



As per Council's Reduced Syllabus

Syllabus 2021 - 2022

CLASS XI

English Language

A. Aims and Objectives:

To develop the ability to:

- derive, infer and critically assess information through listening.
- express oneself by speaking individually, or in a discussion.
- read with comprehension drawing information directly or by inference from the text, through an understanding of grammar and structure, vocabulary and idiom.
- employ a variety of skills in writing : within a framework, using argument or imagination or note making and summarizing.
- use the English language for the purpose of study and social and cultural interaction.

B. Topics

TERM I

1. Composition Writing
2. Report Writing
3. Proposal Writing
4. Functional Grammar – Transformation of Sentences, Verbs and Tenses, Prepositions and Phrasal Verbs
5. Unseen Comprehension

Internal Assessment: Aural & Oral

TERM II

1. Composition Writing
2. Report Writing
3. Proposal Writing
4. Functional Grammar – Transformation of Sentences, Verbs and Tenses, Prepositions and Phrasal Verbs
5. Unseen Comprehension

Internal Assessment: Aural & Oral

English Literature

Aims and Objectives:

- To enjoy and appreciate literature through a critical study of selected literary works.
- Through the study of literature:
 - approach an understanding of humanity.
 - develop an interest in the thought and culture of the people of the world.
 - develop the power of expression and a sense of aesthetic values.

Topics

TERM I

1. Drama

- a. The Tempest-William Shakespeare Act 1 and Act 2 Scene 1

2. Short Stories

- a. Salvatore
- b. Fritz
- c. Quality

3. Poetry

- a. John Brown
- b. The Gift of India
- c. The Dolphins

TERM II

1. Drama

- a. The Tempest Act 2 Scene 1 & 2 and Act 3

2. Short Stories

- a. The Chinese Statue
- b. A Gorilla in the Guest Room

3. Poetry

- a. Desiderata
- b. The Spider and the Fly

Revision of First Term Syllabus

HINDI

TERM I

१. गद्य संकलन

- a. पुत्र प्रेम
- b. गौरी
- c. शरणागत
- d. क्या ननराश हुआ जाए?

2. काव्य मंजरी

- a. बाल लीला
- b. एक फूल की चाह
- c. आ: धरती ककतना देती है
- d. उद्यमी नर
- e. आषाढ़ का एक ददन (अंक एक)

3. व्याकरण

- a. ननबंध लेखन

- b. अपदित गदयांश
- c. मुहावरे
- d. वाक्य शुद्ध करो
- e. पररयोजना कायय

TERM II

1. गद्य संकलन

- a. सती
- b. आउट साइडर
- c. दासी
- d. संस्कृत क्या है?

2. काव्य मंजरी

- a. नदी के द्वीप
- b. तुलसीदास के पद
- c. बादल को निरते देखा है
- d. आषाढ़ का एक ददन (अंक दो)

3. व्याकरण

- a. ननबंध लेखन
- b. अपदित गदयांश
- c. मुहावरे
- d. वाक्य शुद्ध करो
- e. पररयोजना कायय

BENGALI

A. Aims and Objectives:

गद्य उ पद्यः

शिक्षार्थीरु सङ्गमहवेः

- निजेदेरश्रवण, पठन, लेखनी उ भाषा शैलीर विकास घटाते।
- शुद्ध वानान लिखते।
- पाठ्य विषय थेके नतून शब्दभान्दार गठन करते।
- छेद उ यति चिह्न सहयोगे पडते।
- गद्येर एवंग सठिक व्याख्या करते।
- सठि कउच्चारणे सरव पाठ करते।
- गद्येर विषय वस्तु सम्पर्के निजस्व चिन्तारविकास घटाते।
- पाठ्य विषय थेके मूखिक प्रश्नेर उतुतर दिते।
- विषय संक्रान्तु विभिन्न प्रश्नेर उतुतर निजेर भाषाय लिखते।
- विभिन्न लेखक उ कवि सम्पर्के जानते।
- कवितार मूलभाव उ अन्तर्निहित अर्थ निजेर भाषाय व्याख्या करते।
- विभिन्न चरित्र उ सेइसव चरित्रेर विभिन्न वैशिष्ट्य सम्पर्के जानते।

