DEPARTMENT OF MATHEMATICS & STATISTICS
(NAAC Accredited 'A' Grade University)
HIMACHAL PRADESH UNIVERSITY
Summer Hill Shimla-171 005

Equivalence of M A/M.Sc (Mathematics) Syllabus W .e .f (1990 to 1993) With Latest Syllabus

Semester -I(First)

Course No	Title (old syllabus) (1990 to 1993)		Course No	Title (New syllabus-2018-19)
I	Real Analysis-1		M-101 M-102	Real Analysis-I and Advance Algebra-I
II	Differential equation-1(ODE) and Rigid Dynamics		M-103 M-204	Ordinary Differential Equations and Classical Mechanics(II-nd Sem)
	Semester-II(Second)			
III	Analysis II and Algebra II		M-302 M-202	Topology (III-Sem) and Advance Algebra-II(II-nd Sem)
IV	Differential equation-II(Partial Differential equations) and Mathematical Method		M-203 M-403	Partial Differential Equations (II-nd Sem) and Advance Discrete Mathematics(IV -Sem)
	Semester-III(Third)			
V	Analysis-III (Complex Analysis) and Mechanics-II		M-301 M-105	Complex Analysis-I and Fluid Dynamics(Ist -Sem)
VI	Mathematical Statistics-I and Electromagnetic Theory		M-305 M-405	Mathematical Statistics and Magnetofluid Dynamics(IV-Sem)
	Semester-III(Third)			
VII	Analysis-IV and Differential Geometry		M-402 M-404	Functional Analysis and Differential Geometry
VII	Mathematical Statistics-II and Mechanic-III (Solid Mechanics)		M-104	Operational Research-I (I-Sem)and Solid Mechanics (II-nd Sem)

Formula: If a candidate wants to improve in Course-I of 1990, he has to appear in two courses namelyM-101 (Real Analysis-I) and M-102 (Advance Algebra-I) of latest syllabus. The average of the score obtained by the candidate in these two courses should be awarded to the candidate in **Course -I** of the improvement examinations

ANNEXTURE-B

Equivalence of M A/M. Sc (Mathematics) Syllabus W.e .f (1994 To 2000)

Semester -I(First)

Course No	Title (old syllabus) (1994 to2006)		Course No	Title (New syllabus)
1	Real Analysis-1		M-101	Real Analysis-1
2	Algebra-I		M-102	Advance Algebra-1
3	Ordinary Differential Equations-1		M103	Ordinary Differential Equations
4	Fluid Dynamics-1		M-105	Fluid Dynamics
	Semester-II(Second)			
5	Real Analysis-11		M-201	Real Analysis-11
6	Linear Algebra		M-202	Advance Algebra-11
7	Partial Differential Equations-II		M-203	Partial Differential Equations
8	Fluid Dynamics-11		M-204	Classical Mechanics
	Semester-III			
9	Complex Analysis		M-301	Complex Analysis-1
10	Topology		M-302	Topology
11	Elasticity-I		M-205	Solid Mechanics (II Semester)
12	Magneto hydrodynamics-1		M-405	Magneto fluid Dynamics
	Semester-IV			
13	Functional Analysis		M-402	Functional Analysis
14	Differential Geometry		M-404	Differential Geometry
15	Mathematical Methods		M-403	Advance Discrete Mathematics
16	Non Linear programming-II or Analytical Number Theory-II or Magnetohydrodynamics-II 0r Solid Mechanics-II		M-401 M-303 M-305 M-304	Complex Analysis-II(IV-nd Sem)or Analytic Number Theory (III-Sem) Or Mathematical Statistics(III-Sem) Or Operational research -II (III-Sem)

Annexure-C

*Equivalence of M A/M.Sc (Mathematics) Syllabus W .e.f (2001-2003)

Semester -I(First)

Course No	Title(old syllabus) 2001-2003)		Course No	Title (New syllabus)

1	Real Analysis-1		M-101	Real Analysis-1
2	Algebra		M-102	Advance Algebra-1
3	Ordinary Differential Equations		M103	Ordinary Differential Equations
4	Fluid Dynamics-1		M-105	Fluid Dynamics
			M-104	OpertionsResearch-1
	Semester-II(Second)			
5	Real Analysis-11		M-201	Real Analysis-11
6	Linear Algebra		M-202	Advance Algebra-11
7	Partial Differential Equations		M-203	Partial Differential Equations
8	Fluid Dynamics-11		M-204	Classical Mechanics
	Semester-III			
9	Complex Analysis		M-301	Complex Analysis-1
10	Topology		M-302	Topology
11	Solid Mechanics		M-205	Solid Mechanics (II Semester)
12	Magneto hydrodynamics		M-405	Magnetofluid dynamics (IVSemester)
	Semester-IV			
13	Functional Analysis		M-402	Functional Analysis
14	Differential Geometry		M-404	Differential Geometry
15	Mathematical Methods		M-403	Advance Discrete Mathematics
16	Non-Linear Programming		M-401	Complex Analysis-II
	Analytical Number Theory or Magnetohydrodynamics-II Or Solid Mechanics-II		M-303 M-305 M-304	Analytic Number Theory (III Semester) Or Mathematical Statistics (III-Semester) Or Operation Research-II(III-Semeste

