

LOYOLA HIGH SCHOOL, PATNA-800010
SYLLABUS FOR CLASS-12 HUMANITIES(ARTS) (2025-2026)

ENGLISH			
MONTH	Units/Subunits/ Topics/ Chapters to be Covered	Details of Activity/ Practice al / Projects to be given	Unit Tests / Formative/ Tests/ Assignment
APRIL	Literature Flamingo 1. The Last Lesson (Prose) 2. My Mother at Sixty- Six (Poetry) Vistas 1. The Third Level Writing - Notice Writing and its types	1. Write a notice for your school notice- board based on the upcoming events. 2. Write a diary entry sharing your nostalgic experiences.	
MAY	Literature - Flamingo 1. The Lost Spring (Prose) Vistas The Tiger King (Prose) Writing: The letter to the Editor	1. Write an article on the state of Education system in Bihar for your school magazine. 2. Group discussion: on environmental hazards and human threats.	Test 1:- APRIL & MAY (05-05-2025) (Flamingo) 1. The Last Lesson 2. My Mother at Sixty-Six 3. The Lost Spring (Vistas) 1. The Third Level 2. The Tiger King (Writing Section) Notice 1. Writing and its types 2. Letter to the Editor
JUNE	Literature-Flamingo 1. Deep Water (Prose) Vistas 1. Journey to the end of the Earth (Travelogue) Writing- Letter for Job Application	1. Read the autobiographies of prominent writers and share their reviews in class.	
JULY	Flamingo 1. The Rattrap (Prose) 2. Keeping Quiet (Poetry) Vistas 1. The Enemy Invitation Writing and Reply	1. Draft an invitation letter for your school function on A-4 size sheet and submit. 2. Group Discussion: on the environmental hazards and human threats. 3. Write a review of some patriotic films.	Test 2 (21-07-2025) Flamingo 1. Deep water (Prose) 2. Journey to the end of the Earth (Travelogue) 3. Keeping Quiet 4. The Rattrap 5. The Tiger King Writing section 1. Job Application 2. Invitation Writing and Reply
AUG	Flamingo 1. Indigo 2. Poets and Pancakes (Prose) 3. A Thing of Beauty (Poetry) Writing : Article writing	1. Students can prepare a PPT based on Indian National Movement. 2. Students can form groups and enact a scene from the given text	
SEPT	Flamingo 1. The Interview (Prose) 2. A Roadside Stand (Poetry)	1. Conduct an interview session of your most admirable person. 2. Write an article on the struggles of the street vendors.	SENT-UP EXAM: Literature -Flamingo 1. The Last Lesson (Prose) 2. My Mother at Sixty- Six (Poetry) 3. The Lost Spring (Prose) 4. Deep Water (Prose) 5. The Rattrap (Prose) 6. Keeping Quiet (Poetry) 7. Indigo 8. A Thing of Beauty Vistas 1. The Third Level (Prose) 2. The Tiger King (Prose) 3. Journey to the end of the Earth (Prose) 4. The Enemy (Prose) Writing Section Short-Notice Writing, Letter to the Editor, Letter for Job Application, Invitation letter and reply. Article Writing
OCT	Flamingo	1. Prepare a report on the recent	

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	1.Going Places (Prose) 2. Aunt Jennifer's Tigers (Poetry) Writing-Report Writing	occurrences or events happening in the society submit it as an assignment.	
NOV	Vistas 1. On the Face of it. 2. Memories of Childhood (Prose) Flamingo 1. Revision Writing Revision	1. Write an narrative or share an anecdote on any positive incident from your life. 2. Make a collage depicting the memories of your childhood and write a paragraph on it.	
DEC	REVISION	PROJECT SUBMISSION	PRE BOARD -1 Entire syllabus
JAN	AISSCE (CBSE) Board's Practical	Conducting practicals ASL	PRE BOARD -2 Whole Syllabus

