

ST. XAVIER'S SCHOOL, DORANDA
Syllabus for the Academic Year(2023-24)
CLASS XII

ENGLISH SYLLABUS 2024-25

CLASS 12 A,B,C,D,E

MARCH	POEM : TELEPHONE CONVERSATION LANGUAGE: ARTICLE, STATEMENT OF PURPOSE DRAMA: ACT3 SCENE 1 (35)
APRIL	PROSE: ATITHI/ THE GUEST DRAMA: ACT3 SCENE 1,2,3
MAY	DRAMA: ACT3 SCENE 4 LANGUAGE: SPEECH, PROPOSAL REVISION
JUNE	POEM: TITHONUS DRAMA: ACT 3 SCENE 5,6 PROSE: THE COOKIE LADY
JULY	POEM: BEETHOVEN
AUGUST	PROSE: THERE WILL COME SOFT RAINS INDIGO DRAMA: ACT 4 SCENE 1,2
SEPTEMBER	DRAMA: ACT 4 SCENE 3 PROSE: MEDICINE BAG
OCTOBER	PROSE: SMALL TOWN AND THE RIVER DRAMA: ACT 5 SCENE 1
NOVEMBER	POEM: DEATH BE NOT PROUD DRAMA: ACT 5 SCENE 2,3,4,5,6,7

FIRST SELECTION TEST: PRESENTATION

PRACTICE SHEETS ON: TRANSFORMATION OF SENTENCES, COMPOSITIONS

Subject - ACCOUNTS (858)

S. No.	Chapter	Estimated Month/s Required
1	Partnership Accounts	
	A. Fundamentals of Partnership	March-April
	B. Goodwill	April
	C. Reconstitution of Partnership	
	I. Admission	May-June
	II. Retirement and Death of a Partner	July-August
	III. Dissolution of a Partnership Firm	August-September
2	Joint Stock Company Accounts	
	A. Issue of Shares	September
	B. Issue of Debentures	September
	C. Redemption of Debentures	October
	D. Financial Statement of Companies	March
3	Financial Statement Analysis	April
4	Cash Flow Statement	July-August
5	Ratio Analysis	May-June
6	Accounting Application of Electronic Spread Sheet	October
7	Database Management System (DBMS)	November
	FIRST SELECTION TEST SYLLABUS-	

1	Partnership Accounts	
	A. Fundamentals of Partnership	
	B. Goodwill	
	C. Reconstitution of Partnership	
	I. Admission	
2	D. Financial Statement of Companies	
	Financial Statement Analysis	
	Ratio Analysis	
	Second Selection Test Syllabus-	
	Full Syllabus	

Subject - ECONOMICS (856)

S. No.	Chapter	Estimated Month/s Required
1	MICROECONOMIC THEORY (40 Marks)	
	(i) Demand	April
	(ii) Elasticity of Demand	May
	(iii) Supply	June
	(iv) Market Mechanism	July
	(v) Concepts of Production	August
	(vi) Cost and Revenue	September
	(vii) Main Market Forms and Equilibrium of a Firm	November
	MACROECONOMICS (40 Marks)	
2	Theory of Income and Employment	April-May-June-July
3	Money and Banking	October-November
4	Balance of Payments and Exchange Rate	March-April
5	Public Finance	August- September
6	National Income	March-April
	FIRST SELECTION TEST SYLLABUS-	
	(i) Demand	
	(ii) Elasticity of Demand	
	(iii) Supply	
	(iv) National Income	
	(v) Balance of Payments and Exchange Rate	
	(vi) Theory of Income and Employment	
	Second Selection Test Syllabus-	
	Full Syllabus	

Class- XII (Commerce) Subject - COMMERCE (857)

S. No.	Chapter	Estimated Month/s Required
1	Business Environment	March-April
2	Financing	
	i) Capital	April-May
	ii) Sources of Finance for a joint stock company	June-July
	iii) Banking	July-August

