



**ACADEMIC SESSION (2024-25)**

**TERMWISE SYLLABUS**

**CLASS XII**

<b>S.No</b>	<b>SUBJECT NAME</b>	<b>PAGE NO.</b>
<b>1.</b>	<b>ENGLISH</b>	<b>2</b>
<b>2.</b>	<b>MATHEMATICS</b>	<b>3</b>
<b>3.</b>	<b>PSYCHOLOGY</b>	<b>4</b>
<b>4.</b>	<b>INFORMATICS PRACTICES</b>	<b>4</b>
<b>5.</b>	<b>PHYSICAL EDUCATION</b>	<b>5</b>
<b>6.</b>	<b>BIOLOGY</b>	<b>5</b>
<b>7.</b>	<b>ACCOUNTANCY</b>	<b>6</b>
<b>8.</b>	<b>BUSINESS STUDIES</b>	<b>6</b>
<b>9.</b>	<b>PHYSICS</b>	<b>7</b>
<b>10.</b>	<b>HISTORY</b>	<b>8</b>
<b>11.</b>	<b>ECONOMICS</b>	<b>9</b>
<b>12.</b>	<b>CHEMISTRY</b>	<b>11</b>
<b>13.</b>	<b>PAINTING</b>	<b>11</b>
<b>14.</b>	<b>COMPUTER SCIENCE</b>	<b>11</b>
<b>15.</b>	<b>POLITICAL SCIENCE</b>	<b>13</b>
<b>16.</b>	<b>ENTREPRENUERSHIP</b>	<b>14</b>

**SUBJECT – ENGLISH CORE**

**SUBJECT CODE: 301**

**Syllabus to be covered in Term-1 (March - August 2024)**

FLAMINGO

The Last lesson

Lost Spring – stories of stolen Childhood

Deep Water

The Rattrap

Indigo

Going Places

Poetry :

My mother at sixty six

Keeping quiet

A thing of beauty

Aunt Jennifer' s Tigers

VISTAS

The third level

The tiger king

The Enemy

Journey to the end of the earth

WRITING SKILLS

Notice

Invitation & Replies

Letter to editor

Job Application

Article Writing

**Syllabus to be covered in Term-2 (September - October 2024)**

FLAMINGO

The Interview

Poets and Pancakes

POETRY

A roadside stand

VISTAS

On the face of it

Memories of Childhood

WRITING SKILLS

Report writing

**SUBJECT: MATHEMATICS**

**SUBJECT CODE: 041**

**Syllabus to be covered in Term I(March-August 2024)**

Chapter-1 Relations and Functions

Chapter-2 Inverse Trigonometric functions

Chapter-3 Matrices

Chapter-4 Determinants

Chapter-5 Continuity and Differentiability

Chapter-6 Application of Derivatives

Chapter-7 Integrals

Chapter-8 Application of Integrals

**Syllabus to be covered in Term II (September-October 2024)**

Chapter-9 Differential Equations

Chapter-10 Vector Algebra

Chapter-11 Three Dimensional Geometry

Chapter-12 Linear Programming

Chapter-13 Probability

**SUBJECT: PSYCHOLOGY**

**SUBJECT CODE: 037**

**Syllabus to be covered in Term I (March-August 2024)**

Chapter-1 Variations in Psychological Attributes

Chapter-2 Self and Personality

Chapter-3 Meeting Life Challenges

Chapter-4 Psychological Disorders

**Syllabus to be covered in Term II (September-October 2024)**

Chapter-5 Therapeutic Approaches

Chapter-6 Attitude and Social Cognition

Chapter-7 Social Influence and Group Processes

**SUBJECT: INFORMATICS PRACTICES**

**SUBJECT CODE: 065**

**Syllabus to be covered in Term I (March-August 2024)**

1. Review of Database Concepts & SQL
2. Database Query Using SQL Functions (All Types)

3. Data Handling Using Pandas : Series, DataFrames & associated operations
4. Combining DataFrames, CSV Files & its manipulations

**Syllabus to be covered in Term II (September-October 2024)**

5. Data Visualization Using Matplotlib
6. Computer Networks
7. Societal Impacts

**SUBJECT: PHYSICAL EDUCATION**

**SUBJECT CODE- 048**

**Syllabus to be covered in Term I (March to August- 2024)**

- Unit 1. Management of Sporting Events
- Unit 2. Children & Women in Sports
- Unit 3. Yoga as Preventive measure for Lifestyle Disease
- Unit 4. Physical Education & Sports for CWSN (Children with Special Needs - Divyang)
- Unit 5. Sports & Nutrition

**Term II (September to October -2024)**

- Unit 6. Test & Measurement in Sports
- Unit 7. Physiology & Injuries in Sports
- Unit 8. Biomechanics & Sports
- Unit 9. Psychology & Sports
- Unit 10. Training in Sports

