

**ST. JOSEPH'S CONVENT HR. SEC SCHOOL, SAMBALPUR**

**SYLLABUS 2026-2027**

**CLASS 10 ENGLISH LITERATURE**

<b>NAME OF THE BOOK - TREASURE CHEST: A COLLECTION OF ICSE POEMS &amp; SHORT STORIES, PROSE POEMS PLAY JULIUS CAESAR</b>	
<b>MONTHS</b>	<b>CHAPTERS</b>
February	Prose: L-11-With The Photographer Poetry: L-11 Haunted House Julius Caesar: Act 3, Scene 1
March & April	Prose: L-12 The Elevator Poetry: L-12 The Gloves & The Lions Julius Caesar: Act 3, Scene 2
June	Julius Caesar: Act 3, Scene 2
July	Poetry: L-13 When Great Trees Fall Julius Caesar: Act 3, Scene 3 <b>Quarterly Examination</b> Prose: L-11, L-12 Poetry: L-11, L-12 Julius Caesar Act 3, Scene 1,2
August	Julius Caesar Act 4, Scene 1,2 Poetry - L-13, The Girl Who Can
September	<b>Half Yearly Examination</b> Julius Caesar - Act 3, Scene 1,2&3 Prose L-11, L-12, L-13 Poetry - L-11, L-12, L-13
October	Julius Caesar: Act 4, Scene 3 Prose: L-14, The Pedestrian Poetry: L-14, A Considerable Speck
November & December	Julius Caesar: Act 5, Scene 1,2,3,4,5 Prose: L-15, The Last Lesson Poetry: L-15, The Power Of Music Specimen Paper Practice
January	<b>Model Examination</b>
February	<b>ICSE Board Exam</b>

**CLASS 10 ENGLISH LANGUAGE  
2026-2027**

<b>NAME OF THE BOOK – TOTAL ENGLISH</b>	
<b>MONTHS</b>	<b>CHAPTERS</b>
February	Practice Paper 1,2
March & April	Practice Paper 3,4
June	Practice Paper 5
July	Practice Paper 6,7 <b>Quarterly Examination</b> Practice Paper 1,2,3,4,5
August	Practice Paper 8,9
September	Practice Paper 10 <b>Half Yearly Examination</b> Practice Paper 6,7, 8,9,10
October	Practice Paper 11,12
November & December	Practice Paper 13,14,15 Specimen Paper Practice
January	<b>Model Examination</b>
February	<b>ICSE Board Exam</b>

**CLASS 10 MATHEMATICS  
2026-2027**

<b>BOOK</b>	<b>Concise Mathematics By Selina</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February-March	4. Linear Inequations 5. Quadratic Equations 6. Solving Problems using Quadratic Equations 1. GST 2. Banking 3. Shares and Dividend 7. Ratio and Proportion
April - June	12. Reflection 23. Graphical Representation 24. Measures of Central tendency 8. Factorization of Polynomials 9. Matrices 10. Arithmetic Progression
<b>QUARTERLY EXAMINATION</b> (CHAPTERS- 1,2,3,4,5,6,7,12,23,24)	
July- August	11. Geometric Progression 13. Section Formula and Mid-Point Formula 14. Equation of a Line 25. Probability
<b>HALF YEARLY EXAMINATION</b> (CHAPTERS- 1 to 14,23,24,25)	
September- November	21. Trigonometrical Identities 22. Height and Distance 15. Similarity 16. Loci 17. Circles 18. Tangents and Intersecting Chords 19. Constructions 20. Mensuration
December	<b>Revision</b>
January	<b>MODEL EXAMINATION 2027</b>

**CLASS 10 PHYSICS**  
**2026-2027**

<b>BOOK</b>	<b>Concise Physics By Selina</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February	Ch 1, 2 Force, Work, energy and power
March	Ch 3, 11 Machines and Calorimetry
April	Ch 4,5 Refraction of light
June	Ch 6 Spectrum
<b>QUARTERLY EXAM</b> <b>Chapter 1, 2 ,3, 11, 4</b>	
August	Ch 7 Sound Ch 8 Current electricity
<b>HALF YEARLY EXAMINATION</b> <b>Chapter 1 to 8 and 11</b>	
September	Ch 9 Household electricity
October	Ch 10 Electromagnetic Induction
November	Ch 12 Radioactivity
December	Revision
January	<b>ICSE Model Examination</b>
February	<b>ICSE Board Exam</b>

