

**SYLLABUS CLASS : 12**

**SESSION 2021 – 22**

1. ENGLISH
2. MATHEMATICS
3. PHYSICS
4. CHEMISTRY
5. BIOLOGY
6. ENGG. GRAPHICS
7. COMPUTER SCIENCE
8. ECONOMICS
9. BUSINESS STUDIES
10. ACCOUNTANCY
11. INFORMATICS PRACTICES
12. GEOGRAPHY
13. PSYCHOLOGY
14. PHYSICAL EDUCATION
15. PAINTING

## ENGLISH

### **Textbooks:**

- 1) Flamingo: English Reader-N.C.E.R.T
- 2) Vistas: Supplementary Reader-N.C.E.R.T

### **FIRST TERM**

#### **Reader-Flamingo**

- 1) The Last Lesson
- 2) Lost Spring
- 3) Deep Water
- 4) The Rattrap
- 5) Indigo
- 6) My Mother at Sixty-Six
- 7) An Elementary School Classroom in a Slum
- 8) Keeping Quiet

#### **Supplementary Reader-Vistas**

- 1) The Third Level
- 2) The Tiger King
- 3) Journey to the end of the Earth
- 4) The Enemy
- 5) Should Wizard hit Mommy?

#### **General English-Writing Skills**

- 1) Comprehension; note-making.
- 2) Designing posters; notices; writing formal and informal invitations and replies.
- 3) Letters to the editor(giving suggestions or opinion on issues of public interest)
- 4) Application for a job
- 5) Composition based on visual and/or verbal input. Output may be descriptive or argumentative in nature such as an article, a speech or a debate.

### **SECOND TERM**

#### **Reader-Flamingo**

- 1) Poets and Pancakes
- 2) Going Places
- 3) A Thing of Beauty
- 4) Aunt Jennifer's Tigers

#### **Supplementary Reader-Vistas**

- 1) On the Face of It
- 2) Evans Tries An O-Level

#### **General English-Writing Skills**

- 1) Comprehension; note- making
- 2) Advertisements; designing posters; notices; writing formal and informal invitations and replies.
- 3) Writing letters-making enquiries, registering complaints, asking for and giving information, placing orders and sending replies; letters to editor; application for a job
- 4) Composition based on visual and/or verbal input. Output may be descriptive or argumentative in nature such as an article, debate, a speech or a report.

### **THIRD TERM**

#### **Reader-Flamingo**

- 1) A Roadside Stand
- 2) The Interview

#### **Supplementary Reader-Vistas**

- 1) Memories of Childhood
  - The Cutting of My Long Hair
  - We Too are Human Beings

## MATHEMATICS

### **Text Books:**

1. Mathematics-A text book for Class XII , Part I , NCERT
2. Mathematics-A text book for Class XII , Part II , NCERT

### **Reference Books:**

1. Mathematics for Class XII, Part I and II by R.D. Sharma
2. Mathematics for Class XII, Part I and II by M.L Aggarwal

### **FIRST TERM**

Chapter 1: Relations and Functions

Chapter 2: Inverse Trigonometric Functions

Chapter 3: Matrices

Chapter 4: Determinants

Chapter 5: Continuity and Differentiability

Chapter 6: Applications of Derivatives (Ex 6.1 to Ex 6.4)

### **SECOND TERM**

Chapter 6: Application of Derivatives (Ex 6.5 & Miscellaneous Ex)

Chapter 7: Integrals

Chapter 8: Application of Integration

Chapter 9: Differential Equations

Chapter 12: Linear Programming Problems

### **THIRD TERM**

Chapter 10: Vectors

Chapter 11: Three-Dimensional Geometry

Chapter 13: Probability

## PHYSICS

### **Text book:**

Physics : Text book for class XII Part I & Part II (NCERT)