**SUBJECT- BIOLOGY**

**SUBJECT CODE- 044**

**Syllabus to be covered in Term I (March-August 2024)**

- Unit-VI Reproduction
- Chapter-: Sexual Reproduction in Flowering Plants

Chapter-: Human Reproduction

Chapter-: Reproductive Health

Unit-VII Genetics and Evolution

Chapter-: Principles of Inheritance and Variation

Chapter-: Molecular Basis of Inheritance

Chapter-: Evolution

Unit-IX Biotechnology and its Applications

Chapter-: Biotechnology - Principles and Processes

Chapter-: Biotechnology and its Applications

**Syllabus to be covered in Term II (September- October 2024)**

Unit-VIII Biology and Human Welfare

Chapter-: Human Health and Diseases

Chapter-: Microbes in Human Welfare

Unit-X Ecology and Environment

Chapter- Organisms and Populations

Chapter-: Ecosystem

Chapter-: Biodiversity and its Conservation

## **SUBJECT- ACCOUNTANCY**

### **SUBJECT CODE- 055**

**Syllabus to be covered in Term I (March 2024- August 2024)**

Unit 1: Accounting for Partnership Firms

Ch1- Accounting for Partnership Firms- Fundamental

Ch2- Goodwill: Nature and Valuation

Ch3- Change in Profit Sharing Ratio among the Existing Partners

Ch4- Admission of a Partner

Ch5- Retirement of a Partner

Ch6- Death of a Partner

Ch7- Dissolution of a Partnership Firm

Unit 3: Analysis of Financial Statements

Ch1- Financial Statements of a company

Ch2- Financial Statement Analysis

**Syllabus to be covered in Term II (September 2024 - October 2024)**

Unit 2: Accounting for Companies

Ch1- Accounting for Share Capital

Ch2- Issue of Debentures

Unit 3: Analysis of Financial Statements

Ch3- Accounting Ratios

Unit 4: Cash Flow Statement

**SUBJECT- BUSINESS STUDIES**

**SUBJECT CODE- 054**

**Syllabus to be covered in Term 1 (March to August 2024)**

Chapter 1 Nature and Significance of Management

Chapter 2 Principles of Management

Chapter 3 Business Environment

Chapter 4 Planning

Chapter 5 Organising

Chapter 6 Staffing

Chapter 7 Directing

Chapter 8 Controlling

**Syllabus to be covered in Term 2 (September-October2024)**

Chapter 9 Financial Management

Chapter10 Financial Markets

Chapter11 Marketing Management

Chapter12 Consumer Protection

**SUBJECT: PHYSICS**

**SUBJECT CODE- 042**

**Syllabus to be covered in Term I (March 2024 to August 2024)**

Unit 1. Electrostatics

Unit 2. Current Electricity

Unit 3. Magnetic Effects of current & magnetism

Unit 4. Electromagnetic induction & AC

Unit 5. Electromagnetic waves

**Syllabus to be covered in Term II (September 2024 to October 2024)**

Unit 6. Optics

Unit 7. Dual nature of matter & radiation

Unit 8. Atomic Nucleus

Unit 9. Electronic Devices

**SUBJECT: HISTORY**

**SUBJECT CODE: 027**

**Term I (March 2024 to August 2024)**

Theme 1 Bricks, Beads and Bones

Theme 2 Kings, Farmers and Towns



Theme 3 Kinship, Caste and Class

Theme 4 Thinkers, Beliefs and Buildings

Theme 5 Through the Eyes of Travellers

Theme 6 Bhakti –Sufi Traditions

Theme 7 An Imperial Capital: Vijayanagar

**Term II (September 2024 to October 2024)**

Theme 8 – Peasants, Zamindars and the State

Theme 10 Colonialism and The Countryside

Theme 11 Rebels and the Raj

Theme 13 Mahatma Gandhi and the Nationalist Movement

Theme 15 Framing the Constitution

**SUBJECT: ECONOMICS**

**SUBJECT CODE: 030**

**TERM I (March to August 2024)**

**Macro Economics:**

**Unit 1: National Income and Related aggregates**

- What is Macroeconomics?
- Basic concepts in Macro Eco.
- Circular flow of income (2 sector model)
- Aggregates related to NY (National Income)
- 3 Methods of measuring NY
- GDP Deflator, GDP & welfare

**Unit 2: Money & Banking**

- Money – Definition, functions & Money supply
- Money creation by commercial banks
- Central Bank & its functions.

