TamilNadu State Board 12th Syllabus

Tamil Nadu Class 12 Syllabus - English:

Sections	Topics
Vocabulary Competencies	Meanings, syllabification, spellings, word formation, vocabulary improvement, phrasal verbs and idioms, foreign words and phrases.
Grammatical Competencies	Sentence patterns, conditional and concessional clauses, modal auxiliaries, reported speech, relative clauses, the transformation of sentences, passivization.
Listening Competencies	Comprehension passage containing six-eight lines, short passages, ease of breath, CNN news panel discussion, coherence,
Speaking Competencies	Introduction to topics through group discussions, greeting, introduction, and giving information, disagreeing peacefully, projecting one's image, expressing gratitude, welcome address, vote of thanks, and more.
Reading Competencies	Descriptive, argumentative, factual, and literary texts.
Writing Competencies	Scientific and factual discourse, interesting texts, reports, relevant situations, non-verbal information, projects, advertisements, et cetera.
Study Skills	Dictionaries, library facilities, internet, verbal and non-verbal texts, lectures, books and journals, essays of students, email language.
Occupational	Report writing, presenting messages, picture composition, presenting facts and figures in a systematic method, advertisements, and more.
Strategic Competencies	Samples of pupil language, areas of doubt, hesitation, and more.
Creative competencies	Essay writing, poem writing, critical appraisal, scriptwriting for interviews, cartoon scripts, travelogues, captions for photographs, translation.

Tamil Nadu Board 12th Syllabus - Mathematics

Sections	Topics
Systems of Equations	Systems of linear equations, methods of solution
Applications of Matrices	Matrices for transformations: Matrices for Translation, Reflection, Rotation, Glide reflection, Shear and Stretch, Isometry and similarity matrices for the same.
Analytical Geometry	Definition of a conic, Derivation of the standard equation of Parabola, Ellipse, Hyperbola and Rectangular Hyperbola, Chords, Tangents & Normals, and more.
Vector Algebra	Vectors and Scalars Representations of vectors and operations of addition and subtraction, Scalar and vector products, Triple products, products 4 vectors, and more.
Applications of Differentiation	Derivative as a rate measurer, Derivative as a measure of slope, Mean Value Theorems, Curve tracing, et cetera.
Applications of Integration	Definite integral and its applications
Differential Equations	Formation of differential equations, I order and II Order Linear Equations, Applications.
Probability Distribution	Random variable, probability functions, mathematical expectation, discrete and continuous distribution.

Complex Numbers	Complex Algebra Fundamental operations on complex numbers, Applications.
Algebraic Structures	Rings. Integral Domains and Fields, Group Structure.

TamilNadu State Board Syllabus 12th – Physics:

Sections	Topics
Systems of Equations	Systems of linear equations, methods of solution
Applications of Matrices	Strong information, input-output analysis, transition matrices for market share.
Analytical Geometry	Standard equations, tracing the conics, derivation of standard equations
Sequences and Series	Progressions and number sums, application in commerce
Applications of Differentiation	Functions in Economics and Commerce, derivative as a rate of measure, derivative as a measure of slope, maxima and minima, applications of maxima and minima, partial derivatives, errors, and applications.
Applications of Integration	Definite integral, area under a curve, commuting producer's surplus and consumer surplus.
Differential Equations	The formula of differential equations, I Order variables, II Order linear equations with constant coefficients, applications.
Probability Distribution	Random variable, probability functions, mathematical expectation, discrete and continuous distribution.
Sampling Techniques	Sampling distribution, errors, estimation, quality control charts.
Forecasting Techniques and Decision Theory	Linear Programing, correlation, and regression, index numbers, decision theory.
Current Electricity	Electric Current, drift velocity, Ohm's law, Electrical resistivity, superconductivity, Combination of resistors, Electric power and more.
Effects of Electric Current	Healing effect, Joule's law, magnetic effect of electric current, Magnetic dipole moment of a revolving electron, Conversion to ammeter and voltmeter, Bar magnet as an equivalent solenoid, and more.
Electromagnetic Induction And Alternating Current	Electromagnetic induction, Alternating current, Eddy current, AC generator, methods of inducing emf, self-induction.
Electromagnetic Waves And Wave Optics	Electromagnetic waves and their characteristics, Transverse nature of electromagnetic waves, Emission and Absorption spectrum, Theories of light, Wavefront and Huygens principle, etc.
Atomic Physics	Atomic structure, Bohr's model, Sommerfield's atom model, Quantum numbers, x -rays production properties, detection, absorption, diffraction of x - rays, and more.
Dual Nature of Radiation and Matter	The photo-electric effect, Photocells and their application, Matter waves, electron microscope.
Nuclear Physics	Nuclear properties, Nuclear mass defect, Nature of Nuclear forces, Neutron discovery, Radioactivity, Nuclear fission.
Relativity	Concept of space, time and mass, Frame of reference, Newtonian relativity, Special theory of relativity, Doppler effect of light,
Semiconductor devices	Semiconductor theory, Semiconductor doping, Formation of P-N

and their applications	Junction, Diode as a rectifier, Junction - transistors, Measuring Instruments, and more.
Communication Systems	Modes of propagation ground wave, Amplitude modulation, Antennas, and Transmission lines, TV.Transmission and reception, Video signal analysis, and more.

