

COURSE STRUCTURE FOR B.Sc. (MATHEMATICS)													
Semester I			B.Sc. (Mathematics)										
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme					
			L	T	P	C	Hrs./Wk	Theory		Practical			
								MS	ES	IA	LW	LE/Viva	
1	20MSM501T	Calculus -I / Basic Mathematics-I	3		0	0	3	3	25	50	25	--	--
2	20MSM502T	University Physics - I	3		0	0	3	3	25	50	25	--	--
3	20MSM503T	Chemistry - I	3		0	0	3	3	25	50	25	--	--
4	20MSM504T	English Communication 3	3		0	0	3	3	25	50	25	--	--
5	20MSM505T	Elective 1	3		0	0	3	3	25	50	25	--	--
6		Elective 1	3		0	0	3	3	25	50	25		
7		Foreign Language-I	3		0	0	3	3	25	50	25		
8		Physics Lab -I	0		0	1	1	1					
9		Chemistry Lab -I	0		0	1	1	1					
<b>Total</b>			<b>21</b>		<b>0</b>	<b>2</b>	<b>23</b>	<b>23</b>					

Elective I

	Elementary Algebra	
	Introduction to Computer Science	
	Leadership	
	Understanding Theatrical Arts	

Semester II		B.Sc. (Mathematics)											
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme					
			L	T	P	C	Hrs./Wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1	20MSM501T	Calculus -II / Basic Mathematics-II	3		0	0	3	3	25	50	25	--	--
2	20MSM502T	University Physics – II	3		0	0	3	3	25	50	25	--	--
3	20MSM503T	Chemistry – II	3		0	0	3	3	25	50	25	--	--
4	20MSM504T	Environmental Science	3		0	0	3	3	25	50	25	--	--
5	20MSM505T	Elective I	3		0	0	3	3	25	50	25	--	--
6		Elective II	3		0	0	3	3	25	50	25		
7		Foreign Language-II	3		0	0	3	3	25	50	25		
8		Physics Lab -II	0		0	1	1	1					



1		Ordinary Differential Equations / Basic Mathematics- III	3	1	0	4	4	25	50	25	--	--
2		Object Oriented Programming With JAVA	2	0	0	2	4	25	50	25	--	--
3		Object Oriented Programming With JAVA LAB	0	0	4	2	4	0	0	50	--	--
4		Real Analysis	3	1	0	4	4	25	50	25		
		Probability and Statistics	3	1	0	4	4	25	50	25	--	--
5		Elective 1	3	0	0	3	3	25	50	25	--	--
6		Elective 2	3	0	0	3	3	25	50	25	--	--
7		R Programming	0	0	4	2	4	0	0	50	--	--
<b>Total</b>			<b>17</b>	<b>3</b>	<b>8</b>	<b>24</b>	<b>30</b>					

Elective-1			Elective-2		
	Number Theory	3,0,0		Films and Society	3,0,0
	Logic and Set Theory	3,0,0		Workplace Communication	3,0,0
				Environmental Psychology	3,0,0

				Atmospheric Sciences	3,0,0
				Indian Government and Politics	3,0,0
				Basics of Accounting	3,0,0
				Introduction to Human Resource Management	3,0,0
				Introduction to Law and Governance	3,0,0

Semester IV			B.Sc. (Mathematics)										
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme					
			L	T	P	C	Hrs/Wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1		Partial Differential Equations	3		1	0	4	4	25	50	25	--	--
2		Matlab	0		0	2	1	2	0	0	50	--	--
3		Theory of Computation	3		0	0	3	3	25	50	25	--	--

4		Complex Analysis	3	1	0	4	4	25	50	25	--	--
5		Linear Algebra	3	1	0	4	4	25	50	25	--	--
6		Discrete Mathematics	3	1	0	4	4	25	50	25	--	--
7		Elective 1	3	0	0	3	3	25	50	25	--	--
<b>Total</b>			<b>18</b>	<b>4</b>	<b>2</b>	<b>23</b>	<b>24</b>					

