

# **Syllabus XII (2021 – 22)**

## **English core XII (20 21 -22)**

Prescribed books: 1 Flamingo    2 Vistas

### **Term 1 ( April to September)**

#### **Section A (Reading skills)**

1. Unseen comprehension passage
2. Note making

#### **Section B (Advanced writing skills)**

1. Advertisement, Notice , Poster
2. Letter writing ---Application for a job and letters to Editor
3. Article, Speech writing, Debate

#### **Section C (literature)**

##### **Flamingo**

1. The last lesson
2. Lost spring
3. Deep water
4. The Rattrap
5. Indigo

##### **Poetry section**

1. My mother at sixty six
2. An Elementary school classroom in a Slum
3. Keeping Quiet
4. A Thing of Beauty

##### **Vistas**

1. The Third level

2. The tiger king
3. Journey to the end of the Earth
4. Enemy

## **Term 2 ( October to February )**

### **Section A (Reading skills)**

Unseen comprehension passage

Note making

### **Section B (Advanced writing skills)**

1. invitation and replies
2. Business and official letters
3. Report writing /article/ speech/ debate

### **Section C (literature)**

#### **Flamingo**

1. Poets and pancakes
2. The interview
3. Going places

Poetry section

1. A Roadside Stand
2. Aunt Jennifer's tigers

#### **Vistas**

1. Should wizard hit Mommy
2. On the face of it
3. Evans tries an o level
4. Memories of childhood

## **Mathematics Core**

### **Term 1 ( April to September)**

- 1 . Matrices
- 2 . Determinants
- 3 . Inverse Trigonometric Functions
- 4 . Continuity and Differentiability
- 5 . Applications of Derivatives
- 6 . Integrals
7. Applications of Integrals
- 8 . Linear Programming Problems

### **Term 2 ( October to February )**

- 9 . Differential Equations
- 10 . Vectors
- 11 . Three Dimensional Geometry
- 12 . Probability
13. Relations and Functions

## **Applied Maths**

### **Term -I (April-September)**

- CH-1 : Numbers , Quantification and Numerical Applications
- CH-2 : Numerical Inequalities
- CH-3: Simultaneous Linear Equations
- CH-4 : Matrices
- CH-5 : Determinants

CH-6 : Applications of Derivatives

CH-7 : Integrals

CH-8 : Differential Equations

Ch-9 : Probability

CH-10 : Inferential Statistics

**Term -II ( October to February )**

CH-11 : Index Numbers and Time -based Data

CH-12 : Perpetuity, Sinking Funds, Bonds and EMI

CH-13 : Stock, Shares and Debentures

CH-14 : Returns ,Growth and Depreciation

CH-15 : Linear Programming

**Physics**

**Term -I (April-September)**

Unit 1 Electrostatic

Unit 2 Current electricity

Unit 3 Magnetic effect of current and Earth magnetism

Unit 4 Electromagnetic induction and alternating current

Unit 5 Electromagnetic wave

Unit 6 Ray optics and wave optics

**Term -II ( October to February )**

Unit 7 Dual nature

Unit 8 Atom and nuclei number

Unit 9 Semiconductor devices

### **Books Recommended**

A textbook of NCERT

### **Reference Books**

- 1) Modern ABC of Physics
- 2) Pradeep fundamental
- 3) Simplified Physics by S.L. Arora
- 4 New Millennium Physics by Dinesh Publication

### **Practical**

Every student will perform at least fifteen practical demonstrated by the teacher in the class

Eight activities for the demonstration purpose only and one investigatory project

XII (CHEMISTRY)  
SESSION (2021-2022)

Books recommended : N.C.E.R.T Chemistry

Reference books : 1. Modern abc

2.Pardeep

3.Dinesh

GENERAL INSTRUCTIONS

1. Syllabus of 1st term will be repeated in the second term
2. Unit test will be held between terms

TERM -I. APRIL TO SEPTEMBER

1. Solid state
2. Solution
3. Electrochemistry
4. Chemical kinetics
5. Surface chemistry
6. Aldehyde Ketone and carboxylic acid
7. Haloalkanes and Haloarenes
8. Alcohol phenol and Ether
9. Polymer
10. Chemistry in everyday life
11. Organic compound containing nitrogen
12. Coordination compound

TERM II. OCTOBER TO FEBRUARY

1. P block
2. d and f block
3. General principle and process of isolation
4. Biomolecules

Pattern of chemistry practical paper M.M =30

- |                              |   |
|------------------------------|---|
| 1. Volumetry.                | 8 |
| 2. Salt analysis.            | 8 |
| 3. Content based experiment. | 6 |
| 4. Viva and practical file.  | 4 |
| 5. Project.                  | 4 |

Theory( 70) practical ( 30 )Total ( 100 )

