

CLASS 11 (SCIENCE SECTION) — SYLLABUS

❖ Half- yearly exams

1) MATHS

- Chapter 1 Sets
- Chapter 2 Relations and functions
- Chapter 3 Trigonometric functions
- Chapter 5 Complex numbers and quadratic equations
- Chapter 6 Linear inequalities
- Chapter 7 Permutations and combinations
- Chapter 9 Sequences and series
- Chapter 10 Straight lines

Activities

1. To represent set theoretic operations using Venn diagrams.
2. To identify and distinguish between a relation and function.
3. To verify the relation between the degree measure and the radian measure of an angle.
4. To interpret geometrically the meaning of $i = \sqrt{-1}$ and its integral powers.
5. To verify that the graph of a given inequality, of the form $ax+by +c < 0$, $a, b > 0$ and $c < 0$ represents only one of the two half planes.

6.To find the number of ways in which three cards can be selected from given five cards.

2) PHYSICS

- Chapter 1 Physical world
- Chapter 2 Units and measurements
- Chapter 3 Motion in a straight line
- Chapter 4 Motion in a plane
- Chapter 5 Laws of motion
- Chapter 6 Work, energy and power
- Chapter 7 System of particles and rotational motion
- Chapter 8 Gravitation

Practical

1. Vernier calliper
2. Screw gauge
3. Spherometer

3) CHEMISTRY

- Chapter 1 Some basic concepts of chemistry
- Chapter 2 Structure of an atom
- Chapter 3 Classification of elements and periodicity in their properties

- Chapter 4 Chemical bonding and molecular Structure
- Chapter 5 States of matter
- Chapter 6 Thermodynamics

Chemistry practical

- 1. Titration of oxalic acid vs Sodium hydroxide
- 2. Paper chromatography.
- 3. Salt analysis:
 - (a) Ammonium chloride
 - (b) Lead acetate

4) BIOLOGY

- Chapter 1 The living world
- Chapter 2 Biological classification
- Chapter 3 Plant kingdom
- Chapter 4 Animal kingdom
- Chapter 5 Morphology of flowering plants
- Chapter 7 Structural organisation in animals
- Chapter 8 Cell the unit of life
- Chapter 10 Cell cycle and cell division
- Chapter 17 Breathing and exchange of gases
- Chapter 18 Body fluids and circulation

PRACTICAL

1. Study of animal specimens
2. Study of plants specimens
3. Study of animal tissues
4. Mitosis in onion root tip
5. Description of a flower

5) COMPUTER SCIENCE

- Chapter 1 Getting started with python
- Chapter 2 Python programming fundamentals
- Chapter 3 Conditional and looping constructs(till decision making)
- Chapter 8 Computer system organisation
- Chapter 9 Data representation and Boolean logic
- Chapter 10 Cyber safety

Activity

Practical File with programs on Python:

10 Programs on Python Programming Fundamentals and conditional statements

6) ENGLISH

- Hornbill chapter – 1,2,3,4,5
- Snapshots chapter-1,2,3,4 ; Poems- 1,2,3
- Writing skills: Notice, posters, letter writing, articles, speech, reports

- Grammar: Editing and omission

Activity Section

- 1) Poster Making
- 2) 50 word Biography writing (Indian Personalities)
- 3) Describing Indian Monuments in 50 Words.