HISTORY

MONT H	Units/Subunits/ Topics/ Chapters to be Covered	Details of Activity /Practical/ Projects to be given	Unit Tests /Formative Tests/Assignment
APRIL	CH-1 Bricks, Beads and Bones The Harappan civilization 1. Beginnings. 2. Subsistence Strategies 3. Mohenjo-Daro a planned Urban Centre 4. Tracking Social Differences 5. Finding out about Craft Production 6. Strategies for procuring material 7. Seals, Scripts, Weight 8. Ancient Authority 9. The End of the Civilization 10. iscovering the Harappan Civilization 11. roblems of piecing together the Past CH-2 Kings, Farmers and Towns: Early states & Economy (C.600BCE-600CE) 1. Princep and Priyadasi 2. The Earliest States 3. An Early Empire: Mauryans 4. New Notions of Kingship 5. A changing Countryside 6. Towns and Trade Back to basics: How are Inscriptions deciphered?	Map practice- Mature Harappan sites: Harappa, Banawali, Kalibangan, Balakot, Rakhigarhi, Dholavira, Nageshwar, Lothal, Mohenjodaro, Chanhudaro, KotDiji. Mahajanapada and cities: Vajji, Magadha, Kosala, Kuru, Panchala, Gandhara, Avanti, Rajgir, Ujjain, Taxila, Varanasi. Ashokan Pillar inscriptions – Sanchi, Topra, Meerut Pillar and Kaushambi. Kingdoms- of Cholas, Cheras and Pandyas. Important kingdoms and towns: Kushanas, Shakas, Satavahanas, Vakatakas, Guptas Cities/towns: Mathura, Kanauj, Puhar, Braghukachchha, Shravasti, Rajgir, Vaishali, Varanasi, Vidisha	
MAY	CH-3 Kinship, Caste and Class- Early Societies (C.600BCE -600CE) 1. The critical edition of the Mahabharata 2. Kinship and marriage: Many rules and varied practices 3. Social differences: Within and beyond the framework of Caste 4. Beyond birth Resources and Status 5. Explaining social differences: A Social Contract 6. Handing Texts, Historians, and the Mahabharata 7. A Dynamic Text	Allotment of final topic for project work.	12.05.2025 (Monday) : History Test – 01 Syllabus: CH-1 The Harappan civilization CH-2 Kings, Farmers and Towns: Early states & Economy
JUNE	CH-4 Thinkers, Beliefs and Buildings Cultural Developments (C. 600 BCE-600 ce) 1. A glimpse of Sanchi.	Major Buddhist Sites: Nagarjunakonda, Sanchi, Amaravati, Lumbini, Bharhut, Bodh Gaya, Ajanta	