**CLASS 10 CHEMISTRY**  
**2026-2027**

<b>BOOK</b>	<b>Concise Chemistry By Selina</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February	Ch.1. Periodic Table, Periodic Properties and Variations of Properties
March	Ch.2. Chemical Bonding Ch.3. Acids, Bases and Salts
April	Ch.4. Analytical Chemistry
June	Ch.6. Electrolysis
July	Ch.5. Mole concept and Stoichiometry
<b>QUARTERLY EXAMINATION</b> <b>Chapter -1,2,3,4</b>	
August	Ch.7. Metallurgy Ch.8. Study of Compounds A. Hydrogen Chloride
<b>HALF YEARLY EXAMINATION</b> <b>Chapter – 1,2,3,4,5,6,7</b>	
September	Ch.9. Study of Compounds B. Ammonia Ch.10. Study of Compounds C. Nitric Acid
October	Ch.11. Study of Compounds D. Sulphuric Acid
November	Ch.12. Organic Chemistry
December	Revision
January	<b>ICSE MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 BIOLOGY  
2026-2027**

<b>BOOK</b>	<b>Concise Biology By Selina</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February -March	1. Cell 2. Structure of Chromosomes, cell cycle and cell division 3. Genetics
April	4. Absorption by roots 5. Transpiration
May-June	6. Photosynthesis
<b>QUARTERLY EXAMINATION</b>	
Chapter 1-6	
July	7. Circulatory System 8. Excretory System 9. Pollution 10. Chemical coordination in Plants
August	11. Nervous System 12. Sense Organs
<b>HALF YEARLY EXAMINATION</b>	
Chapter 2-11	
September	13. Endocrine System 14. Human evolution
October	15. Reproductive system
November	16. Population
December	Revision
January	<b>ICSE MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 HISTORY & CIVICS  
2026-2027**

<b>BOOK</b>	<b>Total history and civics (morning star)</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February	1.The Union Parliament -I 2. The First World War
March	1.The Union Parliament – II 2.The First War of Independence
June	1.Mahatma Gandhi and the National Movement
July	1.Rise of Dictatorship 2.Second World War 3.Prime Minister and the Council of Ministers
<b>QUARTERLY EXAMINATION</b>	
1.The Union Parliament -I ,II 2.The First World War 3.The First War of Independence 4.Mahatma Gandhi and the National Movement	
August	1.First phase of Indian National Movement 2.Second phase of Indian National Movement 3.United Nations 4.Major Agencies of the United Nations 5.The President and Vice – President
September	1.Forward Bloc 2.The Supreme Court 3.The High Court
<b>HALF YEARLY EXAMINATION</b>	
1.Growth of Nationalism 2.Rise of Dictatorship 3.The Second World War 4.Prime Minister and the Council of Ministers 5.The President and the Vice – President	
October	1.The Muslim League 2.Non – Aligned Movement
December	Revision
January	<b>ICSE MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>
Project	Contributions of Subash Chandra Bose

**CLASS 10 GEOGRAPHY  
2026-2027**

<b>BOOK</b>	A TEXTBOOK OF ICSE GEOGRAPHY BY VEENA BHARGAVA (GOYAL BROTHERS PRAKASHAN)
<b>MONTHS</b>	<b>CHAPTER</b>
February	Ch-1 Climate Of India And Station Problem
March	Ch-2-Soils In India
April	Ch-3-Natural Vegetation In India Ch-4-Practice Of Survey Map
<b>QUARTERLY EXAMINATION</b> PORTION-CH-1, CH-2, CH-3 AND CH-4	
June	Ch-1- Water Resources In India
July	Ch-2-Mineral And Energy Resources -1 Ch-3-Mineral And Energy Resources -2
August	Ch-4-Transport In India Ch-5-Practice Of Survey Map Ch-6-Practice Of Map Of India
<b>HALF YEARLY EXAMINATION</b> PORTION-CH-1, CH-2, CH-3, CH-4, CH-5, CH-6	
September	Ch-1-Agriculture-1
October	Ch-2-Agriculture-2
November	Ch-3-Agriculture-3 Ch-4-Waste Management
December	Ch-5-Method Of Safe Disposal Of Waste
January	<b>ICSE MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 HINDI**  
**2026-2027**