3	Management	
	i) Management- Meaning, Nature and importance	March-April
	ii) Principles of Management	April
	iii) Functions of Management and Coordination	May
	iv) Planning	May
	v) Organising	June
	vi) Staffing	August
	vii) Directing	August
	viii) Controlling	September
4	Marketing	
	i) Marketing- Concept and Function	October
	ii) Marketing Mix	November
	iii) Consumer Protection	September-October
	FIRST SELECTION TEST SYLLABUS-	
	Business Environment	
	Capital	
	ii) Sources of Finance for a joint stock company	
	i) Management- Meaning, Nature and importance	
	ii) Principles of Management	
	iii) Functions of Management and Coordination	
	iv) Planning	
	v) Organising	
	Second Selection Test Syllabus-	
	Full Syllabus	

Syllabus for History

1	Towards Independence and Partition: The Last Phase(1935-1947)	March-April
2	World War II	April
3	Establishment and Development of Indian Democracy(1947-1966)	May
4	De-colonisation -in Asia(China) and Africa(Ghana and Kenya)	June
5	Challenges to Indian Democracy(1964-1977)	June-July
6	Chaning face of Indian Democracy(1977-1986)	August
7	Cold War(1945-1991)Origin,Cause,End and Impact	September
8	Protest Movements	September
9	Indian foreign policy	October
10	Movements for Womens Rights	October
11	Middle East:Israeli-Palestine conflict(1916-1993)	November

Mid Term (20 marks): Assignment- Chandra Bose and INA 2. Decolonisation in Asia led by Chiang Kai-Shek and Mao Zedong. Date of Submission:	1.Subhash
First term Selection Examination: All the Chapters taught in the First Term.	
Final Selection Examination: All the chapters taught in the First and the Second term	
PROJECT WORK:20 MARKS	
1. Naxalism Movement in Jharkhand	
2. Middle East: Israeli - Palastine conflict (1948 till the present times)	

Syllabus for Political Science

MONTH	CHAPTER
March- April	- Forms of government
April- May	- Indian Constitution -The Preamble and Salient Features of The Indian Constitution
June- July	- Constitution: meaning and kinds of the constitution, amending procedure and conventions of the constitution of U.K, U.S.A and India
July- August	- Fundamental Rights -Directive Principles of the State Policy
September	- Franchise and Representation - Local Self Government (panchayati raj/ rural local government and urban local government)
October	- Legislature - Executive
November	- Judiciary -Democracy in India: Perspective of challenges faced: caste, communalism, regionalism, and political violence and strengthening Indian Democracy

SYLLABUS GEOGRAPHY (2024 -25)

MARCH	Population of India
APRIL	Locational setting - India Structure of India Migration
MAY/JUNE	The five-fold physiographic divisions Drainage Rural settlements Urban settlements
JULY	Climate
AUGUST	Sources of Energy Natural vegetation Land resources Industries
SEPTEMBER	Water resources and types of irrigation Infrastructural Resources (Development of Transport and Communication)
OCTOBER	Agriculture Fishing in India

PAPER II: PRACTICAL WORK AND PROJECT WORK (30 Marks)

1. Practical Work:

(i) Drawing of scales: linear, graphic scales showing primary and secondary divisions; representative fractions and statement of scale methods.

(ii) Drawing of cross-section or profiles of important contours, viz. ridge, plateau, escarpment, valley, conical hill, types of slope, sea cliffs, waterfalls, spurs, by using vertical exaggeration and horizontal equivalent.

(iii) Understanding and illustrating location references of SOI maps.

(iv) Map reading and interpretation of survey of India maps: Study will be based on representative portions of any two topographical sheets. It will include the description of location, extent, relief features, drainage, land use, settlement patterns, communications and inferences about human occupations and stage of economic development of the area.

2. Project Work (Assignment):

Field work

Physics syllabus for Class xii (2024-25)**1st unit test**

* Reflection of light by spherical mirrors

* Refraction of light at a plane interface

* Coulomb's law,

* Concept of electric field and its intensity;

1st Selection test**March**

* Reflection of light by spherical mirrors.