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	2. The background: Sacrifices and Debates 3. Beyond worldly pleasure, The message of Mahavira 4. The Buddha and the quest for Enlightenment 5. The teachings of the Buddha 6. Followers of the Buddha 7. Stupas 8. Discovering Amravati and Sanchi 9. Sculpture 10. New Religious Traditions		
JULY	CH-5 Through the Eyes of Travellers Perceptions of Society (C. 10th to 17th CE) 1. Al-Biruni and the Kitab-ul Hind 2. Ibn Battuta.s Rihla 3. Francois Bernier, A Doctor with a difference 4. Making sense of an alien world, Al- Biruni and the Sanskrit tradition 5. Ibn Battuta and the excitement of the unfamiliar 6. Bernier and the “Degenerate” East 7. Women, Slaves, Sati and Labourers Ch-6 Bhakti-Sufi Traditions Changes in Religious beliefs and devotional tests (C. Eight to Eighteenth century) 1. A Mosaic of Religious beliefs and practices 2. Poems of Prayers: Early traditions of Bhakti 3. The Virashaiva tradition in Karnataka 4. Religious ferment in North India 5. New Strands in the fabric Islamic traditions 6. The Growth of Sufism 7. The Chishti’s in Subcontinent 8. New devotional paths dialogue and dissent Northern India Reconstructing Histories of religious traditions		28.07.2025 (Monday): History Test – 02 Syllabus: CH-3 Kinship, Caste and Class- Early Societies CH-4 Thinkers, Beliefs and Buildings CH-5 Through the Eyes of Travellers
AUG	CH-7 An Imperial Capital: Vijayanagar (C. Fourteenth to Sixteenth Century) 1. The discovery of Hampi. 2. Rayas, Nayakas and Sultans 3. Vijayanagara The Capital and its Environs 4. The Royal Centre 5. The Sacred Centre 6. Plotting Palaces, Temples and Bazaars 7. Questions in search of answers CH- 8 Peasants, Zamindars and the State Agrarian Society and the Mughal Empire (C. Sixteenth Seventeenth Centuries) 1. Peasants and agricultural production 2. The village community 3. Women in agrarian society 4. Forests and Tribes 5. The Zamindars 6. Land revenue system 7. The flow of silver 8. The Ain-I-Akbari of Abul Fazal	South India- Bidar, Golconda, Bijapur, Vijayanagar, Chandragiri, Kanchipuram, Mysore, Thanjavur, Kolar, Tirunelveli Territories under Babur, Akbar and Aurangzeb: Delhi, Agra, Panipat, Amber, Ajmer, Lahore, Goa	
SEPT	CH- 9 Colonialism and the Countryside 1. Case study of Bengal and Permanent Settlement 2. Case study of Rajmahal Hills- The Struggles of Paharias and Santhals	Collections and discussion of project data	Send UP Examination From 08/09/2025 Syllabus: CH-1 TO CH-8

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	3. The Case study of Bombay Deccan, Ryotwari System The Deccan riots Commission		
OCT	CH- 10 Rebels and the Raj the Revolt of 1857 and Its Representations 1. Pattern of the Rebellion 2. Leaders of Revolt 3. Rumours and Prophecies 4. Awadh in Revolt 5. What the Rebel wanted 6. The Azamgarh Proclamation 7. Repression Images of the Revolt	Territories/cities under British Control in 1857: Punjab, Sindh, Bombay, Madras Berar, Bengal, Bihar, Orissa, Surat, Calcutta, Patna, Allahabad Main centres of the Revolt of 1857: Delhi, Meerut, Jhansi, Lucknow, Kanpur, Azamgarh, Calcutta, Benaras, Gwalior, Jabalpur, Agra, Awadh	
NOV	CH-11 Mahatma Gandhi and the Nationalist Movement Civil Disobedience and Beyond 1. A Leader announces Himself 2. The making and unmaking of Non-Cooperation. 3. The Salt Satyagraha: A Case Study 4. Quit India 5. The last Heroic days 6. Knowing Gandhi CH-12 Framing the Constitution The Beginning of a New Era 1. A Tumultuous time 2. The vision of the Constitution 3. Defining Rights 4. The Power of States The Language of the nation.	Important centres of the National Movement: Champaran, Kheda, Ahmedabad, Benaras, Amritsar, Chauri Chaura, Lahore, Bardoli, Dandi, Bombay (Quit India Resolution), Karachi Data analysis and interpretation for project work Monitoring the progress of Project work	
DEC	REVISION - Completion of left over Practicals and PROJECTS , PRE BOARD -1 - [Complete Syllabus]		
JAN	AISSCE (CBSE) Board's Practical , PRE BOARD -2 - [Complete Syllabus]		

POLITICAL SCIENCE

MONTH	Units/Subunits/ Topics/ Chapters to be Covered	Details of Activity /Practical/ Projects to be given	Unit Tests /Formative Tests/Assignment
APRIL	The End of Bipolarity The Soviet System Gorbachev and the disintegration Causes and Consequences of disintegration Shock Therapy and its Consequences New entities in World Politics India's Relations with Russia and Other Post Communist countries Challenges of Nation Building Introduction – Challenges for a New Nation	Oral detailed discussions Everyday questions and answers Group discussion – Causes and Consequences of disintegration	
MAY	Challenges of Nation Building Partition – Displacement and Rehabilitation Integration of Princely States – The Problems and the Government's approach Reorganization of States Era of One Party Dominance - Introduction	Discussion on Causes and Consequences of Partition Map Activity	
JUNE	Era of One Party Dominance Challenge of Building a democracy	Group discussion – Recent changes in the electoral process Comparative	