ব্যাকরণঃ

- অপঠিত অনুচ্ছেদ পঠন এবং প্রশ্নের উত্তর লেখার মাধ্যমে বোধপরীক্ষণ বিষয়ে ধারণা স্বচ্ছকর।
- সঠিকশব্দ, ভাষা ও বাক্য প্রয়োগ করে প্রবন্ধ লিখতে।
- প্রবন্ধ লেখার মাধ্যমে সৃজনী শক্তির বিকাশে।
- বাগধারার ব্যবহার শিখতে।
- অশুদ্ধ শব্দ ও বাক্যশুদ্ধ করে লিখতে।

B. Topics

TERM I

1. কোনি ১ ২ ৩ ৪
2. বীরশুল্ক
3. পূব পশ্চিম
4. তাসের ঘর
5. ঠাকুরদা
6. ওরা কাজ করে
7. বর্ণপরিচয়
8. না পাহারার পরীক্ষা
9. স্বাধীনতাতুমি
10. প্রবন্ধ রচনা
11. বোধ পরীক্ষণ
12. শুদ্ধ শব্দ ও বাক্য
13. বাগধারা

TERM II

1. কোনি ৫ ৬ ৭ ৮
2. অনাচার
3. লছমেনের মা
4. সালেমেনের মা
5. নুন
6. রেকর্ড
7. রাস্তা কারও একার নয়
8. বনলতা সেন
9. জোড়াসাঁকোর ধারে
10. প্রবন্ধ রচনা
11. বোধ পরীক্ষণ
12. শুদ্ধ শব্দ ও বাক্য
13. বাগধারা

PHYSICS

A. Aims and Objectives:

- Strengthen the concepts developed at the secondary stage to provide firm foundation for further learning in the subject.
- Expose the learners to different processes used in physics-related industrial and technological applications.
- Develop process skills and experimental, observational, manipulative, decision making and investigatory skills in the learners.
- Develop conceptual competence in the learners and make them realize and appreciate the interface of physics with other disciplines.

B. Topics

TERM I

1. Physical World And Measurement - dimensional analysis, significant figures.
2. Kinematics –Two dimensional motions, Vectors, projectiles.
3. Laws of Motion – Newton’s laws, Friction, Uniform circular motion.
4. Work, Energy, Power – conservation of energy, collision in one dimension.
5. Gravitation - Newton's law, Kepler’s laws, Satellites, Geostationary satellites, Escape velocity.
6. Heat and Thermodynamics – Heat Transfer, Zeroeth Law and First law of thermodynamics – isothermal and adiabatic processes, Molar Heat capacities, Second law of thermodynamics – Carnot's Heat Engine, efficiency of heat engine, Refrigerator.
7. Properties of Bulk Matter – Elasticity, Viscosity, Surface tension.
8. Revision.
9. Projects and Experiments.

TERM II

1. Motion of System Of Particles and Rigid Body - Centre of mass, Moment of Inertia – parallel and Perpendicular axes Theorems, Conservation of angular momentum.
2. Behaviour of Perfect Gases and Kinetic Theory of Gases - Assumptions, Expressions for pressure, Kinetic interpretation of temperature,, Degrees of freedom, Equipartition of energy.
3. Oscillation and Waves - Simple harmonic motion, Transverse and longitudinal waves, equation of progressive waves, Stationary waves in air column, Organ pipes, Principle of Superposition of waves- Interference: Beats, Laws of vibration in a stretched string.
4. Revision of all the chapters of Term I.
5. Projects and experiments.

CHEMISTRY

A. Aims and objectives:

- To foster acquisition of knowledge and understanding of terms, concepts, facts, processes, techniques and principles relating to the subject of Chemistry.
- To develop the ability to apply the knowledge of contents and principles of Chemistry in new or unfamiliar situations.