* Refraction of light at a plane interface, Snell's law

* Coulomb's law, S.I. unit of charge;

April

* Refraction of light at a plane interface:-

* Concept of electric field and its intensity;

* Electric lines of force

* Electric dipole and dipole moment; \vec{p}

* Gauss' theorem

May+ june

* Refraction through lenses

* Concept of potential, potential difference and potential energy.

* Capacitance of a conductor C

* Dielectric constant K

July

* Wave optics

* Current Electricity

* Magnetic effects of current and Magnetism

* Free electron theory of conduction;

* Electrical energy consumed in time t is $E=Pt= VIt$;

* The source of energy of a seat of emf (such as a cell) may be electrical,

* Statement and explanation of Kirchhoff's laws with simple examples.

Second unit test

* Wave optics

* Moving charges and magnetism

Second selection**August**

* Wave optics

* Moving charges and magnetism

September

Dual Nature of Radiation and matter

Atoms and Nuclei

October

- *Electromagnetic induction,
- * Self-Induction, coefficient of self-inductance
- * Sinusoidal variation of V and I with time,
- *Variation of voltage and current in a.c

November

- *Electronics devices
- *Electromagnetic Waves
- * The LCR series circuit
- * Simple a.c. generators

Syllabus for Chemistry

First Selection Examination

- 1.Solutions
- 2.Chemical Kinetics
- 3.d,f block elements
- 4.Alkyl halides and Aryl halides
5. Alcohols,phenols and ether

Second Selection Examination

- 1.Electrochemistry
- 2.Co-ordination compounds
- 3.Aldehydes,Ketones and Carboxylic Acid
- 4.Nitrogen base compounds
- 5.Biomolecules

All the topics of 1st selection will also be included

Syllabus for Biology

1 ST SELECTION PORTION	2 ND SELECTION PORTION
<ol style="list-style-type: none">1. Reproduction In Organisms2. Sexual Reproduction In Flowering Plants3. Human Reproduction4. Reproductive Health5. Principles Of Inheritance And Variation6. Evolution - Origin Of Life7.Organisms And Populations8.Ecosystem	<ol style="list-style-type: none">1.Evolution -Evidences Of Evolution2.Theories Of Evolution & Human Evolution3. Molecular Basis Of Inheritance4. Human Health And Disease5. Strategies For Enhancement Of Food Production6. Microbes In Human Welfare7. Biotechnology – Principles And Process8. Biotechnology And Its Applications9.Ecosystem9. Biodiversity And Conservation10. Environmental Issue

PROJECT:

"SELECT ANY ONE TOPIC FROM THE LIST MENTIONED IN THE SYLLABUS OR CHOOSE ON YOUR OWN ANY RELEVANT/ CURRENT TOPIC. "

Syllabus of Mathematics

Distribution of chapters for the theory paper.

The Syllabus is divided into three sections.

Section A compulsory and Either Section B or Section C.

March	Inverse Trigonometric Functions Continuity and Differentiability	
April	Continuity and Differentiability Differentiation Applications of Derivatives	C.A. Test I (20 marks) Inverse Trigonometric Functions Continuity and Differentiability
May	Indefinite Integrals	C.A. Test II (20 marks) Differentiation Applications of Derivatives
June	*Application of Calculus Definite Integrals #Application of Integrals	
July	Differential Equations Determinants	C.A. Test III (20 marks) [Open Book] *Application of Calculus Definite Integrals #Application of Integrals
August	Matrices Probability	C.A. Test IV (20 marks) Differential Equations Determinants
September	#Vector #Three Dimensional Geometry	C.A. Test V (20 marks) Probability
October	*Linear Regression *Linear Programming Relation	C.A. Unit Test VI (20 marks) [Open Book] #Vector #Three Dimensional Geometry or *Linear Regression *Linear Programming
November	Relation and Function Revision	