## **BIOLOGY**

Books Recommended: NCERT

Note.1 syllabus of 1st term will be repeated in the second term

2. Unit test will be held between term

### **Term -I (April-September)**

1. Reproduction in organisms.
2. Sexual reproduction in flowering plants. 3.Human reproduction
- 4 Reproductive health
5. Principles of inheritance and variation.
- 6 Molecular basis of inheritance
- 7 . Evolution
8. Human health and diseases.
9. Strategies for enhancement in food production
10. Microbes in human welfare.
- 11.biotechnology principles and processes 12.Biotechnology and its applications

### **Term -II ( October to February )**

13. Organism and population
14. Ecosystem
15. Biodiversity and conservation
16. Environmental issues.

## **Accountancy**

Books : Double Entry Bookkeeping Volume I and Volume II, Analysis of Financial Statements by T.S. Grewal, G.S. Grewal, R.K. Khosla

Instructions : Syllabus of 1 term will be repeated in II term. Unit tests will be conducted in between terms

### **Term -I (April-September)**

Unit 1 Accounting for partnership firms fundamentals

Unit 2 Accounting for partnership firms reconstitution and dissolution

Unit 3 Accounting for share capital

Unit 4 Accounting for debentures

### **Term -II ( October to February )**

Unit 5 Analysis of financial statements

Unit 6 Cash flow statements

Unit 7 Accounting for or not for profit organizations

Project Work

Project File 4 Marks

Written Test 12 Marks

Viva Voice 4 Marks



## **Business Studies**

### **Term 1 ( April to September )**

Chapter 1 Nature and significance of Management

Chapter 2 Principle of management

Chapter 3 Business environment

Chapter 4 Planning

Chapter 5 Organising

Chapter 6 Staffing

Chapter 7 Directing

Chapter 8 Controlling

Chapter 9 Financial Management

Chapter 10 Financial market

### **Term 2 ( October to February )**

Chapter 11 Marketing Management

Chapter 12 Consumer protection

## **ECONOMICS SYLLABUS (2020-21)**

### **CLASS XII**

**Books recommended: NCERT**

**Reference books : TR Jain and VK ohri**

**APRIL TO SEPTEMBER**

#### **PART \_ A**

### **I TERM INTRODUCTORY**

### **MACROECONOMICS**

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

**Unit 3: determination of income and employment**

**Unit 4: Government Budget and the Economy**

#### **PART \_ B**

### **INDIAN ECONOMIC DEVELOPMENT**

**Unit 6: Development experience (1947\_1990)and economic reforms since1991**

**Unit 7: current challenges facing Indiar economy (Till employment and unemployment)**

**II TERM OCTOBER TO FEBRUARY**

#### **PART \_ A**

**UNIT 2: Money and Banking**

**Unit. 5: Balance of Payment**

#### **PART \_ B**

**Unit 7: current challenges facing Indiar economy**

**Unit 8: Development experience of Indi Pakistan and China**

**(A comparison with Neighbours)**

## **PHYSICAL EDUCATION**

Physical Fitness Test (Compulsory)	10 Marks
Skill of any one Game	10 Marks
Viva.	05 Marks
Record File	05 Marks

Pattern of Theory and Practical  
Theory 70 Marks

Practical 30 Marks

Total 100 Marks

Unit I - Planning in Sports

Unit II - Sport & Nutrition

Unit III -Yoga & Lifestyle

Unit IV -Physical Education and Sports for CWSN (Children with Special Needs- DIVYANG)

Unit V -Children and Women Sports

Unit VI -Test and Measurement in Sports

Unit VII -Physiology & Injuries in Sports

Unit VIII -Biomechanics & Sports

Unit IX - Psychology & Sports

Unit X -Training in Sports

## **INFORMATICS PRACTICES(065)**

### **APRIL**

Unit 1: Data Handling using Pandas -I Introduction to Python libraries- Pandas, Matplotlib. Data structures in Pandas - Series and Data Frames. Series: Creation of Series from – ndarray, dictionary, scalar value; mathematical operations; Head and Tail functions; Selection, Indexing and Slicing.

### **MAY**

Data Frames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration; Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing; Importing/Exporting Data between CSV files and Data Frames.

### **JUNE & JULY**

Data Visualization Purpose of plotting; drawing and saving following types of plots using Matplotlib – line plot, bar graph, histogram Customizing plots: adding label, title, and legend in plots. Unit 2: Database Query using SQL Math functions: POWER (), ROUND (), MOD (). Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (\*). Querying and manipulating data using Group by, Having, Order by.

### **AUGUST -SEPTEMBER**

Unit 3: Introduction to Computer Networks Introduction to networks, Types of network: LAN, MAN, WAN. Network Devices: modem, hub, switch, repeater, router, gateway Network Topologies: Star, Bus, Tree, Mesh. Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP.

### **OCTOBER-NOVEMBER**

Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website. Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.

Unit 4: Societal Impacts Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, free and open source software (FOSS), cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act. E-waste: hazards and management. Awareness about health concerns related to the usage of technology.