

Syllabus of XII Science

1. English

SECTION ONE (Prose)

1.1 An Astrologer's Day	<i>R. K. Narayan</i>
1.2 On Saying "Please"	<i>Alfred George Gardiner</i>
1.3 The Cop and the Anthem	<i>O'Henry</i>
1.4 Big Data–Big Insights	-
1.5 The New Dress	<i>Virginia Woolf</i>
1.6 Into the Wild	<i>Kiran Purandare</i>
1.7 Why we Travel	<i>Siddarth Pico Raghavan Iyer</i>
1.8 Voyaging Towards Excellence	<i>Achyut Godbole</i>

SECTION TWO (Poetry)

2.1 Song of the Open Road	<i>Walt Whitman</i>
2.2 Indian Weavers	<i>Sarojini Naidu</i>
2.3 The Inchcape Rock	<i>Robert Southey</i>
2.4 Have you Earned your Tomorrow	<i>Edgar Guest</i>
2.5 Father Returning Home	<i>Dilip Chitre</i>
2.6 Money	<i>William H. Davies</i>
2.7 She Walks in Beauty	<i>George Gordon Byron</i>
2.8 Small Towns and Rivers	<i>Mamang Dai</i>

SECTION THREE (Writing Skills)

3.1 Summary Writing	-
3.2 Do Schools Really Kill Creativity? (Mind-Mapping)	
3.3 Note–Making	-
3.4 Statement of Purpose	-
3.5 Drafting a Virtual Message	-
3.6 Group Discussion	-

SECTION FOUR (Genre–Novel)

4.1 History of Novel	-
4.2 To Sir, with Love	<i>E. R. Braithwaite</i>
4.3 Around the World in Eighty Days	<i>Jules Gabriel Verne</i>
4.4 The Sign of Four	<i>Sir Arthur Ignatius Conan Doyle</i>

2. Marathi

भाग - १	
अ. क्र.	पाठ, कविता
	बहु असोत सुंदर... (काव्यानंद) - श्री. कृ. कोल्हटकर
१.	वेगवशता - प्राचार्य शिवाजीराव भोसले
२.	रोज मातीत (कविता) - कल्पना दुधाळ
३.	आयुष्य... आनंदाचा उत्सव - शिवराज गोर्ले
४.	रे थांब जरा आषाढघना (कविता) - बा. भ. बोरकर
५.	वीरांना सलामी - अनुराधा प्रभुदेसाई
६.	रंग माझा वेगळा (कविता) - सुरेश भट
*	आत्मविश्वासासारखी शक्ती नाही (नमुना गद्य आकलन) - भारतरत्न डॉ. बाबासाहेब आंबेडकर

भाग - २

अ. क्र.	पाठ, कविता
७.	विंचू चावला... (भारूड) - संत एकनाथ
८.	रेशीमबंध - डॉ. यू. म. पठाण
९.	समुद्र कोंडून पडलाय (कविता) - वसंत आबाजी डहाके
१०.	दंतकथा - वसंत सबनीस
११.	आरशातली स्त्री (कविता) - हिरा बनसोडे
१२.	रंगरेषा व्यंगरेषा - मंगेश तेंडुलकर
*	जयपूर फूटचे जनक (नमुना गद्य आकलन) - डॉ. बाळ फोंडके

भाग - ३

अ. क्र.	साहित्यप्रकार
१.	कथा- साहित्यप्रकार-परिचय शोध - व. पु. काळे
२.	गद्दी - डॉ. प्रतिमा इंगोले

भाग - ४

अ. क्र.	उपयोजित मराठी
१.	मुलाखत
२.	माहितीपत्रक
३.	अहवाल
४.	वृत्तलेख (फिचर रायटिंग)

भाग -५

अ. क्र.	व्याकरण व लेखन
•	व्याकरण- वाक्यप्रकार व वाक्यरूपांतर, समास, प्रयोग, अलंकार
•	लेखन : निबंधलेखन

भाग -६

अ. क्र.	परिशिष्टे
•	पारिभाषिक शब्द, साहित्य अकादमी पुरस्कारप्राप्त साहित्यिकांची नावे व साहित्यकृती, शब्दार्थ व वाक्प्रचार

3. Hindi

क्र.	पाठ का नाम	विधा	रचनाकार
१.	नवनिर्माण	चतुष्पदी	त्रिलोचन
२.	निराला भाई	संस्मरण	महादेवी वर्मा
३.	सच हम नहीं; सच तुम नहीं	नयी कविता	डॉ. जगदीश गुप्त
४.	आदर्श बदला	कहानी	सुदर्शन
५.	(अ) गुरुबानी (आ) वृंद के दोहे	पद दोहा	गुरु नानक वृंद
६.	पाप के चार हथियार	निबंध	कन्हैयालाल मिश्र 'प्रभाकर'
७.	पेड़ होने का अर्थ	नयी कविता	डॉ. मुकेश गौतम
८.	सुनो किशोरी	पत्र	आशारानी व्होरा
९.	चुनिंदा शेर	शेर	कैलाश सेंगर
१०.	ओजोन विघटन का संकट	लेख	डॉ. कृष्ण कुमार मिश्र
११.	कोखजाया	अनूदित साहित्य	मूल लेखक - श्याम दरिहरे अनुवादक - बैद्यनाथ झा
१२.	* सुनु रे सखिया * कजरी	लोकगीत	