Syllabus of Computer Science

MONTH	TOPICS <i>FIRST SELECTION</i>
March-June	<p style="text-align: center;">(Review of Class XI Topics 1-8)</p> <ol style="list-style-type: none"> 1. Boolean Algebra Propositional logic, well formed formulae, truth values and interpretation of well formed formulae (wff), truth tables, satisfiable, unsatisfiable and valid formulae. Equivalence laws and their use in simplifying wffs. 2. Computer Hardware <ol style="list-style-type: none"> (a) Elementary logic gates (NOT, AND, OR, NAND, NOR, XOR, XNOR) and their use in circuits. (b) Applications of Boolean algebra and logic gates to half adders, full adders, encoders, decoders, multiplexers, NAND, NOR as universal gates. 3. Programming in Java 4. Objects <ol style="list-style-type: none"> (a) Objects as data (attributes) + behaviour (methods); object as an instance of a class. Constructors. 5. Primitive values, Wrapper classes, Types and casting 6. Variables, Expressions 7. Statements, Scope Statements; conditional (if, if else, if else if, switch case, ternary operator), looping (for, while, do while, continue, break); grouping statements in blocks, scope and visibility of variables. 8. Methods Methods (as abstractions for complex user defined operations on objects), formal arguments and actual arguments in methods; different behaviour of primitive and object arguments. Static method and variables. The this Operator. Examples of algorithmic problem solving using methods (number problems, finding roots of algebraic equations etc.). 9. Arrays, Strings Structured data types – arrays (single and multi- dimensional), address calculations, strings. Example algorithms that use structured data types (e.g. searching, finding maximum/minimum, sorting techniques, solving systems of linear equations, substring, concatenation, length, access to char in string, etc.). <i>Storing many data elements of the same type requires structured data types – like arrays. Access in arrays is constant time and does not depend on the number of elements</i>
July	<p><i>Address calculation (row major and column major), Sorting techniques (bubble, selection, insertion). Structured data types can be defined by classes – String. Introduce the Java library String class and the basic operations on strings (accessing individual characters, various substring operations, concatenation, replacement, index of operations).</i></p>
August	<p style="text-align: center;"><i>SECOND SELECTION</i></p> <ol style="list-style-type: none"> 10. Data structures <ol style="list-style-type: none"> (a) Basic data structures (stack, queue, circular queue, dequeue); implementation directly through classes; definition through an interface and multiple implementations by implementing the interface. Conversion of Infix to Prefix and Postfix notations. <i>Basic algorithms and programs using the above data structures.</i> (b) Single linked list (Algorithm and programming), binary trees, tree traversals (Conceptual). <i>The following should be covered for each data structure:</i> <i>Linked List (single): insertion, deletion, reversal, extracting an element or a sublist, checking emptiness.</i> <i>Binary trees: apart from the definition the following concepts should be covered:</i>

	<p><i>root, internal nodes, external nodes (leaves), height (tree, node), depth (tree, node), level, size, degree, siblings, sub tree, completeness, balancing, traversals (pre, post and in-order).</i></p>
September	<p>11. Inheritance, Interfaces and Polymorphism</p> <p>(a) Inheritance; super and derived classes; member access in derived classes; redefinition of variables and methods in subclasses; abstract classes; class Object; protected visibility. Subclass polymorphism and dynamic binding. <i>Emphasize inheritance as a mechanism to reuse a class by extending it. Inheritance should not normally be used just to reuse some methods defined in a class but only when there is a genuine specialization (or subclass) relationship between objects of the super class and that of the derived class.</i></p>
October	<p>(b) Interfaces in Java; implementing interfaces through a class; interfaces for user defined implementation of behaviour. <i>Motivation for interface: often when creating reusable classes some parts of the exact implementation can only be provided by the final end user. For example, in a class that sorts records of different types the exact comparison operation can only be provided by the end user.</i></p>
November	<p>12. Complexity and Big O notation</p> <p>Concrete computational complexity; concept of input size; estimating complexity in terms of methods; importance of dominant term; constants, best, average and worst case. <i>Big O notation for computational complexity; analysis of complexity of example algorithms using the big O notation (e.g. Various searching and sorting algorithms, algorithm for solution of linear equations etc.).</i></p>
December	Revision