

Module Name (General)	Total Hours
Mathematics	25

Day	Sr. No.	Topic	Hrs.
1	1	Logical and reasoning: <ul style="list-style-type: none"> <li>Basic set theory and diagram problems, practical problems</li> <li>On union and intersection using Venn diagrams</li> </ul>	1
	2	Applications of vectors: <ul style="list-style-type: none"> <li>Work done</li> </ul>	1
	3	Application of integration: <ul style="list-style-type: none"> <li>Review of integration</li> </ul>	1
	4	Applications of trigonometry: <ul style="list-style-type: none"> <li>Distance and height</li> </ul>	1
	5	Visualizing mathematics using software: <ul style="list-style-type: none"> <li>Geo Gebra (Locus of points, Area etc..)</li> </ul>	1
2	1	Logical and reasoning: <ul style="list-style-type: none"> <li>Problems on work, time and distance, and clock</li> </ul>	1
	2	Applications of vectors: <ul style="list-style-type: none"> <li>Moment</li> </ul>	1
	3	Application of integration: <ul style="list-style-type: none"> <li>Area</li> </ul>	1
	4	Elementary linear algebra: <ul style="list-style-type: none"> <li>Solution of real life problems of linear system using elimination method and Cramer's rule method</li> </ul>	1
	5	Visualizing mathematics using software: <ul style="list-style-type: none"> <li>D graph (Graphs of various functions)</li> </ul>	1
3	1	Logical and reasoning: <ul style="list-style-type: none"> <li>Problems on interest, profit and loss</li> </ul>	1
	2	Applications of differentiation: <ul style="list-style-type: none"> <li>Velocity and acceleration</li> </ul>	1
	3	Application of integration: <ul style="list-style-type: none"> <li>Volume</li> </ul>	1
	4	Elementary linear algebra: <ul style="list-style-type: none"> <li>Solution of real life problems of linear system using substitution method and matrix method</li> </ul>	1
	5	Visualizing mathematics using software: <ul style="list-style-type: none"> <li>Wolfram alpha(Solutions of equations, Graphs etc.)</li> </ul>	1
4	1	Logical and reasoning: <ul style="list-style-type: none"> <li>Sequence and series</li> </ul>	1
	2	Applications of differentiation: <ul style="list-style-type: none"> <li>Optimization problems</li> </ul>	1
	3	Application of differential equation: <ul style="list-style-type: none"> <li>Formation of real life problems of differential equations, Solution of differential equation using variable separable, reducing to variable separable method</li> </ul>	1
	4	Area :	1
	5	Visualizing mathematics using software: <ul style="list-style-type: none"> <li>Excel (Graph Plotting, etc.)</li> </ul>	1
5	1	Logical and reasoning: <ul style="list-style-type: none"> <li>Puzzles</li> </ul>	1
	2	Applications of differentiation:	1

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		<ul style="list-style-type: none"> <li>• Optimization problems</li> </ul>	
	3	Application of differential equation: <ul style="list-style-type: none"> <li>• solution of differential equation using homogenous method and Linear differential equation method</li> </ul>	1
	4	Volume:	1
	5	Visualizing mathematics using software: <ul style="list-style-type: none"> <li>• Photomath (Android application)</li> </ul>	1
		Total Hours:	25