

Roop vatika (A sen. Sec.) School, Jagraon

Class 12 science syllabus

Mathematics

Syllabus of class 12th (Mathematics)

April

Chapter 1 Relations & Functions

Chapter2 Inverse Trigonometry Functions

Chapter 3 Matrices

May

Chapter 4 Determinants

Chapter 5 Continuity & Derivatives

July

Chapter 6 Applications of Derivatives

Chapter 12 Linear inequality

August

Chapter 7 Integrals

Chapter 8 Applications of Integrals

October

Chapter 9 Differential Equations

Chapter 10 Vector Algebra

November

Chapter 11 3D Geometry

Chapter 13 Probability

Biology

Class 12 Biology syllabus 2026-27

April

Unit 1: Reproduction

- Sexual reproduction in flowering plants
- Human reproduction
- Reproductive health

May

Unit 2: Genetics and Evolution

- Principles of inheritance and variation
- Molecular basis of inheritance
- Evolution

July

Unit 3: Biology and Human Welfare

- Human health and disease
- Microbes in human welfare

October

Unit 4: Biotechnology and Its Applications

- Biotechnology: Principles and processes
- Biotechnology and its applications

Unit 5: Ecology and Environment

- Organisms and populations
- Ecosystem
- Biodiversity and conservation

Chemistry

April -May

Chp : Solutions

Chp : Haloalkanes and Arenes

Chp : Electrochemistry

July -August

Chp Electrochemistry

Chp Alcohol phenol and ethers

Chp d and f block

Oct - Nov

Chp chemical kinetics

Chp Aldehyde ,Ketones and carboxylic acid

Chp Amines

Chp Biomolecules

Physics

April - May

Unit 1

Unit 2

Unit 3

July - August

Unit 4

Unit 7

Unit 8

October - Nov

Unit 5

Unit 6

Unit 9

English

April-May

Flamingo

ch-1 The Last Lesson

Ch-2 Lost spring

Ch-3Deep Water

Poems 1. My Mother at sixty six

2. Keeping Quiet

Vistas

Ch-1 The Third Level

Ch-2 The Tiger King

Ch-3 Journey to the End of the Earth

Writing

Notice, Letter for Job, card invitation

July-August

Flamingo

Ch-4 The Rattrap

Ch-5 Indigo

Ch-6 Poets and Pancakes

Poems 3) A Thing of Beauty

4. A Roadside Stand

Vistas

Ch-4 The Enemy

Ch-5 On the Face of It

Writing-Formal/Informal Invitation and Reply, Letter to Editor

Oct-Nov

Flamingo

Ch-7 The Interview

Ch-8 Going Places

Poem

5) Aunt Jennifer's Tiger

Vistas

Ch-6 Memories of Childhood

i) The cutting of my long hair.

ii) We too are human beings

Writing - Article / Report

Class 12 Hindustani Music Vocal (2026-27)

April

1.1 Brief study of the following: - Alankar, Kan, Meend, Khatka, Murki, Gamak.

1.2 Brief study of the following Gram, Murchhana, Alap, Tana.

May

2.1 Historical development of Time Theory of Ragas

2.2 Detail study of Sangeet Ratnakar the following: Sangeet Parijat

July

3.1 Life sketch and Contribution of Faiyaz Khan, Bade Ghulam Ali Khan, Krishna Krishna Rao, Shankar Pandit

AUGUST

4.1 Description of Prescribed Talas along with Tala Notation with

Thah, Dugun, Tigun and Chaugun Jhaptala, Rupak, Dhamar

4.2 Tuning of Tanpura

SEPTEMBER

5.1 Critical study of Prescribed Ragas along with recognizing the Ragas from phrases of Swaras and elaborating them.

5.2 Writing in Notation the Compositions of Prescribed Ragas: Bhairav, Bageshri, Malkauns

October - November

Practicals -

Taal On hand Beat

Ragas With Notations

Health care

Apr -May.

Unit 1 medical documentation

Unit 2 Role of GDA in elderly and childcare

Unit 3. Biomedical waste

Communication skills and self management skills

(FROM EMPLOYABILITY SKILLS)

July – Aug.

Unit 4 operation theatre

Unit 5 Role of general duty assistant in disaster response and emergency response

ICT skills.

(FROM EMPLOYABILITY SKILLS)

September exams

Oct – Nov.