<b>BOOK</b>	1. Ekanki sanchay 2. Saras Hindi Vyakaran
<b>MONTHS</b>	<b>CHAPTER</b>
February - March	1. संस्कार और भावना 2. व्यावहारक व्याकरण
April	1. बहू की ववदा 2. अपठित गद्यांश
June	1. मातृभूमि का मान
July	1. सूखी डाली 2. व्यावहारिक व्याकरण 3. निबंध 4. पत्र लेखन
<b>QUARTERLY EXAMINATION</b>	
August	1. महाभारत की एक सांझ
September	<b>HALF YEARLY EXAMINATION</b> 1. व्यावहारक व्याकरण 2. निबंध 3. पत्र लेखन 4. अपठित गद्यांश
October	1. दीपदान 2. व्यावहारक व्याकरण
November	1. निबंध 2. पत्र लेखन 3. अपठित गद्यांश Revision
December	Revision
January	<b>MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 ODIA**  
**2026-2027**

<b>BOOK</b>	<b>ଝାନାଞ୍ଜଳୀ</b>
<b>MONTHS</b>	<b>CHAPTER</b>
March	L 5. ଜଗତେ କେବଳ ।(ପଦ୍ୟ)
April	L 5. ମୁଖାଭି (ଗଦ୍ୟ) L 6. ନନ୍ଦନପୁର ଏକ୍ସପ୍ରେସ ।(ଗଦ୍ୟ)
May- June	L 7. ଗ୍ରାମପଥା(ପଦ୍ୟ) L 7. ତିମିରି ଫୁଲ ।(ଗଦ୍ୟ)
July	L 8. ମଣିକାଞ୍ଚନ ଯୋଗ ।(ପଦ୍ୟ) L 8. ସମାନ୍ତର ସରଳରେଖା ।(ଗଦ୍ୟ)
<b>QUARTERLY EXAMINATION</b>	
August	L 9. ବନ୍ଦୀର ବିରହ ବ୍ୟଥା ।(ପଦ୍ୟ) L 9. ନୀଳ ମାଷ୍ଟରାଣୀ ।(ଗଦ୍ୟ)
September	L 10. ଖଦେ୍ୟାତିକା ।(ପଦ୍ୟ)
<b>HALF YEARLY EXAMINATION</b>	
October	L 10. ଆଜୁଠି ।(ଗଦ୍ୟ)
November	<b>QUALIFYING EXAM 2024</b>
December	Revision
January	<b>MODEL EXAMINATION</b>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 COMPUTER APPLICATION  
2026-2027**

<b>BOOK</b>	<b>Computer Application Class-10 By-Viva Publication</b>
<b>MONTHS</b>	<b>CHAPTER</b>
March	<p><b>Basic Concept of Java (Class-IX Revision)</b></p> <ul style="list-style-type: none"> <li>➤ Types of computer languages</li> <li>➤ Programming Paradigms –</li> <li>➤ OOP<sup>s</sup> &amp; POP<sup>s</sup> Difference</li> <li>➤ Principles of Object Orientated language</li> </ul> <p><b>Elementary concept of classes and object (Class-IX Revision)</b></p> <ul style="list-style-type: none"> <li>➤ Concept of Classes and Objects</li> <li>➤ Objects in Java ,Classes and subclasses in java</li> <li>➤ Difference between class and objects</li> <li>➤ Properties of class and objects</li> </ul> <p><b>Values and Types (Class-IX Revision)</b></p> <ul style="list-style-type: none"> <li>➤ Character set in java</li> <li>➤ How characters are stored in java</li> <li>➤ Escape Sequence, Tokens, Variables, type conversion</li> <li>➤ How characters are stored in java</li> </ul>
April	<p><b>Introduction to Java C (Class-IX Revision)</b></p> <ul style="list-style-type: none"> <li>➤ Evolution of Java, Advantages of java</li> <li>➤ Types of java Programming</li> <li>➤ Java Compilation Process</li> <li>➤ Advantages of Java, Features of Java</li> <li>➤ Working with bluej</li> <li>➤ Disadvantages of Java</li> </ul> <p><b>Input in a Java (Class-IX Revision)</b></p> <ul style="list-style-type: none"> <li>➤ Comments in java, Packages in java, Initialization, Input / Output Parameters,</li> <li>➤ Input using Scanner Class/ Buffered Reader class.</li> <li>➤ Errors in java, Testing and Debugging</li> <li>➤ Exceptional Handling in java</li> </ul> <p><b>Conditional and Looping Statement</b></p> <ul style="list-style-type: none"> <li>➤ Flow of control</li> <li>➤ Diff Between If-else and Switch Statement</li> <li>➤ Terminating programs using System. exit(0)</li> <li>➤ Loops, Categories of loop, Loops</li> <li>➤ Different forms of Loops</li> </ul>
May-June	<p><b>Mathematical Library Function</b></p> <ul style="list-style-type: none"> <li>➤ Java.lang packages</li> <li>➤ Mathematical method / Function in java</li> <li>➤ All the programs of Numeric function (Digit Based and Factor Based)</li> </ul>