- To develop skills in proper handling of apparatus and chemicals.
- To develop an ability to appreciate achievements in the field of Chemistry and its role in nature and society.
- To develop an interest in activities involving usage of the knowledge of Chemistry.
- To acquaint students with the emerging frontiers and interdisciplinary aspects of the subject.
- To develop skills relevant to the discipline.
- To apprise students with interface of Chemistry with other disciplines of Science.

B. Topics

TERM I

- Basic concepts of Chemistry
- Structure of Atom
- Classification of elements and periodicity in properties
- Redox reactions
- Chemical Bonding and molecular structure
- Hydrogen
- Basic Organic Chemistry – principles and techniques
- States of Matter
- s-Block Elements
- Hydrocarbons (Aliphatic)
- Practical - Volumetric & Qualitative Analysis

TERM II

- Hydrocarbons (Aromatic)
- Chemical Thermodynamics
- Equilibrium
- p block elements
- Environmental Chemistry
- Practical- Qualitative Analysis & Volumetric

MATHEMATICS

A. Aims and objectives:

- To enable candidates to acquire knowledge and to develop an understanding of the terms, concepts, symbols, definitions, processes and formulae of mathematics at the senior secondary stage.
- To develop the ability to apply the knowledge and understanding of Mathematics to unfamiliar situations or to new problems.
- To enhance ability of analytical and rational thinking in young minds.
- To develop skills of – computations, logical thinking, handling abstractions, generalizing patterns.
- To develop a scientific attitude through the study of Mathematics.

TERM I

Section A

Set and Functions

- Set theory
- Relation and functions

Trigonometry

- Angles and arc lengths
- Trigonometric functions
- Compound and Multiple angles

Algebra

- Mathematical Induction
- Complex Numbers
- Quadratic Equations
- Inequalities

Calculus

- Limits

Statistics and Probability

- Measure of dispersion
- Mean deviation, variance and standard deviation median of ungrouped/grouped data
- Analysis of frequency distribution with equal means but different variance
- Mean deviation about mean and median
- Standard deviation-by direct method, short cut method and step deviation method
- Probability

Section B

- Three dimensional Geometry
- Mathematical Reasoning

Section C

Statistics

- Combined mean and standard deviation
- Median, Quartile, Decile, Percentile, Mode of grouped and ungrouped data

Project: One project for Term I.

Sec A(compulsory) and Sec B/Sec C

TERM II

Section A

Algebra

- Permutation and Combinations
- Binomial Theorem
- Sequences and Series

Trigonometry

- Trigonometric equations

Coordinate Geometry

- Straight lines
- Circles

Calculus

- Derivatives

Section B

- Conic Sections (Parabola, ellipse and hyperbola)

Section C

- Correlation Analysis
- Index Numbers
- Moving Average

Project: One project for Term II

Sec A (compulsory) and Sec B or Sec C

BIOLOGY

A. Aims and Objective:

- To enable candidates to acquire the knowledge and to develop an understanding of biological terms, concepts, facts, principles, formulae etc.
- To develop the ability to apply the knowledge of biology in unfamiliar situations.
- To develop experimental skills required in biology practical work.
- To develop the ability to appreciate biological phenomena in nature and the contribution of biology to human welfare.
- To develop interests in plants and animals and in their respective environments.
- To develop scientific attitude towards biological phenomena.

B. Topics:

Term I

1. The living world
2. Biological classification
3. Plant kingdom
4. Animal kingdom
5. Morphology of flowering plants
6. Anatomy of flowering plants
7. Animal tissue, morphology and anatomy of cockroach
8. Cell: The unit of life
9. Biomolecules: Chemical constituents of living cells
10. Cell cycle and cell division
11. Transport in plants
12. Mineral nutrition in plants
13. Photosynthesis in higher plants

Term II

1. Respiration in plants
2. Plant growth and development
3. Digestion and absorption
4. Breathing and exchange of gases
5. Body fluids and circulation
6. Excretory products and their elimination
7. Locomotion and movement
8. Neural control and coordination
9. Chemical coordination and integration

C. i. Practical

ii. Project

Computer Science

A. Aims and Objectives

- To understand algorithmic problem solving using data abstractions, functional and procedural abstractions, and object based and object-oriented abstractions. To develop logical and analytical thinking so that they can easily solve interactive programs.
- To understand: (a) how computers represent, store and process data at different levels of abstraction that mediate between the machine and the algorithmic problem solving level and (b) how they communicate with the outside world.

