Annexure-I

महात्मा गाँधी केन्द्रीय विश्वविद्यालय
MAHATMA GANDHI CENTRAL UNIVERSITY
(Established by an Act of Parliament)
Chanakya Parisar, Zila School Campus, Motihari
District-East Champaran, Bihar - 845401

गणित विभाग
Department of Mathematics
School of Physical Sciences
E-mail: headmathematics@mgcub.ac.in

Ph.D. Programme

(Effective from Academic Year: 2022-23)

Ph.D. Course Work (Mathematics)

Sl. No.	Course Code	Course title	Credits	Marks
Semester-I				
Compulsory Courses				
1.	MATH5001	Research Methodology and Publication Ethics	4	100
2.	MATH5002	Review Writing and Seminar	2	100
3.	MATH5003	Foundations of Advanced Mathematics	4	100
Elective Courses Student should opt any two elective courses from the following elective courses of his/her area of research interest				
4.	MATH5101	Wavelets and Wavelet Transforms	3	100
5.	MATH5102	Distribution Theory	3	100
6.	MATH5103	Operator Theory	3	100
7.	MATH5104	Advanced Topology	3	100
8.	MATH5105	Category Theory	3	100
9.	MATH5106	Number Theory & Cryptography	3	100
10.	MATH5107	Fuzzy Topology	3	100
11.	MATH5108	Theory of Nonlinear Optimization	3	100
12.	MATH5109	Fuzzy Sets and Application in Operations Research	3	100
13.	MATH5110	Computational Differential Equations	3	100
14.	MATH5111	Special Functions	3	100
15.	MATH5112	Theory of Elasticity	3	100
16.	MATH5113	Abstract Algebra	3	100
17.	MATH5114	Module Theory	3	100
18.	MATH5115	Mathematical Modelling and its Applications	3	100
19.	MATH5116	Coding Theory	3	100
20.	MATH5117	Differentiable Manifolds	3	100
		Total Credits for the Ph.D. Course Work	16	

Note: *1 Credit = 1 hour of Teaching/2 hours of Practical per student per week.*