

Syllabus XI (2021 – 22)

ENGLISH CORE

Books: 1. Hornbill (English Reader Text Book) N.C.E.R.T., New Delhi

2. Snapshots (Supplementary Reader) N.C.E.R.T., New Delhi General Instructions :

Syllabus of I Term will be included in the II Term.

Unit tests will be taken in between the terms.

I Term (April to September)

Section — A

(Reading Unseen Passages)

Unseen Comprehension

Note Making

Section — B

(Writing & Grammar)

Short Composition : Notice, Advertisement

Articles Writing, Speech Writing, Report writing

Letter Writing — Letter to the Editor

Letter to the school or College Authorities

Application for a Job

(Grammar)

1. Editing, Omission, Error Correction

2. Transformation of sentences

3. Re-ordering of sentences,

On the basis of determiners, tenses, clauses, modals and change of voice.

Section -C (Text Books)

Hornbill (English Reader)

Lessons : 1 The Portrait of a Lady

A Photograph (poem)

2. We're not Afraid to Die

3. Discovering Tut : The Saga Continues

The voice of Rain (Poem)

The Labunnum Top (Poem)

4.. Landscape of the soul

Snapshots (Supplementary Reader)

Lesson 1. The Summer of the Beautiful White Horse.

The Address

Ranga's Marriage

Albert Einstein at School 5. The ghat of the only World

Listening & Speaking (ASL)

To be regularly practiced in the class

II Term (October to February)

Section — A

(Reading Unseen Passages)

Unseen Comprehension

Note Making

Section — B

(Writing & Grammar)

Short Composition — Poster making and Advertisement Report Writing, Narrative

Business or official letters (for making enquiries, registering complaints, asking for and giving information, placing orders and sending replies.

Grammar

Error Correction, Editing tasks

Re-ordering of sentences

Transformation of sentences

Section -C (Literature)

Hornbill

1. The Ailing Planet.

2. The Browning Version.

3. Childhood (poem).

4.The Adventure

5.Silk Road

6. Father to Son (Poem)

Snapshots

Lessons :1 . Mother's Day

2. Birth

3 The Tale of Melon City

Listening and Speaking Skill

To be regularly practiced in class

Mathematics Core

Term 1 (April to September)

1 . Sets

2 . Relations and Functions

3. Trigonometric Functions

4 . Principle of Mathematical Induction

5 . Complex Numbers and Quadratic Equations

6. Linear Inequalities

7 . Permutations and Combinations

8 . Binomial Expansion

9 . Introduction to 3-D Geometry

Term 2 (October to February)

10 . Straight Lines

11 . Conic Sections

12 . Limits and Derivatives

13 . Mathematical Reasoning

14 . Statistics

15 . Probability

16 . Sequences and Series

Applied Mathematics

I Term (April to September)

- 1) Numbers
- 2) Indices and Logarithms
- 3) Quantitative Aptitude
- 4) Mensuration
- 5) Sets and Relations
- 6) Sequences and Series
- 7) Permutations and Combinations
- 8) Mathematical Reasoning
- 9) Functions
- 10) Limits and Continuity
- 11) Differentiation
- 12) Probability

II Term (October to February)

- 13) Descriptive Statistics
- 14) Compound Interest and Annuity
- 15) Taxation
- 16) Utility Bills
- 17) Straight lines
- 18) Circles and Parabola

Physics

Book Recommended- NCERT textbook of Physics
Pradeep fundamentals,

Reference book-modern ABC,
S.L.Arora

Note: Syllabus of first term will be included in second term

April to May

Unit 1 physical world and measurement

Unit 2 kinematics

July to September

Unit 3 laws of motion

Unit 4 work power energy

Unit 5 Motion of System of particles and rigid body.

Note: Syllabus of I Unit will be included in the I term

October to December

Unit 6 Gravitation

Unit 7 Properties of Bulk Matter

Unit 8 Thermodynamics

January to February

Unit 9 Behaviour of Perfect Gas and Kinetic Theory of Gas

Unit 10 Mechanical Waves and oscillations

Practical: Every student will perform at least 15 experiment demonstrated by teacher in the class.

XI (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. Some basic concepts of chemistry
2. Structure of atom
3. Classification of elements and periodicity in properties
4. Chemical bonding and molecular structure
5. Redox reaction
6. Environmental Chemistry
- 7.States of matter
8. Hydrogen

TERM II. OCTOBER TO FEBRUARY

1. Equilibrium
2. Thermodynamics
3. S-block elements
4. Organic chemistry some basic principles
5. Hydrocarbons
6. P-block elements

Pattern of chemistry practical paper M.M =30

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|------------------------------|---|
| 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 text book

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

2. Unit test will be held between terms.

I Term (April to September)

Unit I.I. Diversity in the living world

1. The living world. 2. Biological classification.

3. Plant Kingdom 4. Animal Kingdom

Unit II Structural Organisation in plants

5. Morphology in flowering plants 6. Anatomy of flowering plants 7. Structural Organisation in Animals .

Unit III .Cell structure and functions

8. Cell the unit of life 9. Biomolecules.

10. cell cycle and cell division

II Term (October to February)

UNIT IV Plant physiology

12. Mineral nutrition

13. photosynthesis in Higher plants

14. Respiration in plants

15 Growth and development 16. Transport in plant

16. Transport in plants

UNIT V Human Physiology

17. Digestion and absorption

18. Breathing and exchange of gases

19. Body Fluids and circulation

20. Excretory products and their Elimination

21. Locomotion and movement

22. Neural control and coordination 23. chemical coordination and integration

23. Chemical coordination and integration

Economics

Books recommended: 1. Statistics for economics 2. Introductory Microeconomics By TR jain, VK Ohri

