

SCHEME OF EXAMINATION & SYLLABI

For

MASTER OF SCIENCE

(MATHEMATICS)

As per New Guidelines of
University Grants Commission (New Delhi)

(Choice Based Credit System)

(With effective from Session 2019-20)



**UTTARANCHAL UNIVERSITY
DEHRADUN**

M.Sc. (Mathematics) -Two years (Four semesters) Programme

Evaluation Scheme

(w.e.f. Session 2019-20)

1ST Year- Course Programme

SEMESTER-I						
S.No.	Paper Code	Subject	L-T-P	Credit	Max Marks	
					Ext.	Int.
1.1	MMT-101	Algebra-I	5-0-0	5	60	40
1.2	MMT -102	Operations Research-I	5-0-0	5	60	40
1.3	MMT -103	Real Analysis-I	5-0-0	5	60	40
1.4	MMT -104	Complex Analysis	5-0-0	5	60	40
1.5	MMT-105	Advance Differential Equation	5-0-0	5	60	40
1.6	ADP-106	Academic Activities *	0-0-2	1	-	50
Total for I semester			25-0-2	26	550	

***Academic activities:**

1. Presentation by students on the topic provided by HOD/ class coordinator.
2. Any social activities
3. Presentation on mathematical model

SEMESTER-II						
S.No.	Paper Code	Subject	L-T-P	Credit	Max Marks	
					Ext.	Int.
2.1	MMT -201	Algebra-II	5-0-0	5	60	40
2.2	MMT -202	Operations Research-II	5-0-0	5	60	40
2.3	MMT -203	Graph Theory	5-0-0	5	60	40
2.4	MMT -204	Fluid Dynamics	5-0-0	5	60	40
2.5	MMT -205	Algebraic Number Theory	5-0-0	5	60	40
2.6	ADP-206	Seminar/Workshop**	0-0-2	1	-	50
Total for II semester			25-0-2	26	550	
Total for I & II semesters			50-0-4	52	1100	

****Seminar /Workshop: Participation/ paper presentation in the national /international conferences/Workshop.**

2ND Year- Course Programme

SEMESTER-III						
S.No.	Paper Code	Subject	L-T-P	Credit	Max Marks	
					Ext.	Int.
3.1	MMT -301	Topology	5-0-0	5	60	40
3.2	MMT -302	Calculus of Variation	5-0-0	5	60	40
3.3	MMT -303	Discrete Mathematics	5-0-0	5	60	40
3.4	MMT -304	Elective- (to choice 1 out of 4) A. Tensor Analysis and Relativity Theory B. Differential Geometry C. Actuarial Mathematics D. Mathematical Modeling	5-0-0	5	60	40
3.5	MMT -305	Project/seminar/presentation	0-0-3	3	60	40
			Total for III semester	20-0-3	23	500
			Total for I, II & III semesters	70-0-7	75	1600

SEMESTER-IV						
S.No.	Paper Code	Subject	L-T-P	Credit	Max Marks	
					Ext.	Int.
4.1	MMT -401	Measure Theory	5-0-0	5	60	40
4.2	MMT -402	Functional Analysis	5-0-0	5	60	40
4.3	MMT -403	Advanced Numerical Methods	5-0-0	5	60	40
4.4	MMT -404	Elective- (to choice 1 out of 4) A. Number Theory & Cryptography B. Fuzzy Mathematics C. Probability Theory and Statistics D. Linear Integral Equations & Boundary Value Problems	5-0-0	5	60	40
4.5	MMT -405	Project/seminar/presentation	0-0-3	3	60	40
			Total for IV semester	20-0-3	23	500
			Total for I, II, III & IV semesters	90-0-10	98	2100