B. Topics

Term 1

1. Numbers.
2. Encodings.
3. Introduction to Object Oriented Programming using Java.
4. Objects.
5. Primitive values, Wrapper classes, Types and casting.
6. Conditional Constructs in Java.
7. Variables, Expressions.
8. Statements, Scope.
9. Methods and Constructors.
10. String Handling.
11. Packages.
12. Implementation of algorithms to solve problems.
13. Trends in computing and ethical issues.
14. Arrays – Single Dimensional Array

Term 2

1. Propositional logic, Hardware implementation, Arithmetic operations.
2. Arrays – Two Dimensional Array
3. Recursion
4. Basic input/output Data File Handling (Binary and Text)
5. Revision

C. **Activities**

Continuous Evaluation

1. Candidates will be required to submit a work file containing the practical work related to programming assignments done during the year and **ONE** project.
2. Programming assignments done **throughout the year**.

Accountancy

A. **Aims and Objectives:**

- To provide an understanding of the principles of accounts and practice in recording transactions and interpreting individual as well as company accounts.
- To develop an understanding of the form and classification of financial statements as a means of communicating financial information.

B. **Topics**

Term I

1. Introduction to Accounting
2. Basic Accounting Terms
3. Generally Accepted Accounting Principles (GAAP) and Basic Accounting Concepts
4. Accounting Standards: Concept and Objectives, International Financial Reporting Standards (IFRS)
5. Basis of accounting
6. Accounting equation
7. Journal
8. Ledger
9. Sub-division of journal - Cash Book
10. Petty Cash Book
11. Sub-division of journal
12. Trial Balance
13. Bank Reconciliation Statement
14. Depreciation

Term II

1. Bills of Exchange
2. Capital and Revenue Expenditure/Income
3. Final Accounts and Concept of Trading, Profit and Loss account and Balance Sheet (without adjustments)
4. Final Accounts(with adjustments)
5. Rectification of Errors
6. Accounts from incomplete records
7. Non Trading Organisation
8. Computers in Accounting

C. **Project work**

- Preparation of Journal / sub-division of journal, Ledger, Trial balance and Financial Statements of a trading organization on the basis of a case study.
- Prepare a Bank Reconciliation Statement and Amended Cash Book from the information given in your Cash Book and Bank Statement (Pass Book) with at least fifteen transactions.

ECONOMICS

A. Aims and Objectives:

- To enable candidates to acquire knowledge and develop an understanding of facts, terms, concepts, hypothesis in economics.
- To acquaint the candidates with tools of economic analysis.
- To develop an understanding of important economic problems.

B. Topics

TERM I

1. Definition of economics.
2. Basic concepts of economics.
3. Basic problems of an economy.
4. Types of economies.
5. Solutions to the basic economic problems
6. Parameters of Development
7. Definition and scope of statistics
8. Measures of central value (mean and median)

Term 2

The full book will be coming for the final term (as per the reduced syllabus.)

COMMERCE

A. Aims and Objectives:

- Ability to recall facts, concepts, items and principles in Elements of Commerce.
- Ability to locate, classifies, compare and contrast commercial information
- Develops enterprising spirit.
- Develops an ability to critically examines new developments in the field of business, trade and commerce

B. Topics

Term I

1. Nature and Purpose of Business
 - (i) Classification of human activities - economic and non-economic.
 - (ii) Definition and concept of business; classification of business activities.
 - (a) Industry
 - (b) Commerce
 - (iii) Business objectives.
2. Forms of Business Organisations:
 - (i) Introduction to business organizations.
 - (ii) Sole trader.

