

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT : ENGLISH**

MONTH	CHAPTERS TO BE TAUGHT	ACTIVITY/ PROJECT WORK/ GRAPH/ MAPWORK/SEA etc.
April (24 Days)	<ul style="list-style-type: none"> • The Last Lesson • Lost Spring • My Mother at Sixty-six • The Third Level • Notice writing • Job application • Comprehension exercises 	Display through presentation– A tribute to my teacher/ mother. Intra class Debate- ‘Education is the only remedy to poverty.’
May (08 Days)	<ul style="list-style-type: none"> • Keeping Quiet • Deep Water 	Share motivational videos on overcoming fear, power of determination. Hold a discussion on ‘Fear is a state of mind.’
June (15 Days)	<ul style="list-style-type: none"> • The Rattrap • The Tiger King • Invitation writing • Comprehension exercises 	News caster’s special report on ‘Christmas wonder’ based on ‘The Rattrap’
July (25 Days)	<ul style="list-style-type: none"> • Indigo • Journey to the End of the Earth • Poets and Pancakes • The Enemy • A Roadside Stand • A Thing of Beauty • Reply to invitation • Article Writing 	Infographic ‘Antarctica’
August (24 Days)	<ul style="list-style-type: none"> • Poets and Pancakes • A Roadside Stand • Comprehension (Case based) 	Spell bee / Vocabulary quiz
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST) Syllabus : Reading Skills : Comprehension Writing Skills: Notice Writing, Invitations, Job Application, Letter to Editor, Report Writing, Article Writing Literature : Flamingo :Prose- The Last Lesson , Lost Spring, Deep Water, The Rattrap, Indigo Poems- My Mother at Sixty-six, Keeping Quiet, A Thing of Beauty Vistas : The Third Level, The Tiger King , The Enemy		
September (23 Days)	<ul style="list-style-type: none"> • The Interview • Aunt Jennifer’s Tigers 	Panel discussion on teenage fantasy and reality- A teenager, a mother, a psychologist and a teacher.

	<ul style="list-style-type: none"> • Going Places 	
October (18 Days)	<ul style="list-style-type: none"> • Memories of Childhood -The Cutting of My Long Hair -We Too are Human Beings 	Mock interview
November (21 Days)	Revision of Writing Skills	
December (19 Days)	–	
January (25 Days)	–	

NOTE –

- COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024
- COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
- SECOND PRE-BOARD (X & XII) - TENTATIVELY IN THE SECOND WEEK OF DECEMBER.
- MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT : CHEMISTRY**

MONTH	CHAPTERS TO BE TAUGHT	PRACTICAL
April (24 Days)	Unit 1: Solutions Unit 2: Electrochemistry	Content Based Experiments
May(08 Days)	Unit 6: Haloalkanes and Haloarenes (Contd.)	Content Based Experiments (Contd.)
June (15 Days)	Unit 6: Haloalkanes and Haloarenes (To be Completed) Unit 7: Alcohols, Phenols and Ethers	Volumetric Analysis
July (25 Days)	Unit 3: Chemical Kinetics Unit 8: Aldehydes, Ketones and Carboxylic Acids(Contd.)	Volumetric Analysis(Contd.) Salt Analysis
August (24 Days)	Unit 8: Aldehydes, Ketones and Carboxylic Acids(To be Completed) Revision for Mid Term Examination	Salt Analysis (Contd.)
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST)		
September (23 Days)	Unit 9: Amines Unit 4: The d- and f- block elements	Salt Analysis (Contd.)
October (18 Days)	Unit 5: Coordination Compounds Unit 10: Biomolecules(Contd.)	Investigatory Project
November (21 Days)	Unit 10: Biomolecules(To be Completed) Revision for First Pre Board Examination	Revision
December (19 Days)	Revision for Second Pre Board Examination	Revision

January (25 Days)	Revision	
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NOTE –

- COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024
- COMPLETION OF SYLLABUS FOR GRADE VIII, IX& XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
- SECOND PRE-BOARD (X & XII) - TENTATIVELY IN THE SECOND WEEK OF DECEMBER.
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D.A.V.INSTITUTIONS, WEST BENGAL ZONE.

SPLIT UP SYLLABUS FOR THE SESSION 2024-2025

SUBJECT : BIOLOGY

CLASS : XII

MONTH	CHAPTERS AND CONTENT	PRACTICAL
APRIL (24 Days)	Chapter-2: Sexual Reproduction in Flowering Plants Chapter-5: Principles of Inheritance and Variation. Chapter-14: Ecosystem	1. Prepare a temporary mount to observe pollen germination. 2. Pollen germination on stigma through a permanent slide or scanning electron micrograph. 3. Flowers adapted to pollination by different agencies (wind, insects, birds). 4. Mendelian inheritance using seeds of different colour/sizes of any plant.
MAY (8 Days)	Chapter-3: Human Reproduction	5. 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.
HOLIDAY HOME WORK (SUMMER BREAK) : To prepare the investigatory project as per the guidelines .		
JUNE (15 Days)	Chapter-3: Human Reproduction (to be continued) Chapter-4: Reproductive Health	6. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice). 7. T.S. of blastula through permanent slides (Mammalian). 8. Meiosis in onion bud cell or grasshopper testis through permanent slides.
JULY (25 Days)	Chapter 15: Biodiversity and Conservation Chapter-6: Molecular Basis of Inheritance Chapter-7: Evolution	9. Prepare a temporary mount of onion root tip to study mitosis. 10. Flash cards models showing examples of homologous and analogous organs.
AUGUST (24 Days)	Chapter-10: Microbes in Human Welfare Chapter-13: Organisms and Populations	11. Study the plant population density by quadrat method. 12. Study the plant population frequency by quadrat method.
MID TERM EXAMINATION(TENTATIVELY 3RD WEEK OF AUGUST)		
SEPTEMBER (23 Days)	Chapter-11: Biotechnology and its Principles. Chapter 12: Biotechnology and its Application	13. Models specimen showing symbolic association in root modules of leguminous plants, Cuscuta on host, lichens. 14. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc
OCTOBER (18 Days)	Chapter 12: Biotechnology and its Application (To be continued) Chapter-8: Human Health and Diseases	15. Common disease causing organisms like <i>Ascaris</i> , <i>Entamoeba</i> , <i>Plasmodium</i> , any fungus causing ringworm through permanent slides,