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	Congress Domination in first three General Elections – nature of dominance, ideological coalition and management of factions Emergence of opposition parties Contemporary Centres of Power a. European Union	Analysis- Ideology of Different Political Parties Maps Everyday Questions/Answers	
JULY	Contemporary Centres of Power ASEAN Rise of China as an Economic Power Japan and South Korea as emerging Powers Contemporary South Asia Military and Democracy in Pakistan and Bangladesh Monarchy and Democracy in Nepal Ethnic Conflict and Democracy in Nepal India-Pakistan Conflicts India and its neighbours – China, Bangladesh, Sri Lanka, Maldives, Nepal and Russia	Comparative Study- Economic Growth of China, Japan and South Korea Inquiry based learning Map Activity Comparative Analysis- Political Systems of South Asian countries Discussion – Current Economic Crisis in Sri Lanka and Pakistan	14-07-2025 Test 01 1.The End of Bipolarity 2. Challenges of Nation Building
AUG	Politics of Planned Development Political Contestations Planning Commission First Five Year Plans Rapid Industrialization International Organisations Meaning and Importance Evolution of UN Structure and Functions Principal Organs of UN Reforms of UN after cold war- its Processes and Jurisdictions India and UN Reforms NGOs Implications and Futures of International Organisations	Debates and Discussion over Five Year Plans Comparative Analysis-The Left and the Right Ideology Discussion and Debate- Necessary Reforms of UN Quiz	11-08-2025 Test 02 1.Contemp Centres o Power 2.Era of On Party Dominan
SEPT	Security in the Contemporary World Meaning and Type of Security Traditional Concept of Security Non-traditional Notions of Security New Sources of Threats Cooperative Securities India's Security Strategy India's External Relations International Context The Policy of Non Alignment Peace and Conflict with China India's Nuclear Policy	Discussion and Debates- New Sources of threat Comparative Analysis-Security Concerns of Different Countries Collaborative Concept Mapping – India's initiatives and Policies towards security The Policy of Non Alignment Peace and Conflict with China India's Nuclear Policy	Send UP Examination FROM 08/09/2025 The End of Bipola Contemporary Centres of Power Contemporary So Asia International Organisations Challenges of Na Building Era of One Party Dominance Politica of Planne Development
OCT	Environment and Natural Resources – Environmental Concerns Global	1. Presentation – Environmental Issues 2. Debates and Discussion –	

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	Commons Common But Differentiated Responsibilities India's Stand on Environmental Issues Environmental Movements Resource Geopolitics Rights of Indigenous People Challenges to and Restoration of the Congress System Lessons of Emergency Politics after Emergency	Indigenous Communities of the World and their concerns 3. Congress System- Comparative Analysis of Political Succession 4. Group Discussion on Changing Electoral Performance of the Congress 5. Cartoon Interpretation 6. Map Activity	
NOV	Globalization Concept, Causes and Consequences of Globalisation India and globalisation Resistance to Globalisation India and resistance to Globalisation Regional Aspirations Region and the Nation Punjab The NorthEast Recent Developments in Indian Politics	Group Discussion- Positive and Negative Impacts of globalisation Group Discussion in Demands of Autonomy in Different Parts of the Country Comparative Analysis on Government's Response to Regional Aspirations Comparative Analysis-Different Developments in Indian taking place in present scenario with that of twentieth century	
DEC	REVISION - Completion of left over Practicals and PROJECTS , PRE BOARD -1		
JAN	AISSCE (CBSE) Board's Practical , PRE BOARD -2		