### **Reference Book:**

New Simplified Physics for Class XII Vol. 1 & II by S. L Arora

### **FIRST TERM**

Chapter 1 : Electrostatic Charges and Fields

Chapter 2 : Electrostatic Potential and Capacitance

Chapter 3 : Current Electricity

Chapter 9 : Ray Optics

## **SECOND TERM**

Chapter 4 : Moving Charges and Magnetism

Chapter 5 : Magnetism and Matter

Chapter 6 : Electromagnetic Induction

Chapter 7 : Alternating Current

Chapter 8 : Electromagnetic Waves

## **THIRD TERM**

Chapter 10 : Wave Optics

Chapter 11 : Dual Nature of Matter and Radiation

Chapter 12 : Atoms

Chapter 13 : Nuclei

Chapter 14 : Semiconductor Electronics: Materials, Devices and Circuits

## **CHEMISTRY**

### **Text book:**

Chemistry : Text book for class XII Part I & Part II (NCERT)

## **FIRST TERM**

Unit 2 : Solutions

Unit 10 : Haloalkanes and Haloarenes

Unit 11 : Alcohols , Phenols and Ethers

Unit 12 : Aldehydes , Ketones and Carboxylic Acids

Unit 13 : Amines

## **SECOND TERM**

Unit 1 : The Solid State

Unit 3 : Electrochemistry

Unit 4 : Chemical Kinetics

Unit 7 : The p- Block Elements

Unit 8 : The d- and f- Block Elements

Unit 9 : Coordination Compounds

## **THIRD TERM**

Unit 5 : Surface Chemistry

Unit 14 : Biomolecules

Unit 6 : General Principles and Processes of isolation of Elements

Unit 15 : Polymers

Unit 16 : Chemistry in Everyday Life

# **BIOLOGY**

## **Text book:**

Biology: Text book for class XII (NCERT)

## **FIRST TERM**

### **Unit VI: Reproduction**

Chapter 1: Reproduction in Organisms

Chapter 2: Sexual Reproduction in Flowering Plants

Chapter 3: Human Reproduction

Chapter 4: Reproductive Health

### **Unit VII: Genetics and Evolution**

Chapter 5: Principles of Inheritance and Variation

Chapter 7: Evolution

## **SECOND TERM**

### **Unit VII: Genetics and Evolution**

Chapter 6: Molecular Basis of Inheritance

### **Unit VIII: Biology in Human Welfare**

Chapter 8: Human Health and Disease

Chapter 9: Strategies for Enhancement in Food Production

Chapter 10: Microbes in Human Welfare

### **Unit IX: Biotechnology**

Chapter 11: Biotechnology: Principles and Processes

Chapter 12: Biotechnology and its Applications

## **THIRD TERM**

### **Unit X: Ecology**

Chapter 13: Organisms and Populations

Chapter 14: Ecosystem

Chapter 15: Biodiversity and Conservation

Chapter 16: Environmental Issues

## **ENGINEERING GRAPHICS**

### **Text book:**

Engineering Graphics: Text book for class XII (CBSE)

### **FIRST TERM**

**Unit 1 :** Isometric Projection of Solids

**Unit 2 :** Machine Drawing

A. Drawing of Machine Parts

### **SECOND TERM**

B. Assembly Drawings and Disassembly Drawings

1. Bearings
2. Rod – Joints
3. Tie – rod and Pipe joints
4. Couplings

### **THIRD TERM**

5. Pulleys

## **COMPUTER SCIENCE**

### **Text book:**

Computer Science with Python- Text book for class XII (Sumita Arora)

