

Master of Science (M. Sc.) Semester Scheme - CBCS
Subject: MATHEMATICS
Course Structure, Scheme of Teaching and Evaluation (2023-24& Onwards)

	Subject / Paper Code	Title of the Paper	Instruction Hrs/ Week	Marks			Credits	Examination duration (Hrs)
				Examination	Internal Assessment	Total Marks		
SEMESTER - I	HARD CORE PAPERS							
	HCT 1.1	Algebra	4	80	20	100	4	3
	HCT1.2	Real Analysis – I	4	80	20	100	4	3
	HCT1.3	Discrete Mathematics & C-Proramming	4	80	20	100	4	3
	HCT 1.4	Ordinary DifferentialEquations	4	80	20	100	4	3
	SOFT CORE PAPER (ANY ONE)							
	SCT 1.1	Operations Research	4	80	20	100	4	3
		Fuzzy Sets & Fuzzy Logic						
	PRACTICAL							
	HCP 1.1	Programming Lab-I	4	40	10	50	2	3
Mandatory Credits: English Language Communication Skill			2	---	---	---	2	---
SEMESTER - II	HARD CORE PAPERS							
	HCT 2.1	Linear Algebra	4	80	20	100	4	3
	HCT 2.2	Real Analysis – II	4	80	20	100	4	3
	HCT 2.3	General Topology	4	80	20	100	4	3
	HCT 2.4	Partial Differential Equations	4	80	20	100	4	3
	SOFT CORE PAPER (ANY ONE)							
	SCT 2.1	Graph Theory	4	80	20	100	4	3
		Classical Mechanics						
	PRACTICAL							
	HCP 2.1	Programming Lab – II	4	40	10	50	2	3
	OPEN ELECTIVE PAPER (ANY ONE)							
	OET 2.1	Foundations of Mathematics	2	40	10	50	2	3
		Financial and Business Mathematics						
Mandatory Credits: Computer Skill			2	---	---	---	2	---
SEMESTER - III	HARD CORE PAPERS							
	HCT 3.1	Measure Theory and Integration	4	80	20	100	4	3
	HCT 3.2	Complex Analysis – I	4	80	20	100	4	3
	HCT 3.3	Fluid Mechanics	4	80	20	100	4	3
	HCT 3.4	Numerical Methods – I	4	80	20	100	4	3
	SOFT CORE PAPER (ANY ONE)							
	SCT 3.1	Advanced Topology	4	80	20	100	4	3
		Number Theory						
	OPEN ELECTIVE PAPER (ANY ONE)							
	OET 3.1	Statistical Techniques	2	40	10	50	2	2
		Elements of Applied Mathematics						
	PRACTICAL PAPER							
	HCP 3.1	Programming Lab – III	4	40	10	50	2	3
	Mandatory Credits: Personality Development			2	---	---	---	2

SEMESTER - IV	HARD CORE PAPERS							
	HCT 4.1	Functional Analysis	4	80	20	100	4	3
	HCT 4.2	Complex Analysis – II	4	80	20	100	4	3
	HCT 4.3	Differential Geometry	4	80	20	100	4	3
	HCT 4.4	Numerical Methods-II	4	80	20	100	4	3
	SOFT CORE PAPER (ANY ONE)							
	SCT 4.1	Magnetohydrodynamics	4	80	20	100	4	3
		Mathematical Methods						
	PROJECT WORK/REPORT WRITING							
	HCP 4.1	Project	4	80	20	100	4	3
Total Credits for the Course		106	---	---	2350	100	---	