Unit 6 self management and career scope

Entrepreneurship skills

Green skills (FROM EMPLOYABILITY SKILLS)

Physical Education

April

Unit -1 Management Of Sports Events-

- Functions of Sports Events Management (Planning, Organising, Staffing, Directing and Controlling)
- Various Committees and their Responsibilities (pre; during and post)

- Fixtures and its Procedures – Knock-out (Bye and Seeding) and League (Staircase and Cyclic)
- Unit-2 Children And Women In Sports
- Common Postural Deformities – Knock Knee ; Bow Legs ; Flat Foot ; Round Shoulder ; Lordosis, Kyphosis and Scoliosis and their corrective measures
- Special consideration (Menarche and Menstrual Dysfunction)
- Female Athlete Traid (Osteoporosis, Amenorrhea and Eating Disorder)

May

Unit -3 Yoga As Preventive Measure For Lifestyle Disease –

- Obesity : Procedure, Benefits and Contradictions for Tadasana, Katichakraasana, Pavanmuktasana, Matsyasana, Halasana, Paschimottanasana, Ardha Matsyendrasana, Dhanurasana, Ushtrasna, Surya bhedana pranayama
 - Asthma : Procedure, Benefits and Contradictions for Tadasana, Urdhwa hastottanasana, Uttan Mandukasana, Bhujangasana, Dhanurasana, Ushtrasna, Vajrasana, Kapalbhati, Gomukhasana, Matsyasana, Anulom- Viloma
- Hypertension : Procedure, Benefits and Contradictions for Tadasana, Katichakrasana, Uttanapadasana, Ardha Halasana, Sarala Matsyasana, Gomukhasana, Uttan Mandukasana, Vakrasana, Bhujangasana, Makarasan, Shavasana, Nadishodhan pranayama, Sitali pranayama

Unit-4 Physical Education And Sports For CWSN-

- Organizations promoting Disability Sports (Sports Olympics ; Paralympic ; Deaflympics)
- Advantages of Physical Activities for children with special needs
- Strategies to make Physical Activities accessible for children with special needs

July

- Unit -5 sports And Nutrition – • Concept of balance diet and nutrition
- Macro and Nutrition : Food and functions
- Nutritive and Non- Nutritive Components of Diet

August

Unit-6 Test And Measurement In Sports-

- Fitness Test -SAI Khelo India Fitness Test in school
- Measurement of Cardiovascular Fitness – Harvard Step Test • Computing Basal Metabolic Rate (BMR)
- Rikli and Jones- Senior Citizen Fitness Test

October

- Unit-7 Physiology And Injuries In Sports
- Physiological factors determining Components of Physical Fitness
- Effect of exercise on Muscular System
- Sports Injuries : Classification

- Unit -8 Biomechanics And Sports-

- Newton's Law of Motion and its application in sports
 - Equilibrium – Dynamic and Static and Centre of Gravity and its application in sports
 - Friction and Sports
 - Projectile in Sports
- November

Unit- 9 Psychology And Sports

- Meaning, Concept and Types of Aggressions in Sports
- Psychological Attributes in Sports

Unit -10 Training and In Sports

- Concept of Talent Identification and Talent Development in Sports
- Introduction to Sports Training Cycle -Micro,Meso, Macro Cycle
- Types and Methods to Develop – Strength , Endurance, Speed
- Types and Methods to Develop -Flexibility and Coordinative Ability

*** IT Syllabus Class 12 ***

April – May**

UNIT – 1 DATABASE CONCEPTS – RDBMS TOOL

UNIT – 2 OPERATING WEB BASED APPLICATIONS

UNIT – 1 COMMUNICATION SKILLS – IV (PART – A)

- SQL QUERIES

- Worksheet

- Revision

June

Summer Vacation

July – August

UNIT – 3 JAVA

UNIT – 2 SELF MANAGEMENT SKILLS – IV (PART – A)

UNIT – 3 ICT SKILLS – IV (PART – A)

- JAVA PROGRAMS

- Worksheet

- Revision

September

First Terminal Examination

October – November

UNIT – 4 WORK INTEGRATED LEARNING IT – DMA

UNIT – 4 ENTREPRENEURIAL SKILLS – IV (PART – A)

- Worksheet

- Revision

December – January

UNIT – 5 GREEN SKILLS – IV (PART – A)

- Worksheet

- Revision

February

Final Examination

Fine arts

class 12th Fine Arts

1. Miniature Painting

2. Rajasthani School of painting

3. The Pahari School

4. Six Limbs of Fundamental arts

5. The Mughal School of Art

6. The Deccan School of Art

7. The bengal School of Painting