ANNEXTURE-D

*Equivalence of M A/M.Sc (Mathematics) Syllabus W .e .f (2003 to 2012)

Semester -I(First)

Course No	Title (old syllabus) 2003-2006)		Course No	Title (New syllabus)

1	Real Analysis-1		M-101	Real Analysis-1
2	Algebra-I		M-102	Advance Algebra-1
3	Ordinary Differential Equations-1		M103	Ordinary Differential Equations
4	Fluid Dynamics-1		M-105	Fluid Dynamics
5	OpertionsResearch-1		M-104	OpertionsResearch-1
	Semester-II(Second)			
6	Real Analysis-11		M-201	Real Analysis-11
7	Linear Algebra		M-202	Advance Algebra-11
8	Partial Differential Equations-II		M-203	Partial Differential Equations
9	Fluid Dynamics-11		M-204	Classical Mechanics
10	Operation Research-II		M-304	Operation Research-II (III Semester)
	Semester-III			
11	Complex Analysis		M-301	Complex Analysis-1
12	Topology		M-302	Topology
13	Elasticity-I		M-205	Solid Mechanics (II Semester)
14	Magneto hydrodynamics-1/Analytic Number Theory-I		M-303	Analytic Number Theory
15	Non Linear Programming-I		M-305	Mathematical Statistics
	Semester-IV			
16	Functional Analysis		M-402	Functional Analysis
17	Differential Geometry		M-404	Differential Geometry
18	Elasticity-II		M-403	Advance Discrete Mathematics
19	Analytical Number Theory-II or Magnetohydrodynamics-II		M-405	Magneto fluid Dynamics
20	Non Linear Programming-II		M-401	Complex Analysis-II

- **The equivalence of these course may allowed as on the average 60% to 70% of the course contents are common.**

***Equivalence of M A/M.Sc (Mathematics) Syllabus W .e .f (2013 to 2018)**
With the latest syllabus

- No equivalence is required as the title of the courses the course contents and the semester in which are taught are same. **The equivalence of these course may be allowed as on the average 60% to 70% of the course contents are common.**

ANNEXTURE--E

Equivalence of B A/ B.Sc (Mathematics) Syllabus (1990 to 2005) with the the session (2012-13) Syllabus

First Year				**First Year**
	PAPER	Title (old 1990 to 2005)	Course No	Title (old syllabus) 2012-2013)
	A	Calculus and Co-ordinate geometry	102	Calculus
	B	Algebra and polynomial and their roots	101	Algebra and Trigonometry.
Second Year				
	A	Calculus and Differential equations	201	Advance Calculus
	B	Algebra and Geometry	103	Vector Analysis and Geometry (First Year)
Third Year				
	A	Calculus	301	Analysis
	B	Mechanics	203	Mechanics (Second year)

Equivalence of B A/ B.Sc (Mathematics) Syllabus 2006 onward upto (2012-13) With the the session (2012-13) Syllabus:
Since the syllabus has not changed during the above period, therefore no need to establish the equivalance.

ANNEXTURE--F

*Equivalence of B A/ B.Sc (Mathematics-Honours) Syllabus (1990 to2005) With the the session (2012-13) Syllabus

First				**First Year**

Year				
	PAPER	Title (old 1990 to 2005)	Course No	Title (old syllabus) 2012-2013)
	I	Algebra and Analytic Geometry	101	Algebra and trigonometry
	II	Calculus	102	Calculus
Second Year				
	III	Analysis -I	201	Advance Calculus
	IV	Algebra-I	302	Abstract Algebra(Third Year)
	V	Differential equationsAnd Mechanics -I	203	Mechanics
Third Year				
	VI	Analysis -II	301	Analysis
	VII	Algebra-II	304	Elementary Number Theory and Abstract Algebra
	VIII	Differential equations and Mechanics-II	202	Differential Equations (Second Year)
	IX and X	Any two of the following 1.Number Theory 2. Mathematical Statistics 3. Numerical Method 4. Linear Programming and the theory of Games 5. Lattice theory 6.Probability Theory 7.Computer Mathematics		Any Two oof the Following 104 Probability theory and optimization (First Year) 204 Discrete Mathematics (Second Year) 303 Programming in C and Number Theory (Third Year)

Equivalence of B A/ B. Sc (Mathematics-Honours) Syllabus 2006 to 2012-13 With the the session (2012-13) Syllabus:

Since the syllabus has not changed During the period therefore no need to establish the equiva