- (iii) Partnership.
 - (iv) Corporate Organisations:
 - (a) Joint Stock Company.
 - (b) Stages of Formation of a Company.
 - (c) Promotion.
 - (d) Incorporation of a company.
 - (e) Memorandum of Association and Articles of Association.
 - (f) Commencement of business.
 - (g) Prospectus and statement in lieu of prospectus.
 - (h) Types of companies.
 - (i) Global enterprises.
 - (v) Public Sector Undertakings:
 - (a) Departmental Undertakings, Public Corporations and Government Companies).
 - (b) Public Private Partnerships.
 - (vi) Co-operative organizations:
3. Social Responsibility of Business and Business Ethics.
 4. Emerging Modes of Business:
 - (i) E-business.
 - (ii) Outsourcing.
 - (iii) Smart Cards
 5. Stock Exchange (Concept)

Term II

1. Stock Exchange:
 - (i) Meaning and importance.
 - (ii) Functions and services.
 - (iii) Major Stock Exchanges in India (BSE, NSE, DSE, ASE) – types and locations.
 - (iv) Types of operators – Brokers, Jobbers, Bulls and Bears.
 - (v) Terms used in Stock Exchange - exdividend, cum dividend, spot delivery, forward delivery.
 - (vi) SEBI – functions and objectives.
2. Trade:
 - (i) Wholesalers.
 - (ii) Retail trade.
 - (a) Types of retail trade.
 - (b) Documents used in home trade.
 - (c) Role of Chambers of Commerce and Industry and Trade Associations.
3. Foreign Trade:
 - (i) Internal trade and External trade.
 - (ii) Export trade.
 - (iii) Import trade.
 - (iv) Documents involved in international trade.
 - (v) World Trade Organisation.
4. Insurance:
 - (i) Insurance.
 - (ii) Risks in business.

- (iii) Principles of insurance.
- (iv) Types of insurance.

C. Project work

Business Studies

A. Aims and Objectives:

- To enable candidates to understand the modern business environment.
- Create that personality factors that are important for the success of business.
- Ability to suggest improvements in the business process.
- To understand the role, responsibility and authority and delegation of managerial.
- To provide an insight into the recent trends in business.

B. Topics

Term I

1. Business Environment:
 - i. Introduction to the concept of business environment.
2. Features and importance of business environment.
3. SWOT Analysis
4. Entrepreneurship:
 - i. Introduction to Entrepreneur.
 - ii. Introduction to Entrepreneurship.
5. Intrapreneurship.
6. Enterprise.
7. Business risks and causes of failure.

Term II

1. Manager and Managerial Roles:
 - (i) Introduction
 - (ii) Managerial roles
 - (iii) Authority, responsibility, and accountability
 - (iv) Change management.
2. Automation at Workplaces
 - a. Introduction
 - b. Productivity enhancement tools and facilities at different workplaces.

C. Project work

HISTORY (Modern India and World History)

A. Aims and Objectives:

- To provide accurate knowledge of significant events and personalities of the period under study in sequence and in context.
- To familiarize candidates with factual evidence upon which explanations or judgements about the period must be founded.
- To develop an understanding of the existence of problems and relevance of evidence of explanations.
- To develop the capacity to marshal facts and evaluate evidence and to discuss issues from a historical point of view.

B. Topics

TERM I

INDIAN HISTORY

1. Growth of Nationalism
2. Emergence of Colonial Economy
3. Social and Religious Movements

WORLD HISTORY

4. World War I
5. Peace Settlements after World War I
6. The Great Depression
7. The Rise of Communism: Russia

TERM I

INDIAN HISTORY

1. Growth of Nationalism
2. Emergence of Colonial Economy
3. Social and Religious Movements
4. Protest Movement Against Colonial Rule
5. Gandhian Nationalism (1916-1922)
6. Gandhian Nationalism (1927-1934)

WORLD HISTORY

7. World War I
8. Peace Settlements after World War I
9. The Great Depression
10. The Rise of Communism: Russia
11. Rise of Fascism (Italy)
12. Rise of Nazism (Germany)
13. Rise of Militarism (Japan)

