

S.H.I.P.S.
A Premier Institution

Course of Study for Grade XII (Science), 2023-24

ENGLISH

APRIL

Reading: Reading Passage
Writing: Notice Writing, Invitation Writing
Literature: - The Last Lesson, Lost Spring, My Mother at Sixty Six
ASL Introduction of self, Narration of short story

MAY

Reading: Reading Passage
Writing: Letter Writing, Article Writing
Literature: Keeping Quiet, The Third Level, The Tiger King

JULY

Reading: Reading Passage
Writing: Report Writing, Article Writing
Literature: The rattrap, A Thing of Beauty
ASL Listening Activity cum Speaking

AUGUST

Reading : Reading Passage
Writing: - Revision of Writing Composition
Literature: Journey to the end of the earth
ASL Listening Activity cum Speaking

SEPTEMBER

TERM-1 (Revisions)

OCTOBER

Reading : Reading Passage
Writing: - Writing Practice
Literature: Indigo, A Road Side Stand, Poets and pancakes
ASL Situational Questions

NOVEMBER:

Reading : Reading Passage
Writing: - Writing Practice
Literature: The Enemy, The Interview
ASL Situational Questions

DECEMBER

Reading : Reading Passage
Writing: - Writing Practice
Literature : Going Places, On the Face of It, Memories of Childhood, Aunt Jennifer's Tigers
ASL Situational Questions

PUNJABI

ਕਹਾਣੀ – ਸਾਂਝ, ਕਵਿਤਾ - ਟੁਕੜੀ ਜੱਗ ਤੋਂ ਨਿਆਰੀ

ਅਪ੍ਰੈਲ

ਪੱਤਰ, ਪੈਰਾ ਰਚਨਾ, ਅਖਾਣ (1-15)

ਮਈ

ਪੰਜਾਬ ਦੇ ਮੇਲੇ ਤੇ ਤਿਓਹਾਰ, ਪੱਤਰ

ਪੈਰਾ ਰਚਨਾ, ਅਖਾਣ (16-30), ਵਾਕ ਵਟਾਂਦਰਾ

ਜੁਲਾਈ

ਕਵਿਤਾ - ਤਾਜ ਮਹੱਲ, ਕਹਾਣੀ - ਨੀਲੀ

ਵਾਕ ਵਟਾਂਦਰਾ, ਪੱਤਰ

ਅਗਸਤ

ਪੰਜਾਬ ਦੇ ਰਸਮ ਰਿਵਾਜ, ਕਵਿਤਾ - ਚੁੰਮ ਚੁੰਮ ਰੱਖੋ

ਪੱਤਰ, ਪੈਰਾ ਰਚਨਾ

ਸਤੰਬਰ

Term 1 ਪ੍ਰੀਖਿਆ

Unit Test-1 : ਕਹਾਣੀ – ਸਾਂਝ , ਕਵਿਤਾ - ਟੁਕੜੀ ਜੱਗ ਤੋਂ ਨਿਆਰੀ, ਪੰਜਾਬ ਦੇ ਮੇਲੇ ਤੇ ਤਿਓਹਾਰ, ਪੱਤਰ

ਅਖਾਣ (1-30), ਪੈਰਾ ਰਚਨਾ, ਵਾਕ ਵਟਾਂਦਰਾ

ਅਕਤੂਬਰ

ਕਹਾਣੀ - ਮਾੜਾ ਬੰਦਾ, ਕਵਿਤਾ - ਵਾਰਸ ਸ਼ਾਹ

ਪੈਰਾ ਰਚਨਾ, ਸੰਖੇਪ ਰਚਨਾ

ਨਵੰਬਰ

ਪੰਜਾਬ ਦੀਆਂ ਲੋਕ ਖੇਡਾਂ

ਕਵਿਤਾ - ਮੇਰਾ ਬਚਪਨ, ਕਹਾਣੀ - ਘਰ ਜਾ ਆਪਣੇ

ਦਸੰਬਰ

ਪੰਜਾਬ ਦੇ ਲੋਕ ਨਾਚ, ਕਵਿਤਾ - ਗੀਤ

ਜਨਵਰੀ

ਦੁਹਰਾਈ

ਫਰਵਰੀ

ਮਾਰਚ

Term 2 ਪ੍ਰੀਖਿਆ।

PHYSICAL EDUCATION

APRIL

- Chapter 1 –Management of Sporting Events
- Chapter 2 – Children & Women in Sports

MAY

- chapter 3 - Yoga as Preventive Measures for Lifestyle Disease

JUNE

Practical Work

- Brockport Physical Fitness Test
- Athletics

JULY

- Chapter 4 – Physical Education and Sports for CWSN
- Chapter 5 –Sports and Nutrition

AUGUST

Project File

- Prepare File on Lifestyle Disease:- Obesity, Diabetes, Asthma, Hypertension

SEPTEMBER

- Chapter 6 – Test and Measurement in Sports
- Chapter 7 - Physiological and Injuries in Sports

OCTOBER

- Chapter 8 –Biomechanics and Sports
- Chapter 9 – Psychology and Sports

NOVEMBER

PRACTICAL FILE

- Proficiency in Games and Sports
(Skill of any one IOA Recognised Sports/ Game of Choice)
- Chapter 10 – Training in Sports

PHYSICS

Term-1

APRIL

Ch1 Electric Charges and Field
Ch2 Potential and Capacitance

MAY

CH3 Current Electricity
CH4 Effect of Current and Magnetism

JULY

CH5- Magnetism and Matter
CH6- Electromagnetic Induction
CH7- Alternating Current