**Unit 4: Government Budget**

- Government Budget – Meaning, objectives & components

- Balanced, surplus & deficit Budget
- Measures of budget deficit

**Indian Economic Development:**

**Unit 6: Development Experience (1947-90) & Economic Reforms since 1991**

- Chapter 1: Indian Economy on the eve of independence
- Chapter 2: Indian Economy (1950-90)
- Chapter 3: Liberalisation, Privatisation & Globalisation: An appraisal

**Unit 7: Current Challenges Facing Indian Economy**

- Chapter 5: Human Capital Formation in India
- Chapter 6: Rural Development

**TERM II (September to October 2024)**

**Macro Economics:**

**Unit 3: Determination of Income & Employment**

- Aggregate demand & Aggregate Supply
- Propensities to consume & save (Average & Marginal)
- Equilibrium (AD-AS & S-I approach)
- Investment multiplier & its mechanism
- Excess & Deficient demand, measures to correct them

**Unit 5: Balance of Payments**

- Balance of Payments – Meaning & components
- Balance of Payments – Surplus & Deficit
- Foreign Exchange rate
- Fixed, flexible & Managed floating exchange rate systems
- Determination of exchange rate in a free market

**Indian Economic Development:**

**Unit 7: [Continued]**

- Chapter 7: Employment: Growth, informalisation & other issues
- Chapter 9: Environment & Sustainable Development

**Unit 8: Development Experience of India**

- Chapter 10: Comparative development experiences of India & its neighbours

## **SUBJECT: CHEMISTRY**

**SUBJECT CODE: 043**

### **Syllabus to be covered in Term-1 (March - August 2024)**

Chapter 10: Haloalkane and haloarenes

Chapter 2: Solutions

Chapter 3: Electrochemistry

Chapter 4: Chemical kinetics

Chapter 8: d and f block elements

Chapter 11: Alcohols, phenols and ethers

Chapter 12: Aldehydes, ketones and carboxylic acid

### **Syllabus to be covered in Term-2 (September - October 2024)**

Chapter 9: Coordination compounds

Chapter 13: Amines

Chapter 14: Biomolecules

## **SUBJECT: PAINTING**

**SUBJECT CODE -049**

### **Syllabus to be covered in Term I (March'24-August'24)**

- Unit 1- Rajasthani and Pahadi School of Painting
- Unit 2- Mughal and The Deccan school of art.

Syllabus to be covered in **Term II**

### **(September'24-October'24)**

- Unit 3- The Bengal School of Painting and The Modern trends in Indian Art.

## **SUBJECT: COMPUTER SCIENCE**

**SUBJECT CODE: - (083)**

### **Term I (March to August 2024)**

Unit III: Database Management

☐ Database concepts: introduction to database concepts and its need

☐ Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)

☐ Structured Query Language: introduction, Data Definition Language and Data

Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join

#### Unit I: Computational Thinking and Programming – 2

- Revision of Python topics covered in Class XI.
- Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.
- Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Exception Handling: Introduction, handling exceptions using try-except-finally blocks
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths
- Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
- Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- CSV file: import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader()

### **Term II ( September to October2024)**

#### Unit II: Computer Networks

- Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- Transmission media: Wired communication media (Twisted pair cable, Co-axial cable,

Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)

- Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
- Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

Unit III: Database Management

Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %S format specifier or format() to perform queries

## **SUBJECT: POLITICAL SCIENCE**

### **SUBJECT CODE: 028**

#### **Syllabus to be covered in Term I (March'24-August'24)**

##### **CONTEMPORARY WORLD POLITICS**

1. THE END OF BIPOLARITY
2. CONTEMPORARY CENTRES OF POWER
3. CONTEMPORARY SOUTH ASIA
4. INTERNATIONAL ORGANISATIONS

##### **POLITICS IN INDIA SINCE INDEPENDENCE**

1. CHALLENGES OF NATION-BUILDING
2. ERA OF 1 PARTY DOMINANCE
3. POLITICS OF PLANNED DEVELOPMENT
4. INDIAS EXTERNAL RELATIONS
5. CHALLENGES TO AND RESTORATION OF THE CONGRESS SYSTEM

#### **Syllabus to be covered in Term-2 (September'24 - October '24)**

##### **CONTEMPORARY WORLD POLITICS**

1. SECURITY IN CONTEMPORARY WORLD
2. ENVIRONMENT AND NATURAL RESOURCES
3. GLOBALISATION

**POLITICS IN INDIA SINCE INDEPENDENCE**

1. THE CRISIS OF DEMOCRATIC ORDER
2. REGIONAL ASPIRATIONS
3. RECENT DEVELOPMENTS IN INDIAN POLITICS

**SUBJECT:ENTREPRENUERSHIP**

**SUBJECT CODE: 066**

**TERM 1 (MARCH TO AUGUST 2024)**

UNIT 1 Entrepreneurial Opportunity

UNIT 2 Entrepreneurial Planning

UNIT 3 Enterprise Marketing

**TERM II (SEPTEMBER-OCTOBER 2024)**

UNIT 4 Enterprise Growth Strategies

UNIT 5 Business Arithmetic

UNIT 6 Resource Mobilization