Elective-1		
	Industry 4.0	2,0,0
	Industry 4.0 LAB	0,0,4
	Topology - 3	3,0,0

Semester V		B.Sc. (Mathematics)										
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme				
			L	T	P	C	Hrs/Wk	Theory			Practical	
								MS	ES	IA	LW	LE/Viva
1		Graph Theory	3	1	0	4	4	25	50	25	--	--
2		Python	3	1	0	4	4	25	50	25	--	--
3		Applied Statistics	3	1	0	4	4	25	50	25	--	--
4		Modern Algebra	3	1	0	4	4	25	50	25	--	--
5		Numerical Analysis	3	1	0	4	4	25	50	25	--	--
6		Elective 1	3	0	0	3	3	25	50	25	--	--

7		Numerical Analysis Lab	0	0	2	1	2	0	0	50	--	--
<b>Total</b>			<b>18</b>	<b>5</b>	<b>2</b>	<b>24</b>	<b>25</b>					

Elective-1		
	Special Functions	3,0,0
	Linear Programming	3,0,0
	Fluid Mechanics	3,0,0

Semester VI			B.Sc. (Mathematics)										
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme					
			L	T	P	C	Hrs/Wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1		Integral Transforms and Fourier Series	3		1	0	4	4	25	50	25	--	--
2		Artificial Intelligence	2		0	0	2	2	25	50	25		
3		Artificial Intelligence LAB	0		0	4	2	4	0	0	50		
4		Big Data Analytics - 2 0 0	2		0	0	2	2	25	50	25		
5		Big Data Analytics - 0 0 4	0		0	4	2	4	0	0	50		

6		Stochastic Processes	3	1	0	4	3	25	50	25		
7		Operations Research	3	1	0	4	2	25	50	25		
8		Elective 1	3	0	0	3	3	25	50	25		
<b>Total</b>			<b>16</b>	<b>3</b>	<b>8</b>	<b>23</b>	<b>24</b>					

Elective-1		
	Financial Mathematics	3,0,0
	Dynamics and Electrodynamics	3,0,0

Semester VII			B.Sc. (Mathematics)									
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme				
			L	T	P	C	Hrs/Wk	Theory			Practical	
								MS	ES	IA	LW	LE/Viva
1		Integral Equations	3	1	0	4	4	25	50	25	--	--
2		Internet of Things Lab	0	0	0	2	1	2	25	50	25	
3		Internet of Things	2	0	0	2	2	0	0	50		
4		Modelling and Simulation	3	1	0	4	4	25	50	25		
5		Machine Learning	2	0	0	2	2	0	0	50		
6		Machine Learning LAB	0	0	0	2	1	2	25	50	25	



7		Seminar	0	0	0	6						
<b>Total</b>			<b>10</b>	<b>2</b>	<b>4</b>	<b>20</b>	<b>16</b>					

	NPTEL - 4	4

Semester VIII		B.Sc. (Mathematics)											
Sr. No.	Course/Lab Code	Course /Lab Name	Teaching Scheme					Examination Scheme					
			L	T	P	C	Hrs/Wk	Theory			Practical		
								MS	ES	IA	LW	LE/Viva	
1		Differential Geometry	3		1	0	4	4	25	50	25	--	--
2		Algebraic Coding Theory and Cryptography	3		1	0	4	2	25	50	25		
3		Dissertation	0		0	0	12		0	0	0		
4		Seminar	0		0	0	4		0	0	0		
<b>Total</b>			<b>6</b>		<b>2</b>	<b>0</b>	<b>24</b>	<b>6</b>					





100
<b>600</b>

<b>Total</b>
<b>Marks</b>

100

100

50

100

100

100

100

100

**750**

<b>Total</b>
<b>Marks</b>
100
50
100



50
650

<b>Total</b>
<b>Marks</b>
100
100
50
100
50



100
100
100
<b>700</b>

<b>Total</b>
<b>Marks</b>
100
100
50
100
50
100

500

<b>Total</b>
<b>Marks</b>
100
100
0
0
200