July	<b>String Library, Function</b> <ul style="list-style-type: none"> <li>➤ Java.lang packages</li> <li>➤ String method / Function in java</li> <li>➤ All the programs of String (Word Based and Sentence Based)</li> </ul>
August	<b>Encapsulation</b> <ul style="list-style-type: none"> <li>➤ Concept of Encapsulation</li> <li>➤ Importance of Encapsulation</li> <li>➤ Role of access specifier-Public , Private, Protected</li> <li>➤ Elements/parts of function</li> </ul>
September	<b>User Define Function</b> <ul style="list-style-type: none"> <li>➤ Definition of function.</li> <li>➤ Type of function(Returnable &amp; non-returnable )</li> <li>➤ Header Line and Prototype of a function</li> <li>➤ Function Overloading</li> <li>➤ Recursive Function</li> </ul>
<b>HALF YEARLY EXAMINATION</b>	
October	<b>Constructor</b> <ul style="list-style-type: none"> <li>➤ Definition of Constructor &amp; it's importance</li> <li>➤ Types of constructor (default &amp; Parameterized)</li> <li>➤ Use of constructor in java program</li> </ul>
November	<b>Array Programming</b> <ul style="list-style-type: none"> <li>➤ Definition and concept of array</li> <li>➤ Initialization of Array</li> <li>➤ Types of array ( One and two Dimensional )</li> <li>➤ Storing , Calculation , Searching and sorting in one dimensional array</li> <li>➤ Matrix operation using two dimensional array</li> </ul>
December	<b>Revision work</b> <ul style="list-style-type: none"> <li>➤ Revision from test paper</li> <li>➤ Revision from Specimen Paper , test paper</li> </ul>
January	<b>Pre-Board Examination - Conducted by All Odisha ICSE Association</b>
February	<b>ICSE BOARD EXAMINATION</b>

## CLASS 10 Robotics and Artificial Intelligence 2026-2027

BOOK	Orange Publication
MONTHS	CHAPTER
March	<p><b>Revision work of Class-9 Python Programming.</b> Conditional and Looping Statement. Practice session of loops and conditional programs.</p> <p><b>Numeric Function &amp; Numeric Programs in Python</b> Use of math and random library. A set of numeric programs – ( digits based &amp; Factor based type)</p> <p><b>Functions in Python</b> An understanding of both built in and user defined functions; the importance of functions to maintain modularity; arguments given to a function (fixed and variable length); the concept of default arguments and return type of a function.</p>
April	<p><b>New Age Robotic Systems</b> Warehouse Robots, Assistant Robots, Smart Homes, Smart Schools, Smart mobility, Autonomous Cars/Driver Assisted Cars, Autonomous Drones, Robotics for Medicine and Healthcare, any other (give examples). Why NARS are relevant and possible. Some common examples of robotic systems such as, elevator.</p> <p><b>Decision making in Machines / Computers</b> Automated versus Autonomous Systems. Concept of Automated versus Autonomous Systems for Deterministic versus Probabilistic versus. (ii) Decision Making. Human versus machine decision making as subjective and objective respectively; An understanding of object classification by humans and computers/machines. (iii) Machine Learning (ML). A brief understanding of Machine Learning, role of data and information. Steps in machine learning. Importance of programming and algorithms in teaching machines/computers in subjective decision making. Example such as fruit sorting.</p>
June	<p><b>Numeric Function &amp; Numeric Programs in Python</b> Use of string library in python A set of string programs- character based and word based. String slicing in Python</p>
July	<p><b>From Robots to Cobots</b> Difference between a machine and a robot. Difference between a machine and a robot: an understanding of how a robot must continuously sense, maintain a certain speed and do a certain task that it is programmed to do, using examples; identification of machine/robot through illustrations. (ii) Cobots Meaning of Cobots (as robotic systems with humans in the loop, emphasizing the provision for human interaction and a multi robot system); difference between Cobot and Robot, importance of cobots, a brief understanding of the progress from Robots to Cobots.</p>
August	<p><b>Introduction to Data and Programming with Python</b> Libraries like NumPy, Pandas, implemented using simple programs in python. An understanding of what libraries are and why we need them in the first place, the syntax of importing libraries. Use of DataFrame and Series to store data in tabular format</p>
September	<p><b>Introduction to Data and Programming with Python</b> Introduction to Gears. Use of gears in robots- transmission and amplification of force, principles of gears, types of gears, gear ratio (brief understanding with examples). (ii) Sensors in Robotics. Types of Sensors based on application (Vision, tactile, temperature, range and proximity detection, motion, navigation, speech recognition) with examples only. Classification of sensors as Internal Sensors (Position, Velocity, Acceleration and Force Sensors) and External Sensors (Contact type, Non-contact Type Sensors) . Functions of sensors. (iii) Actuators Brief understanding of actuators and their application; types of</p>

