAB Theory and practical	75 (CA-05 CIA-10 End SEM - 60)	6	Subham Maity	all		
	MDC	Digital Technologies	75 (CA-05 CIA-10 End SEM - 60)	6	Dr. Monoranjan De and Madhumita Giri	all		
	Minor- 2(MI-01)				Debraj Manna	all		
	General Mathematics				Subham Maity	all		

UG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
SEM IV	C8T	Riemann Integration and series of function	75 (CA-05 CIA-10 End SEM - 60)	6	Hironmay Manna	Unit- 2,4	4	56
					BikashPanda	Unit-3,	2	28
					SantuHati	Unit-1	2	28
	C9T	Multivariate Calculus	75 (CA-05 CIA-10 End SEM - 60)	6	DrManoranjan De	Unit-3	2	28
					Madhumita Giri	Unit-4	5	70
	C10T	Ring Theory and	75 (CA-05 CIA-10	6	Debraj Manna	Unit- 1,2,3,4	4	56

		Linear Algebra - I	End SEM - 60)					
	SEC-2	Graph Theory	50 (CA-05 CIA-05 End SEM - 40)	2	Suman Kr Giri	All Unit	3	42
	GE-4							

UG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
SEM VI	C13T	Metric Space and Complex Analysis	75 (CA-05 CIA-10 End SEM - 60)	6	Subham Maity	Unit-3,4,	2	24
					SantuHati	Unit- 5,6	2	24
					BikashPonda	Unit-1,2	2	28
	C14T	Ring Theory and Linear Algebra II	75 (CA-05 CIA-10 End SEM - 60)	6	Debraj Manna	Unit-1	1	14
					Hironmay Manna	Unit-2,3	2	28
	DSE-3	Mechanics	75 (CA-05 CIA-10 End SEM - 60)	6	Debraj Manna	Unit-1,2	2	28
					Suman Kr. Giri	Unit-3	2	28
	DSE-4	Mathematical Modeling	50 (CA-05 CIA-05 End SEM - 40)	6	Dr. KalipadaMaity	Unit- 1	1	14
					Dr. Manoranjan De	Unit-2	2	28

MugberiaGangadharMahavidyalaya
Dept of Mathematics (UG & PG)

(Odd Semester)

Course Duration : 14 Weeks

PG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
SEM I	MTM-101	Real Analysis	50	4	Hironmay Manna	All Units	4	56
	MTM-102	Complex Analysis	50	4	Santu Hati	All Units	4	56
	MTM-103	Ordinary Differential Equations and Special Functions	50	4	Dr. KalipadaMaity	All Units	4	56
	MTM-104	Advanced Programming in C and MATLAB	50	4	Dr. Manoranjan De	Unit - I	2	28
					Subham Maity	Unit-II	2	28
	MTM-105	Classical Mechanics and non linear Dynamics	50	4	Bikash Panda	Units	4	56
					Dr. KalipadaMaity	Non-Linear Dynamics	1	14
MTM-106	Graph Theory	25	2	Suman Giri	All	2	28	
MTM-197	Lab1(Computational Methods : Using MATLAB)	25	2	Subham Maity	All	2	28	

PG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
SEM III	MTM-301	Partial Differential Equations and Generalized Functions	50	4	Santu Hati	Units	4	56
	MTM-302	Transforms and Integral Equations	50	4	Hironmay Manna	Integral Equations	2	28
					Madhumita Giri	FT & LT & WT	2	28
	MTM-303	Stochastic Process & Regrassion	25	2	Dr. K. Maity	All	2	28
		Cryptography	25	2	Subham Maity	All	3	42
	MTM-304	CBCS(Bengali)	50	4	Dr. Goutam Barman Rajesh Khan	All	4	56
	MTM-305A	Advanced Optimization	50	4	Dr. Manoranjan De	All	4	56
MTM-306A	Operational Research Modelling -I	50	4	Dr. KalipadaMaity	Inventory + PERT CPM	2	28	
				Bikash Panda	Replacement + Simulation	2	28	

MugberiaGangadharMahavidyalaya
Dept of Mathematics (UG & PG)(Even semester)

PG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
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SEM II	MTM-201	Fluid Mechanics	50	4	Santu Hati	All	4	56
	MTM-202	Numerical Analysis	50	4	Dr. Kalipada Maity	All	4	56
	MTM-203	Unit-1: Abstract Algebra	25	2	Madhumita Giri	Unit -I	2	28
		Unit-2: Linear Algebra	25	2	Bikash Panda	Unit-II	2	28
	C-MTM-204	Bengali	50	4	Dr. Pintu Ray Choudhuri & PranabMaha patra	All	4	56
	MTM-205	General theory of Continuum Mechanics	50	4	Suman Kr. Giri + Subham Maity	All	4	56
	MTM-206	General Topology	25	2	Hironmay Manna	All	2	28
	MTM-297	Lab 2: (Language C Programming with Numerical methods)	25	2	Dr. Manoranjan De	All	3	42

PG	Course Code	Course Name	Total Allotted Marks	Total credit	Allotted Teacher Name	Allotted Topic /Unit	Weekly Class Hour	Total Class Hours
SEM IV	MTM-401	Functional Analysis	50	4	Dr. Arpan Dhara	All	4	56
	MTM-402	Fuzzy Mathematics with applications	25	2	Santu Hati	Unit -1	2	28
		Magneto Hydro Dynamics	25	2	Madhumita Giri	Unit-2	2	28
	MTM-403	Soft Computing	25	2	Dr. Manoranjan De	Units	2	28

	MTM-404 A	Non-Linear Optimization	25	2	Bikash Panda	Units	2	28
	MTM-497	LAB : Optimization(using MATLAB & LINGO)	25	2	Subham Maity	Units	2	28
	MTM-405A	Operational Research Modelling -II	25	2	Dr. Kalipada Maity	Units	2	28
	MTM-498	LAB : OR(using MATLAB & LINGO)	25	2	Bikash Panda	Units	2	28
	MTM-499A	LAB : Soft computing (using MATLAB)	25	2	Dr. Manoranjan De	All	2	28
	MTM-406	Dissertation Project Work	50	4	All Teachers	-	6	84





Signature of The Principal
 Dr Swapan Kumar Misra

Principal
 Mugberia Gangadhar Mahavidyalaya