I Term (April to September)

1. Concept of economics and significance of statistics in economics
2. Collection of data
3. Census and Sample methods of Collection of data
4. Measures of Central Tendency - Arithmetic mean
5. Measures of Central Tendency- Median, Mode
6. Measures of Dispersion

Part B (Introductory Microeconomics)

1. Economics and economy
2. Central problems of an economy
3. Consumer's equilibrium- utility analysis
4. Consumer equilibrium- indifference curve analysis
5. Theory of demand
6. Price elasticity of demand

II Term (October to February)

Part A (Statistics for economics)

7. Organisation of data
8. Presentation of data- Textual and tables 9 Presentation of data -Bar diagrams and pie diagrams
10. Frequency diagrams-Histogram, polygon and Ogive
11. Arithmetic line graph & time series graph
12. Correlation
13. Index number

Part B (Introductory Microeconomics)

7. Production function and returns to factor
8. Concept of cost
9. Concept of revenue

10. Producer's equilibrium
11. Theory of supply
12. Forms of market and
13. Market equilibrium under perfect competition and effects of shift in demand and supply

Part C- Project

ACCOUNTANCY

BOOK : DOUBLE ENTRY BOOK KEEPING (by T.S.GREWAL)

1st Term (April to September)

1. Introduction to Accounting (except theory base of accounting)
2. Recording of Business Transaction.
3. Bank Reconciliation statement.
4. Depreciation , provision and reserves
5. Trial balance

II Term (October to February)

6. Accounting for bills of exchange
7. Rectification of errors
8. Financial statements of sole proprietorship
9. Incomplete records
10. Computers in accounting
11. Theory base of accounting
12. Project work (20 marks)

SUBJECT - BUSINESS STUDIES

Term 1

PART A

1. Nature and Purpose of Business
2. Forms of Business Organisation
3. Private ,Public and Global Enterprises
4. Business Services
5. Emerging Modes of Business
6. Social responsibilities of Business and Business Ethics

Term 2

PART B

7. Formation of a company
8. Sources of Business Finance
9. Small business
10. Internal trade
11. International Business

INFORMATICS PRACTICES

I Term (April to September)

1. Computer System:

Introduction to Computer System, Evolution of Computer, Memory and its units, Hardware and devices, Software and its types etc.

2. Database Concepts:

Introduction, File System, Database Management System, Relational data model, keys in Relational database.

3. Introduction to Structured Query Language (SQL):

Introduction to SQL, Datatypes, Constraints in MySQL, data Definition Language commands, Data Manipulation Language Commands, SQL for data query, data updation and deletion and other related commands.

4. Brief Overview of Python:

Introduction to Python, Keywords, identifiers, variables, datatypes, operators, expressions, Input and Output, debugging, Functions, if, if-else statements, for loop, while loop and nested loops.

5. Working with Lists and Dictionaries:

Introduction to List, List Operations, Traversing a List, List methods and built in functions, list manipulation, Introduction to Dictionary, Traversing a dictionary, Dictionary methods and built in functions in dictionary.

II Term (October to February)

6. Emerging Trends:

Introduction to Emerging Trends, artificial Intelligence(AI), Big data, Internet of Things(IOT), Cloud Computing, grid Computing, Block chains.

7. Understanding Data:

Introduction to Data, Data collection, Data Storage, data Processing, Statistical techniques for Data.

8. Introduction to NUMPY:

Introduction, Array, Numpy Array, Indexing and Slicing, operation on arrays, concatenating arrays, reshaping arrays, splitting arrays, statistical operation on arrays, loading arrays from files, saving Numpy arrays in files on disks.

COMPUTER SCIENCE

I Term (April to September)

Unit-1(Chapter-1,2)

- Basic Computer Organisation, Memory Units, Types of Software.
- Boolean Logic, Number System, Operating system
- Cloud computing

Unit-2 (Chapter-3,4,5,6,7)

- Computational Thinking, algorithms, Flow Chart, Features of python, character set, tokens, variables
- Datatypes and operators, Execution of program, errors, conditional statements, Iteration, String manipulation

II Term (October to February)

Unit-2(Chapter-7,8,9,10,11)

- List Definition, Creation, manipulation
- Tuples-Definition, creation, methods, manipulation
- Dictionary-Definition, creation, methods, manipulation
- Python Modules

Unit-3(Chapter-12)

- Cyber safety
- Appropriate use of Social networks
- Safety across websites, intellectual rights, fraud, cyber...

PHYSICAL EDUCATION - XI

I Term April to September

- Unit I - Changing trends and career in physical education
- Unit II - Olympic value education
- Unit III - Physical fitness, wellness and Lifestyle
- Unit IV - Physical education and sports for CWSN (children with special Needs - divyang)
- Unit V - Yoga

II Term October to February

- Unit VI - Physical activity and leadership Training
- Unit VII - Test , measurement and evaluation
- Unit VIII - Fundamental of aAnatomy, Physiology and kinesiology in sports
- Unit IX - Psychology and sports
- Unit X - Training and doping in sports

PRACTICAL - 30 Marks

1. Physical fitness test (compulsory)
(10 marks)
2. Skill of any one game and athletic
any two events (10 marks)