TN 12th Syllabus for Chemistry:

Sections	Chapters
Inorganic Chemistry	Atomic Structure II, Periodic Table, Coordination compounds & bio coordination compounds, Nuclear Chemistry, etc.
Physical Chemistry	Solid State, Thermodynamics, Chemical Equilibrium, Chemical Kinetics, Surface Chemistry, Electro Chemistry, Electro Chemistry II, etc.
Organic Chemistry	Isomerism in Organic Chemistry, Hydroxy derivatives, Ethers, Carbonyl Compounds, Carboxylic acid, Organic Nitrogen Compounds, Biomolecules, Chemistry in Action, Problems in Chemistry.

Tamilnadu Board 12 Syllabus for Commerce:

Chapters	Topics
Organization	Meaning and Types of Organization
Sole trader	Meaning of sole trader, Special features of a sole trader, Merits of a sole trader, Demerits of a sole trader.
Partnership	Definition of partnership, Special features of partnership, Similarities between sole trader and partnership, Merits and Demerits of Partnership, Types of Partnership, Kinds of Partners, Rights and Duties of partners, Partner's express and Implied authority, Partnership Deed, Dissolution of partnership, and more.
Companies I and II	Definitions, Differences between partnership and company, Kinds of companies, public company, private company, Privileges of a private company, Differences between private company and public company, Formation of a company, Memorandum of Association, Articles of Association, Prospectus, Shares, Allotment of shares, Debentures Types, Differences between Shares and Debentures.
Stock Exchange	Introduction, Procedures regarding new Issues, Stock Exchange, Investors and speculators, Differences, SEBI, Mutual funds, Bombay Online Trading (BOLT).
Co-operatives	Definition, Merits, and Demerits, Types of Cooperatives, Differences between companies and cooperatives.
Government in Business	Introduction, Types, Public Corporation, Government Companies, Differences between the private sector and the public sector.

TN Board Syllabus Class 12 – Economics:

Chapters	Topics
Nature and Scope of Economics	Definition of Economics, The divisions, and nature of economics, and their relationship with other subjects, static and dynamic concepts, Scope of micro and macro Economics, Nature of Economic Laws, Basic concepts in economics.

Basic Economic Problems	Basic economic problems of all societies, Production possibility curve.
Consumer's Behavior	Characteristics of human wants, Concept of utility Marshallian approach, Consumers' surplus and indifference curves theory, Indifference curve theory.
Law of Demand and Law of Supply	The concept of demand and the causes for the demand curve sloping downwards, Factors determining demand, Elasticity of demand, Factors determining Elasticity of demand, The concept supply, Factors or determinants of the supply curve, shifts in the supply curve.
Equilibrium Price	Concept of equilibrium, Concepts of static equilibrium and dynamic equilibrium, Diagram of equilibrium price, Time periods and price fixation.
Production	The concept of production, The factors of production, Production function, Laws of returns and laws of returns to scale, Difference between Laws of Returns and Laws of Returns to Scale.
Cost and Revenue	The concepts of cost and revenue, The different kinds of costs and revenues, To develop skills to draw diagrams and to prepare tables,
Market Structure and Pricing	Structure and different kinds of markets, The characteristic features of perfect and imperfect competition, Product differentiation, Wastes of monopolistic competition, Monophony.
Marginal Productivity Theory of Distribution	The general theory of income distribution, The marginal productivity theory of factor pricing and its criticism, Theories of distribution, and more.
Simple Theory of Income Determination	The theory of income determination, Aggregate demand, and aggregate supply, consumption function, investment function, Govt.'s Spending, Shifts in aggregate demand, and more.
Monetary Policy	Money, Functions of money, money supply, Inflation, and Deflation.
Fiscal Policy	The concept of public finance and its importance, taxes, Budget, Limitations of fiscal policy.

Tamilnadu Syllabus Class 12- History:

Sections	Chapters
History of Modern India	India under East India Company's Rule, Education under the Company's rule, British rule in Tamilnadu, The Great Revolt of 1857, Changes in Indian administration after 1858, India's Freedom Movement, Role of Tamilnadu in India's Freedom Movement, India after independence - Social, Economic, Scientific and Technological Progress.
Modern World History	Renaissance, the American war of independence, French Revolution, Industrial, and Agricultural Revolutions, Spread of Colonialism, Russian Revolution, Rise of Fascism and Nazism, Second World War, Growth of Asian Nations China and Japan after the Second World War, UNO, Cold War.

Tamilnadu Class 12 Exam Pattern 2020-21:

Examination	Duration	Subjects
Part I- Language	3 Hours	Tamil, Hindi, Kannada, Telugu, Malayalam, Urdu, Sanskrit, Arabic, French, and German.
Part II- English	3 Hours	English

Part III- Any 4 subjects	3 Hours	Any 4 subjects from General Stream Papers or Vocational Stream Papers.