AUGUST

CH8- Electromagnetic Waves
CH9- Ray Optics

SEPTEMBER

Term-2

OCTOBER

CH10- Wave Optics
CH11- Dual Nature

NOVEMBER

CH12 - Atoms
CH13- Nuclei
CH14- Semiconductor

DECEMBER

REVISION
January Revision

JANUARY

Ch-15 Waves

FEBRUARY

Full Syllabus (Pre Board)

MARCH

SYLLABUS FOR PRACTICALS

APRIL

Experiment: To Determine Angle of Minimum Deviation For Given Prism By Plotting Graph
Activity: To observe refraction in slab

MAY

EXPERIMENT : To Draw I-V Characteristics For Pn Junction
Activity-To assemble household circuit having, bulb, switch, fuse and power source

JULY

Experiment : To Find Resistance Using Metre Bridge
Activity- To assemble component of given electrical circuit

AUGUST

Experiment: To Verify Laws Of Combination Using Metre Bridge Activity : To Measure Resistance, Voltage Using Multimeter

OCTOBER

Experiment: to find focal length of lens using u-v graph
Activity: to study nature of images formed by lens

NOVEMBER

Experiment: To Convert Galvanometer Into Voltmeter

DECEMBER

Experiment: To Find Resistance Of Galvanometer By Half Deflection

PRE BOARD-FULL SYLLABUS

CHEMISTRY

Unit.2. Solutions
Unit 3. Electrochemistry(half)

APRIL

MAY

Unit.3. Electrochemistry(remaining half)
Unit.4. Chemical kinetics

JULY

Unit.8. d and f block elements
Unit.9. Coordination compounds

AUGUST

Unit.10. Haloalkanes and Haloarenes
Unit.14. Biomolecules

SEPTEMBER

Term-1 Examination

OCTOBER

Unit. 11. Alcohols ,phenols and Ethers
Unit 13. Organic compounds containing Nitrogen

NOVEMBER

Unit.12. Aldehydes ,Ketones and Carboxylic Acids (half)

DECEMBER

Unit.12. Aldehydes ,Ketones and Carboxylic acids (remaining half)

JANUARY

Revision and Practicals

FEBRUARY

Revision and Preboard

MARCH

Term II Examination

MATHEMATICS

Unit- Relations and Functions
Relations and functions (Ch-1)
Inverse Trigonometric functions (Ch-2)

APRIL

MAY

Algebra
Matrices (Ch-3)
Determinants (Ch-4)

JULY

Calculus
Continuity and differentiability (Ch-5)
Applications of Derivatives (Ch-6)

AUGUST

Calculus

Integrals (Ch-7)

Applications of Integrals (Ch-8)

OCTOBER

Unit: Calculus

Differential Equations

Unit: Vectors and 3D

Vectors

NOVEMBER

Unit: Vectors and 3D

3D Geometry

Unit Linear Programming

Linear Programming

DECEMBER

Unit Linear Programming

Linear Programming

Unit Probability

Probability

BIOLOGY

APRIL

ch.2 Sexual Rep in plants

ch.3 Human Rep

MAY

ch.4 Reproductive Health

ch.8 Human Health and Diseases

ch.10 Microbes in Human welfare

JULY

ch.5 Principles of Inheritance

OCTOBER

ch.6 Molecular Basis of Inheritance

ch.7 Evolution

NOVEMBER

ch.7 Evolution

ch.11 Biotechnology - Principles & Process.

ch.12 Biotechnology - Application

DECEMBER

ch.13 organism and population

ch.14 Ecosystem

ch.15 Biodiversity in organism

Syllabus of Practicals Evaluation Scheme

One Major Experiment Part A	5M
One Minor Experiment Part A	4M
Slide Preparation Part A	5M
Spotting Part B.	7M
Practical Record + Viva Voce.	4M
Project Record + Viva Voce.	5M

Part - A

A: List of Experiments

Sect- A List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Study the plant population density by quadrat method.
3. Study the plant population frequency by quadrat method.
4. Prepare a temporary mount of onion root tip to study mitosis.
5. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

Part - B

Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects, birds).
2. Pollen germination on stigma through a permanent slide
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides.

4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. T.S. of blastula through permanent slides (Mammalian).
6. Mendelian inheritance using seeds of different colour/sizes of any plant.
7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
8. Controlled pollination - emasculation, tagging and bagging.
9. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.

INFORMATION TECHNOLOGY

APRIL

Part B: Unit I: RDBMS Concepts and commands

Test -1

MAY

Part B: Unit III: ICT SKILLS

Part A: Unit IV: Entrepreneurial Skills

Test – 2

JUNE

UNIT TEST I (Part A: Unit IV and Part B: Unit I)

JULY

Part B: Unit I: RDBMS Queries

Part B: Unit III: ICT Skills, Unit V:Green Skills

Test -3

AUGUST

Part A: Unit II: Self-Management Skills

Practical (RDBMS)

SEPTEMBER

Term I

OCTOBER

Part B: Unit I: Operating Web-Based Applications

Part A: Unit I: Communication Skills

NOVEMBER

Revision for Prelims

Prelims I/Term I

Part B: Unit IV: Work Integrated learning IT-DMA

DECEMBER

Part B: Unit III: JAVA Programming

Part A: Unit I: Communication skills

JANUARY

Revision

FEBRUARY

Term II