ECONOMICS

MONTH	Units/Subunits/ Topics/ Chapters to be Covered	Details of Activity /Practical/ Projects to be given	Unit Tests /Formative Tests/Assignment
APRIL	Indian Economic development Development Experience (1947-1990) (a) Indian economy on the eve of Independence (b) Economic Planning - Indian Economy (1950-1990) (c) Features/Problems / Policies of Agriculture (institutional and technical reforms)/ Industry / Foreign trade.	Preparing detailed notes related various topics Flow chart for understanding the topics precisely Listing out the dates and factual information	
MAY	Indian Economic development Economic Reforms (a) Since 1991 - LPG Policies Liberation, Privatisation and Globalization Need, measures taken, critical appraisal (b) Human Capital Formation (c) Rural Development	Preparing detailed notes related various topics Flow chart for understanding the topics precisely Listing out the dates and factual information	Weekly test I Ch 1 Indian economy at the eve of independence Ch 2 Economic planning 1950 -90
JUNE	Basic Concepts of Macro		
JULY	Macro Economics (a) Circular flow of Income (b) National Income and Related Aggregate (c) Measurement of National Income	Preparing detailed notes related to various topics Flow chart for understanding the topics precisely Understanding the formulas and concepts of related national income	Weekly Test-2 National Income

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		aggregates Formula derivation related to product, income and expenditure method Numericals	
AUG	Indian Economic development: Demonetisation Macro Economics Money		
SEPT	Macro Economics Banking :Commercial Bank and Central Bank	Preparing detailed notes related to the various topics Flow charts for precisely understanding the topics Formulas and measures of money supply Learning the concept of money multiplier and credit creation by commercial banks. Tabulation Numericals	Send UP Examination FROM 08/09/2025 Sent up exam Indian economy at the eve of independence Economic planning 1950-90 Economic reforms -LPG Human capital formation Rural development Macro - National income
OCT	Macro Economics Government Budget Indian Economic development: (a)Employment (b)Environment and sustainable development (c) Comparative Economic development of India, Pakistan and China Project work for Boards	Preparing detailed notes related various topics Flow chart for understanding the topics precisely Listing out the dates and factual information	
NOV	Macro Economics (a)Aggregate demand & Related Concept (b)Income determination and multiplier (c)Excess & Deficient demand (d)Foreign Exchange Rate (e)Balance of Payment	Flow chart Formulas Numericals	
DEC	REVISION , Completion of leftover practical and projects , PRE BOARD -1		
JAN	AISSCE (CBSE) Board's Practical , PRE BOARD -2		

MATHEMATICS

APRIL	Unit-II: Algebra 1. Matrices Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operations on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non- commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries). 2. Determinants Determinant of a square matrix (up to 3 x 3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.		
MAY	UNIT I (relations and functions) Relations and functions Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and Onto functions. Inverse trigonometric functions: Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.	1. To verify that the relation R in the set L of all lines in a plane defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive. 2. To verify that the relation r in the set l of all lines in a plane, defined by $r = \{(l, m) : l \parallel m\}$ is an equivalence relation.	
JUNE	Unit III-calculus Continuity and differentiability: Continuity and differentiability, chain	3. To demonstrate a function which is not one-one but is onto. 4. To demonstrate a function which is	First weekly test monday 23 rd june 2025 Syllabus :

