

<b>Course Title</b>	Mathematics Practical-I	
<b>Course Code:23SBCS21VSA</b>		<b>No. of Credits:2</b>
<b>Course Type: VSC</b>		<b>Total Teaching Sessions: 10</b>

<b>Sr. No</b>	<b>Syllabus</b>	<b>No. of Practical</b>
<b>1</b>	<b>Introduction to Maxima</b>	<b>1</b>
	1. Basic syntax 2. Mathematical Operators 3. Real and Complex numbers 4. Polynomials 5. Built-in functions	
<b>2</b>	<b>Operations on Matrices using Maxima</b>	<b>2</b>
	1. Matrix construction 2. Algebraic operations on Matrices, powers and inverse of a matrix. 3. Transpose of a matrix 4. Accessing rows and columns 5. Determinant and inverse of a matrix	
<b>3</b>	<b>Plotting graphs using Maxima</b>	<b>1</b>
	1. 2-D graph 2. 3-D graph	
<b>4</b>	<b>Set Theory using Maxima</b>	<b>1</b>
<b>5</b>	<b>Discrete Mathematics (Relations, Counting and Logic) using Maxima</b>	<b>1</b>
<b>6</b>	<b>Problems Based on Unit I : 23SBCS21MNA</b>	<b>1</b>
<b>7</b>	<b>Problems Based on Unit II : 23SBCS21MNA</b>	<b>1</b>
<b>8</b>	<b>Problems Based on Unit III : 23SBCS21MNA</b>	<b>1</b>
<b>9</b>	<b>Problems Based on Unit IV : 23SBCS21MNA</b>	<b>1</b>