

SYLLABUS FOR CLASS XII

Subjects		Chapters	
MATHEMATICS		<ul style="list-style-type: none"> • Relations and Functions & Inverse Trigonometric Functions • Matrices and Determinants • Continuity and Differentiability • Application of Derivatives • Integrals and Differential Equations • Vector Algebra and Three Dimensional Geometry • Probability 	
CO-SCHOLASTIC SUBJECTS			
1.	Artificial Intelligence	<ul style="list-style-type: none"> • Programming in a High-Level Language (e.g., Python, Java) • Artificial Intelligence Fundamentals • Cybersecurity and Ethical Hacking 	<ul style="list-style-type: none"> • Data Structures and Algorithms • Machine Learning Concepts • Web Development (Advanced Concepts)
2.	STEM	<ul style="list-style-type: none"> • Advanced Physics Concepts (Quantum Mechanics, Relativity) • Advanced Mathematics Concepts (Calculus, Differential Equations) • Scientific Research and Experimental Design 	<ul style="list-style-type: none"> • Advanced Chemistry Concepts (Organic Synthesis, Thermodynamics) • Engineering Design and Innovation • Environmental Engineering and Sustainability
3.	Aptitude & Reasoning	<ul style="list-style-type: none"> • Advanced Number Systems and Algebraic Expressions • Mathematical Reasoning (algebraic reasoning, word problems) • Data Interpretation and Analysis 	<ul style="list-style-type: none"> • Logical Reasoning (complex puzzles, deductive reasoning) • Critical Thinking and Analytical Skills • Problem-solving Strategies in Advanced Mathematics
4.	English	<ul style="list-style-type: none"> • Reading Comprehension and Critical Analysis • Advanced Grammar (Syntax, Semantics) • Literature Analysis and Appreciation 	<ul style="list-style-type: none"> • Vocabulary Building and Word Usage • Creative Writing (essays, research papers) • Effective Communication Skills and Public Speaking
5.	Commerce Class XI & XII (Accountancy, Business Studies & Economics)	<p>Introduction to Accounting</p> <ul style="list-style-type: none"> • Meaning, objectives, and importance of accounting. • Basic terms: Assets, liabilities, capital, revenue, expenses, profit, and loss. • Users of accounting information and their needs. • Limitations of accounting. <p>Theory Base of Accounting</p> <ul style="list-style-type: none"> • Accounting principles: Concepts and conventions (e.g., Going Concern, Accrual, Consistency). • Meaning and need for the system of accounting standards. • International Financial Reporting Standards (IFRS) overview. • Goods and Services Tax (GST) and its implications <p>Nature and Purpose of Business</p> <ul style="list-style-type: none"> • Concept of business, objectives, and role in the economy. • Types of business activities: Industry and commerce. • Characteristics and importance of business risks. <p>Forms of Business Organizations</p> <ul style="list-style-type: none"> • Sole proprietorship, partnership, joint-stock company, and cooperative societies. • Features, merits, and demerits of each form of organization. • Comparison of different forms of organizations. <p>Introduction to Microeconomics</p> <ul style="list-style-type: none"> • Meaning, scope, and importance of microeconomics. • Central problems of an economy: What to produce, how to produce, and for whom to produce. • Concept of opportunity cost and production possibility frontier (PPF). <p>Government Budget and the Economy</p> <ul style="list-style-type: none"> • Objectives and components of the government budget: Revenue and capital budget. • Types of deficits: Fiscal deficit, Revenue deficit, and Primary deficit. • Role of government budget in economic stability and development. 	