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	rule, derivatives of inverse trigonometric functions like $\sin^{-1} x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concept of exponential and Logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic Differentiation, derivative of functions expressed in parametric forms. Second order derivatives.	one-one but not onto.	1. determinant 2. Matrices 3. Relations and functions 4. Inverse trigonometric function
JULY	<p>Applications of derivatives: Applications of derivatives: rate of change of quantities, increasing/decreasing functions, Maxima and minima (first derivative test motivated geometrically and second derivative test Given as a provable tool). Simple problems (that illustrate basic principles and understanding of The subject as well as real-life situations).</p> <p>Integrals: Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, evaluation Of simple integrals of the following types and problems based on them.</p> $\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}},$ $\int \frac{dx}{ax^2 + bx + c}, \int \frac{px + q}{ax^2 + bx + c} dx.$ $\int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx$ $\int \sqrt{ax^2 + bx + c} dx,$ $\int (px + q)\sqrt{ax^2 + bx + c} dx$	<p>5. to draw the graph of $\sin^{-1} x$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$).</p> <p>6. To explore the principal value of the function $\sin^{-1} x$ using a unit circle.</p>	
AUG	<p>Indefinite Integral Continued Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.</p> <p>APPLICATIONS OF THE INTEGRALS: Applications in finding the area under simple curves, especially lines, circles/ parabolas/ ellipses (in standard form only).</p>	<p>7. To sketch the graphs of a^x and $\log_a x$ $a > 0, a \neq 1$ and to examine that they are mirror images of each other.</p>	<p>Second Weekly Test Monday 4th August 2025 Syllabus : 1. Calculus Unit III 1. Differential calculus 2. Indefinite and Definite Integral</p>
SEPT	<p>UNIT V LINEAR PROGRAMMING: Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).</p> <p>UNIT:IV VECTOR ALGEBRA: Vectors and scalars, magnitude and</p>	<p>8. To establish a relationship between common logarithm (to the base 10) and natural logarithm (to the base e) of the number x.</p>	<p>Send UP Exam FROM - 08/09/2025 Unit-II: Algebra 1. Matrices 2. Determinants Unit i (relations and functions) Inverse trigonometric functions: Unit iii-calculus Continuity and differentiability: Applications of derivatives: Integrals: Applications of the integrals:</p>

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	direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.		
OCT	THREE-DIMENSIONAL GEOMETRY: Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.	9. To find analytically the limit of a function $f(x)$ at $x = c$ and also to check the continuity of the function at that point.	
NOV	UNIT VI PROBABILITY: Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes theorem, Random variable and its probability distribution, mean of random variable. DIFFERENTIAL EQUATIONS: Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables. Solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type $\frac{dy}{dx} + py = q$, where p and q are functions of x or constants. $\frac{dx}{dy} + px = q$, where p and q are functions of y or constants.	10. To verify that for a function f to be continuous at given point x_0 , $\Delta y = f(x_0 + \Delta x) - f(x) $ is arbitrarily small provided Δx is sufficiently small.	
DEC	REVISION - Completion of left over Practicals and PROJECTS , PRE BOARD -1		
JAN	AISSCE (CBSE) Board's Practical , PRE BOARD -2		
INFORMATICS PRACTICES			
APRIL	Unit 2: Database Query using SQL Math functions: POWER(), ROUND(), MOD() Text functions: UCASE() / UPPER(), LCASE() / LOWER(), MID() / SUBSTRING() / SUBSTR(), LENGTH(), LEFT(),RIGHT(), INSTR(), LTRIM(), RTRIM(), TRIM(). Date-Time Functions: NOW(), DATE(), MONTH(),MONTHNAME(), YEAR(), DAY(), DAYNAME().	Practice of topics and Practical programs. Activities as specified in NCERT Textbook. 1. Create a new database called XII_IP_2022. 2. Open / Select / Load a database called XII_IP_2022. 3. Create a exstudent table with the student id, name, and marks as attributes where the student id is the primary key. 4.Display table structure of student table.	