C. Activities:

1. Group Discussion
2. Project Work
3. Research Work
4. Peer Assessment

GEOGRAPHY

A. Aims and Objectives:

- To enable candidates to acquire knowledge and to develop an understanding of facts, terms, symbols, concepts, principles, generalizations, hypotheses, problems, trends, processes and methods of Geography at the national and global level.
- To apply the knowledge of the principles of Physical Geography in explaining the causes and consequences of natural hazards and suggest ways of coping with them through sustainable development.
- To develop skills of drawing statistical diagrams and thematic maps.
- To develop an interest in Geography.

B. Topics

TERM 1

1. Geography as a discipline.
2. Principles of physical Geography
3. Atmosphere
4. Project Work
5. Practical Work
6. Map Pointing (India)

TERM 2:

1. The Realms of water
2. Biosphere- life on the earth
3. World Climatic Types
4. Man Environment Interaction
5. Map Pointing (India)

SOCIOLOGY

A. Aims and Objectives:

- To familiarize candidates with the basic concepts of Sociology and Anthropology.
- To develop in candidates an understanding of various forces that constitutes social life and social problems.
- To create an awareness of the process of change and development in general and with reference to the Indian society in particular.
- To provide candidates with the means whereby they can come to a better understanding of other cultures as well as of their own.
- To form in candidates the habit of scrutinizing social assumptions and beliefs in the light of scientific evidence.
- To introduce a deeper study of the subject for the tertiary level.

B. TOPICS:

TERM 1

1. Origin and Development of Sociology and Anthropology
2. Indian Sociologists
3. Social Problems

TERM 2

1. Origin and Development of Sociology and Anthropology
2. Research Methodology
3. Basic Concepts
4. Social Structures
5. Indian Sociologists

C. ACTIVITY:

Project Related Discussion

HOME SCIENCE

A. Aims and Objectives:

- To develop an understanding of the terms, concepts and principles used in the study of the discipline of Home Science.
- To develop thought, inquiry, insight and understanding of issues involved in running a home, providing adequate nutrition, meal planning, care of textiles and clothing, budgeting and family care.
- To inculcate an appreciation of aesthetic balance, economy and efficiency with regard to home.
- To foster an understanding of the changes that takes place during growth and development of children.
- To equip adolescents with the knowledge and skills necessary for management of the self.
- To foster an understanding of children in difficult circumstances, problems of the elderly and individuals with special needs.

TERM I

1. Concept and Scope of Home Science
2. Food and Nutrition
3. Storage and Preservation of food

TERM II

1. Resource Management
2. Human Development
3. Care and Maintenance of Textiles
4. Communication and Extension Education
5. Revision of 1st Term

ART

A. Aims and Objectives

- To encourage creative expression and interest in the World of Art.
- To develop the power of aesthetic appreciation and artistic values through the study of Art.

B. Topics

Term I

1. Drawing with basic geometric shapes
2. Understanding of light and shade
3. Objects with values
4. Different techniques of rendering with pencil
5. Different techniques of rendering with pen and ink
6. Different techniques of rendering with colour
7. Phad Painting / Cartoon Drawing / Poster Making
8. Tie and Dye / Block Printing / Paper Collage
9. Drawing and/or Painting from Objects
10. Drawing and/or Painting from Nature

Term II

*Continue with the syllabus of **Term I** (Revision)*

1. Final Portfolio for **Art Paper 1** (Submission of 15 Drawing and/or Painting)
2. Final Portfolio for **Art Paper 2** (Submission of 15 Drawing and/or Painting)
3. Final Portfolio for **Art Paper 6 (Craft B)** (Submission with Project Documents)

C. Activities (Continuous Evaluation)

Candidates will be required to submit assignments containing the practical works related to syllabus throughout the year.

***Syllabus is planned according to the number of working days in the Academic Calendar 2021 -22.
Syllabus is subject to change due to unforeseen circumstances.***