### **FIRST TERM**

Chapter 1: Python Revision Tour

Chapter 2: Python Revision Tour –II

Chapter 3: Working with Functions

Chapter 4: Using Python Libraries

Chapter 5: File Handling

### **SECOND TERM**

Chapter 6: Recursion

Chapter 7: Idea of Algorithmic Efficiency

Chapter 8: Data Structure –I : Linear Lists

Chapter 9: Data Structure –II : Stack and Queue Using Lists

Chapter 10: Communication and Network Concepts

Chapter 11: Relational Databases

Chapter 12: Simple Queries in SQL

Chapter 13: Table Creation and Data Manipulation Commands

### **THIRD TERM**

Chapter 14: Grouping Records, Join in SQL

Chapter 15: Interface Python with Mysql

### **ECONOMICS**

#### **Text books:**

- 1) Introductory Macroeconomics- Sandeep Garg
- 2) Indian Economic Development- NCERT

### **FIRST TERM**

#### **Part-A: Introductory Macroeconomics**

Unit 1: National Income and Related Aggregates

Unit 2: Money and Banking

#### **Part-B: Indian Economic Development**

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

### **SECOND TERM**

#### **Part-A: Introductory Macroeconomics**

Unit 3: Determination of Income and Employment

Unit 4: Government Budget and the Economy

#### **Part-B: Indian Economic Development**

Unit 7: Current challenges facing Indian Economy

- Poverty
- Human Capital Formation
- Rural Development

### **THIRD TERM**

#### **Part-A: Introductory Macroeconomics**

Unit 5: Balance of Payments

#### **Part-B: Indian Economic Development**

Unit 7: Current challenges facing Indian Economy

- Employment
- Infrastructure

Sustainable Economic Development

Unit 8: Development Experience of India - A Comparison with Neighbours

## **BUSINESS STUDIES**

### **Textbook :**

Business Studies for Class XII (NCERT)

Part I: Principles and Functions of Management

Part II: Business Finance and Marketing

### **FIRST TERM**

Chapter 1 : Nature and Significance of Management

Chapter 2 : Principles of Management

Chapter 3 : Business Environment

Chapter 4 : Planning

### **SECOND TERM**

Chapter 5 : Organising

Chapter 6 : Staffing

Chapter 7 : Directing

Chapter 8 : Controlling

Chapter 9 : Financial Management

Chapter 10 : Financial Markets

### **THIRD TERM**

Chapter 11 : Marketing

Chapter 12 : Consumer Protection

## **ACCOUNTANCY**

Text Books : For class XII

1) Double Entry Book-keeping (Volume I and II)

2) Analysis of Financial Statements (T.S.Grewal)

### **FIRST TERM**

Part A: Accounting for Not-For-Profit Organisations, Partnership Firms and Companies

Unit 2: Accounting for Partnership Firms:

Ch2-Fundamentals

Ch3-Goodwill

Ch4-Change in Profit Sharing Ratio

Ch5- Admission of a partner

### **SECOND TERM**

Unit 2: Accounting for Partnership Firms:

Ch6-Retirement of a Partner

Ch7-Death of a Partner

Ch8-Dissolution of a Partnership Firm



Part B: Financial Statement Analysis  
Unit 4: Analysis of Financial Statement  
Unit 5: Cash Flow Statement

### **THIRD TERM**

Part A: Accounting for Not-for-Profit Organisations, Partnership Firms and Companies  
Unit 3: Accounting for Companies  
Unit 1: Ch1- Accounting for Not-for-Profit Organisations

## **INFORMATICS PRACTICES**

### **Text book:**

Informatics Practices Textbook for Class XII (NCERT)

### **FIRST TERM**

Chapter 1 Querying and SQL Functions  
Chapter 2 Data Handling using Pandas – I

### **SECOND TERM**

Chapter 3 Data Handling using Pandas - II  
Chapter 4 Plotting Data using Matplotlib  
Chapter 5 Internet and Web

### **THIRD TERM**

Chapter 6 Societal Impacts  
Chapter 7 Project Based Learning

## **GEOGRAPHY**

### **Textbooks:**

1. Book -1: Fundamentals of Human Geography ( Textbook for Class XII, NCERT)
2. Book-2: India, People and Economy (Textbook in Geography for Class XII, NCERT)
3. Book-3: Practical Work in Geography (Textbook for Class-XII, Part-II, NCERT)

### **FIRST TERM**

Book-1: Fundamentals of Human Geography

Unit-I

Chapter 1: Human Geography : Nature and Scope

Unit-II

Chapter 2: The World Population: Distribution, Density and Growth

Chapter 3: Population Composition

Chapter 4: Human Development.