	<p>actuators (linear and rotary) with examples such as joints and wheels. (iv) Controller for a Robotic System Examples of control systems from daily life: regulation of fan, refrigerator, and air conditioner. Control systems in robotics: Meaning, functions and working; differences between manual and automatic control systems. Block diagrams to be used to illustrate (Input-controller-robot-feedback). (v) Integrating Sensors, Actuators and Controller in a Robotic System Illustration using a simple example: how angular position is measured by a position sensor of a robotic arm is controlled by driving the revolute joint using a motor.</p>
<b>HALF YEARLY EXAMINATION</b>	
October	<p><b>Components of Robots as a System.</b> Libraries like SciPy, Matplotlib; implementation using simple programs in python. An understanding of what libraries are and why we need them in the first place, the syntax of importing libraries.</p> <p><b>Visualization, Design and Creation of Components</b> Application of Mechanical Block of Robotics. Visualize, design and create components of a robot. Using Tinkercad to visualize, design, and create the components of a robot; the different types of joints: revolute and prismatic, RR Mechanism. (ii) Visualization of motion. Use of Tinkercad to visualize motion of the components designed. 5. Integrating Robots as a System Building simple robotic systems, wheeled mobile robot, Single Board Computer coding Using Tinkercad to build simple robotics systems, for example, RR Mechanism. Building simple systems up to a mobile robot with four wheels.</p>
November	<p><b>Modules and Packages</b> Modules and Packages. Scope and uses of packages, modules and. (ii) Lists and Tuples in Python. Introduction to lists, creation of list, access elements of a list, list operations (append, insert, extend, sort, search) .</p>
December	<p><b>Machine Intelligence and Cybersecurity in Computing</b> Machine Intelligence – Turing Test. Human intelligence vs Machine Intelligence; role of the Turing test in AI: a brief understanding only; connectivity between human intelligence and machine intelligence. (ii) Cybersecurity A basic understanding of security and ethical issues such as the unauthorized use of hardware, theft of software, disputed rights to products, the use of computers to commit fraud, the phenomenon of hacking and data theft, sabotage in the form of viruses, responsibility for the reliability of output, making false claims for computers, and the degradation of work.</p> <p><b>Components of AI Project Framework</b> (i) Problem Scoping Understanding of problem and finding out which factors affect the problem, defining the goal of the project. The 4 Ws: Who, What, Where, Why. The Problem Statement . (ii) Data Acquisition Types of Data, Data Features, Data Sources, Training and testing Data and System Maps. Importance of acquiring relevant data from reliable sources. Sources of Dataset in AI – Kaggle Platform (iii) Data Exploration An understanding of different ways of representing data to gather meaningful information: Bar graphs/ histograms, line graphs, scatter plots, pie charts. (iv) Modelling and Evaluation Approaches in AI data modelling: Prediction – linear regression. Rule based approach, learning based approach, supervised learning, unsupervised learning (brief understanding of each).</p>
January	<p><b>Revision work</b></p> <p style="text-align: center;"><b>PREBOARD EXAMINATION - 2027</b></p>
February	<b>ICSE BOARD EXAMINATION</b>

**CLASS 10 ECONOMIC APPLICATION  
2026-2027**

<b>BOOK</b>	<b>ICSE Economic Applications By Anima Jain APC Publications</b>
<b>MONTHS</b>	<b>CHAPTER</b>
February	1. Theory of Demand 2. Elasticity of Demand
March	3. Theory of Supply 4. Elasticity of Supply
April	5. Factors of Production 6. Land
June	7. Destruction of Ecosystem
<b>(End of July) Quarterly Examination</b> Chapter 1 to Chapter 5	
July	8. Labour 9. Capital and Capital Formation
August	10. Entrepreneur 11. Alternative Market Structures
<b>(End of September) Half Yearly Examination</b> Chapter 3 to Chapter 11	
September	12. The State and Economic Development 13. Instruments of State Intervention
October	14. Public Sector Enterprises 15. Privatization of Public Enterprises
November	16. Money and Inflation 17. Banking Commercial: Bank and Central Bank
December	Revision
January	<b>Model Examination</b>
February	<b>ANNUAL EXAM (ALL CHAPTERS)</b>