

**Bifurcation of Syllabus**  
**MATHEMATICS (311)**  
**TOTAL NO. OF LESSONS – 38**

<b>MODULE</b>	<b>I</b> <b>TMA (40 % of Syllabus)</b> <b>15 lesson</b>	<b>II</b> <b>Public Examination (60% of syllabus)</b> <b>23 Lessons</b>
<b>Module-I</b> Sets, Relations and Functions	1. Sets 2. Relations and Functions-I 3. Trigonometric Functions-I 4. Trigonometric Functions-II 5. Relation between Sides and Angles of A triangle	
<b>Module- II</b> Sequences and Series	6. Sequences and Series 7. Some Special Sequences	
<b>Module-III</b> Algebra-I	8. Complex Numbers 9. Quadratic Equations and Linear Inequalities 10. Principle of Mathematical Induction 11. Permutations and Combinations 12. Binomial Theorem	
<b>Module-IV</b> Co-ordinate Geometry		13. Cartesian System of Rectangular Co-ordinates 14. Straight Lines 15. Circles 16. Conic Sections
<b>Module-V</b> Statistics and Probability	17. Measures of Dispersion 18. Random Experiments and Events 19. Probability	
<b>Module-VI</b> Algebra-II		20. Matrices 21. Determinants 22. Inverse of a Matrix and its Applications
<b>Module- VII</b> Relations and Functions		23. Relations and Functions-II 24. Inverse Trigonometric Functions
<b>Module- VIII</b> Calculus		25. Limits and Continuity 26. Differentiation 27. Differentiation of Trigonometric functions 28. Differentiation of Exponential and Logarithmic functions 29. Application of Derivatives 30. Integration 31. Definite Integrals 32. Differential Equations
<b>Module-IX</b> Vectors and Three Dimensional Geometry		33. Introduction to Three Dimensional Geometry 34. Vectors 35. Plane 36. Straight Line
<b>Module-X</b> Linear Programming and Mathematical Reasoning		37. Linear Programming 38. Mathematical Reasoning