Unit-III

Chapter 5: Primary Activities

Book-2: India, People and Economy

Unit- I

Chapter 1: Population, Distribution, Density, Growth and Composition

Chapter 2: Migration: Types, Causes and Consequences

Chapter 3: Human Development

Unit-II

Chapter 4: Human Settlements

### **SECOND TERM**

Book-1: Fundamentals of Human Geography

Unit-III

Chapter 6: Secondary Activities

Chapter 7: Tertiary and Quaternary Activities

Chapter 8: Transport and Communication

Chapter 9: International Trade

Unit IV

Chapter 10: Human Settlements

Book 2: India, People and Economy

Unit III:

Chapter 5: Land Resources And Agriculture

Chapter 6: Water Resources

Chapter 7: Mineral and Energy Resources

Chapter 8: Manufacturing Industries

Chapter 9: Planning and Sustainable Development in India Context.

### **THIRD TERM**

Book 2: India, People and Economy

Unit IV:

Chapter 10: Transport and Communication

Chapter 11: International Trade

Chapter 12: Geographical Perspective on Selected Issues and Problems

### **PSYCHOLOGY**

**Textbook: Psychology: NCERT CLASS XII**

#### **FIRST TERM**

Unit 1: Variations in Psychological Attributes

Unit 2: Self and Personality

Unit 4: Psychological Disorder

#### **SECOND TERM**

Unit 3: Meeting Life Challenges

Unit 5: Therapeutic Approaches

Unit 6: Attitude and Social Cognition

Unit 7: Social Influence and Group Processes

#### **THIRD TERM**

Unit 8: Psychology and Life

Unit 9: Developing Psychological Skills

### **PHYSICAL EDUCATION**

## **FIRST TERM**

- UNIT- 1 Planning in sports
- UNIT- 2 Sports and nutrition
- UNIT- 3 Yoga and lifestyle
- UNIT- 4 Physical education and sports for CWSN
- UNIT- 5 Children and women in sports

## **SECOND TERM**

- UNIT- 6 Test and measurement in sports
- UNIT- 7 Physiology and injuries in sports
- UNIT- 8 Biomechanics and sports
- UNIT- 9 Psychology and sports
- UNIT- 10 Training in sports

## **THIRD TERM**

- UNIT- 1 Planning in sports
- UNIT- 2 Sports and nutrition
- UNIT- 3 Yoga and lifestyle
- UNIT- 4 Physical education and sports for CWSN
- UNIT –5 Children and women in sports
- UNIT- 6 Test and measurement in sports
- UNIT- 7 Physiology and injuries in sports
- UNIT- 8 Biomechanics and sports
- UNIT- 9 Psychology and sports
- UNIT- 10 Training in sports

## **PAINTING**

**Text Book : History of Indian Art ( FULL MARKS )**

### **FIRST TERM**

#### **UNIT – 1**

1. Six Limbs of Indian painting (Sadngas) and fundamentals of Visual Arts – (Elements and Principles)
2. The Rajasthani and Pahari Schools of Miniature Painting :-
  - A. The Rajasthani School
  - B. The Pahari School

### **SECOND TERM**

#### **UNIT – 2**

The Mughal and Deccan schools of Miniature Painting

- A. The Mughal School
- B. The Deccan School

### **THIRD TERM**

#### **UNIT – 3**

The Bengal School of Painting and the Modern Trends in Indian Art.

- A. National Flag of India and the Symbolic significance of its forms and the colours.
- B. The Modern trends in Indian Art :-
  - i. Paintings
  - ii. Graphic – prints
  - iii. Sculptures