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		<p>05 . Insert the details of three students in the above table.</p> <p>06.Display details of all students</p> <p>07. Delete the details of a student in the above table.</p> <p>8. Use the select command to get the details of the students with marks more than 480.</p> <p>9. Find the min, max, sum, and average of the marks in a student marks table.</p> <p>10. Create table customer (customer ID, customer Name, country) and store few records.</p> <p>11.Store few records in customer table.</p> <p>12.Find the total number of customers from each country in the table (customer ID, customer Name, country) using group by.</p> <p>13.Write a SQL query to order the (student ID, marks) table in descending order of the marks.</p>	
MAY	<p>Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (), using COUNT (*).</p> <p>Querying and manipulating data using- Group by, Having, and Order by clauses.</p>	<p>The practice of topics and Practical programs.</p> <p>Activities as specified in NCERT Textbook</p>	
JUNE	<p>Unit 1: Data Handling using Pandas and Data Visualization</p> <p>Introduction to Python libraries Pandas & Matplotlib.</p> <p>Data Structures in Pandas-</p> <p>Series: Creation of Series from ndarray, dictionary, scalar value, mathematical operations, Head and Tail functions, Selection, Indexing and Slicing.</p>	<p>The practice of topics and Practical programs and SQL.</p> <p>1.Write a program to generate a series of float numbers from 10.0 to 50.0 with an increment of 3.5 using user defined function.</p> <p>2.Write a program to generate a series of 10 numbers with a scalar value of 44 with user defined index 1-10.</p> <p>3.Create a panda's series of five items from a dictionary, display 2nd and 3rd item and then 1st and 4th item of series.</p> <p>4.Create a panda's series of five items from an array, display 2nd and 3rd item and then 1st and 4th item of the series.</p> <p>5.Create a data frame for examination results and display row labels, column labels data types of each column and the dimensions.</p> <p>6.Create the following DataFrame Sales containing year wise sales figures for five salespersons in INR. Use the years as column labels, and salesperson names as row .</p> <p>7.Consider above sales dataframe and write code to display the last two rows of Sales dataframe using different method.</p> <p>8.Consider sales dataframe and write code to display the first two columns of Sales dataframe using different methods.</p>	
JULY	DataFrames: creation from the	9.Use above dataframe sales and	Monday Test 1

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	dictionary of Series, list of dictionaries, Text/CSV files display iteration Operations on rows and columns: add, select, delete, rename Head and Tail functions Indexing using Labels, Boolean Indexing.	do the following: 1. Change the DataFrame Sales such that it becomes its transpose. 2. Display the sales made by all sales persons in the year 2018. 3. Display the sales made by Kapil and Mohini in the year 2019 and 2020. 4. Add data to Sales for salesman Nirali where the sales made are [221, 178, 165, 177, 210] in the years [2018, 2019, 2020, 2021] respectively. 10. Use above dataframe sales and do the following: 1. Delete the data for the year 2018 from the DataFrame Sales. 2. Delete the data for sales man Shikhar from the DataFrame Sales. 3. Change the name of the salesperson Kamini to Rani and Kapil to Anil. 4. Update the sale made by Mohini in 118 to 150 in 2018.	07/07/2025 Unit -1.
AUG	Data Visualization Purpose of plotting; drawing and saving the following Types of plots using Matplotlib lineplot, bargraph, and histogram. Customizing plots: adding labels, titles, and legend in plots.	The practice of topics and Practical questions on Data Visualization.	Monday Test -2 25/08/25 Unit -1,2
SEPT	Unit 3: Introduction to Computer Networks Introduction to networks, Types of networks: LAN, MAN, WAN Network Devices: modem, hub, switch, repeater, router, gateway Network Topologies: Star, Bus, Tree, Mesh Introduction to Internet, URL, WWW, and its applications Web, email, Chat, VoIP. Website: Introduction, the difference between website and webpage, static vs dynamic web page, web server, and hosting of a website. Web Browsers: Introduction, commonly used browsers, browser settings, add-ons, plug-ins, cookies.		Send UP Examination FROM 08/09/2025 Unit -1,2,4
OCT	Unit 4: Societal Impacts Digital footprint, net, and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, free and open-source software (FOSS), cybercrime and cyber laws, hacking, phishing, cyberbullying, an overview of the Indian IT Act. E-waste: hazards and management. Awareness about health concerns related to the usage of technology.		
NOV	REVISION		
DEC	REVISION - Completion of left over Practicals and PROJECTS, PRE BOARD -1		
JAN	AISSCE (CBSE) Board's Practical, PRE BOARD -2		