4. Physics

Sr. No	Title
1	Rotational Dynamics
2	Mechanical Properties of Fluids
3	Kinetic Theory of Gases and Radiation
4	Thermodynamics
5	Oscillations
6	Superposition of Waves
7	Wave Optics
8	Electrostatics
9	Current Electricity
10	Magnetic Fields due to Electric Current
11	Magnetic Materials
12	Electromagnetic induction
13	AC Circuits
14	Dual Nature of Radiation and Matter
15	Structure of Atoms and Nuclei
16	Semiconductor Devices

5. Chemistry

Sr. No.	Title
1	Solid State
2	Solutions
3	Ionic Equilibria
4	Chemical Thermodynamics
5	Electrochemistry
6	Chemical Kinetics
7	Elements of Groups 16, 17 and 18
8	Transition and Inner transition Elements
9	Coordination Compounds
10	Halogen Derivatives
11	Alcohols, Phenols and Ethers
12	Aldehydes, Ketones and Carboxylic acids
13	Amines
14	Biomolecules
15	Introduction to Polymer Chemistry
16	Green Chemistry and Nanochemistry

6. Mathematics I and II

Sr.No.	Chapter
1.	Mathematical Logic
2.	Matrices
3.	Trigonometric Functions
4.	Pair of Straight Lines
5.	Vectors
6.	Line and Plane
7.	Linear Programming

Sr. No.	Chapter Name
1	Differentiation
2	Applications of Derivatives
3	Indefinite Integration
4	Definite Integration
5	Application of Definite Integration
6	Differential Equations
7	Probability Distributions
8	Binomial Distribution

7. Biology

Sr. No.	Name of the lesson
1.	Reproduction in Lower and Higher Plants
2.	Reproduction in Lower and Higher Animals
3.	Inheritance and Variation
4.	Molecular Basis of Inheritance
5.	Origin and Evolution of Life
6.	Plant Water Relation
7.	Plant Growth and Mineral Nutrition
8.	Respiration and Circulation
9.	Control and Co-ordination
10.	Human Health and Diseases
11.	Enhancement of Food Production
12.	Biotechnology
13.	Organisms and Populations
14.	Ecosystems and Energy Flow
15.	Biodiversity, Conservation and Environmental Issues

8. Computer Science

Paper I

- 1) Operating system
- 2) Data structures
- 3) C++ Programming
- 4) HTML

Paper II

- 1) Introduction to microprocessor and organisation of 8085
- 2) Instruction set and programming of 8085
- 3) Introduction to Intel X-86 family
- 4) Introduction to microcontroller
- 5) Networking technology

9. Information and Technology

1	Advanced Web Designing
2	Introduction to SEO (Search Engine Optimization)
3	Advanced Javascript
4	Emerging Technologies (IOT, Cloud computing, AI,5G)
5	Server-Side Scripting (PHP)
6	E-Commerce and E-Governance

10. Electronics

Paper I

- 1) Electronic instruments**
- 2) DC Power supplies**
- 3) Transducers**
- 4) Operational Amplifiers**
- 5) Modern Electronic Communications**
- 6) Study of Integrated Circuits**

Paper II

- 1) Number system**
- 2) Logic gates**
- 3) Semiconductor Digital ICs**
- 4) Combinational logic circuits**
- 5) Electronic counters**
- 6) A/D, D/A Converters**
- 7) Computer Fundamentals**

11. EVS

Sr. No.	Name of the topic
1.	Humans and Environment 1.1 Population growth 1.2 Rural and urban settlements 1.3 Indigenous communities and traditions 1.4 Environment and health 1.5 Right to live, human rights and value education
2.	Environmental Pollution 2.1 Air pollution 2.2 Climate change 2.3 Soil pollution 2.4 Noise pollution 2.5 Solid waste management
3.	Sustainable Development 3.1. Need for sustainable development 3.2. Sustainable Development Goals 3.3. Challenges for sustainable development 3.4. Sustainable Agriculture 3.5. Role of individuals, community and government in sustainable development
4.	Practices for Environmental Protection 4.1 Consumer Education 4.2 Eco-labelling 4.3 Environment Impact Assessment 4.4 Green Audit 4.5 Eco-tourism 4.6 International Conventions and Agreements
5.	Water Security 5.1 Water resources 5.2 Need and importance of water resources 5.3 Water scarcity 5.4 Water contamination 5.5 Water conservation and management methods

12. Health and Physical Education

Sr. No.	Name of the lesson
1.	Physical Fitness
2.	Exercise – Scientific View
3.	Study of Yoga
4.	Diet
5.	Active Lifestyle
6.	Motivational Stories
7.	Sports Awards