		models or virtual images or specimens. Comment on symptoms of diseases that they cause. 16. Controlled Pollination - Emasculation, Tagging and Bagging
NOVEMBER (21 days)	Revision	
DECEMBER (19 Days)	Revision of All Chapters From Sample Papers.	
JANUARY (25 Days)	Revision For All Chapters.	

NOTE –

- COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024
- COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
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- MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT: MATHEMATICS (041)**

MONTH	CHAPTERS TO BE TAUGHT	ACTIVITY/ PROJECT WORK/ GRAPH/ MAPWORK/SEA etc.
April (24 Days)	Relations and Functions. (Excluding composition of function, inverse of a function and binary operation). Inverse trigonometric functions (excluding properties of inverse trigonometric function) Matrices (excluding elementary transformation) .	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 draw the graph of $\sin^{-1}x$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y = x$).
May(08 Days)	Matrices and determinants (excluding properties of determinants).	
June (15 Days)	Continuity and Differentiability. Derivatives (first order) of inverse trigonometric function, implicit function, exponential and logarithmic function and parametric differentiation and second order differentiation.	3. 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.
July (25 Days)	Application of derivatives: derivative as rate measure, increasing and decreasing function, maxima and minima (excluding approximations, tangent & normal). Indefinite integrals. Definite Integrals. (Definite integral as a limit of a sum excluded).	4. To understand the concept of decreasing and increasing functions. 5. To understand the concepts of local maxima, local minima and point of inflection.

August (24 Days)	Application of Integrals. Differential equation (Formation of differential equation deleted).	6. To construct an open box of maximum volume from a given rectangular sheet by cutting equal squares from each corner.
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST)		
September (23 Days)	Vectors (Scalar triple product deleted)	7. To verify that angle in a semi-circle is a right angle, using vector method. 8. To verify geometrically that $\vec{c} \times (\vec{a} + \vec{b}) = \vec{c} \times \vec{a} + \vec{c} \times \vec{b}$
October (18 Days)	Three -Dimensional Geometry (up to straight line).(Plane deleted) Probability (As per new syllabus 2024-25)	9. To measure the shortest distance between two skew lines and verify it analytically.
November (21 Days)	L.P.P (Mathematical formulation of L.P.P deleted) FIRST PREBOARD	10. To explain the computation of conditional probability of a given event A, when event B has already occurred, through an example of throwing a pair of dice.
December (19 Days)	Revision Work SECOND PRE BOARD	
January (25 Days)	Revision Work	

NOTE –

- COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024
- COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
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- MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT : APPLIED MATHEMATICS**

MONTH	CHAPTERS TO BE TAUGHT	ACTIVITY/ PROJECT WORK/ GRAPH/ MAPWORK/SEA etc.
April (24 Days)	<ul style="list-style-type: none">● Unit - 1 Numbers, Quantification and Numerical Applications (1.1 , 1.2, 1.4, 1.5, 1.6)● Unit – 2 Algebra (2.1 to 2.3) Matrices, Types of matrices, Equality of matrices, Transpose of a matrix, symmetric and skew symmetric matrices, Operation on matrices (up to matrix multiplication)	
May(08 Days)	<ul style="list-style-type: none">● Unit – 2 (contd...) Algebra (2.4 to 2.6) Determinant, Inverse of a matrix, Solving system of simultaneous equations using matrix method and Cramer’s rule.● Unit – 3 Calculus (3.1 and 3.2) Derivatives and its applications (Determine the rate of change of various quantities, Understand the gradient of tangent and normal to a curve at a given point, Write the equation of tangents and normal to a curve at a given point)	PROJECT: Each day the newspaper tells us about the maximum temperature, minimum temperature and humidity. Collect the data for a period of 30 days and represent it graphically. Compare it with the data available for the same time period for the previous year. (To be given to the students)
June (15 Days)	<ul style="list-style-type: none">● Unit – 3 Calculus (3.3 to 3.12) - (Contd...) Marginal Cost and Marginal Revenue using Derivatives, Increasing /Decreasing Functions, Maxima and Minima, Indefinite integrals, Definite integrals and area under the curve, Application of integration. Differential Equations and Modeling, Application of differential equations.	PRACTICAL 1: Matrix multiplication and inverse of matrix using spreadsheet.
July (25 Days)	<ul style="list-style-type: none">● Unit – 4 Probability Distributions(4.1 to 4.6)	PRACTICAL 2: Plot the graphs of functions on excel and study the graph to find

		out the point of maxima and/ or minima.
August (24 Days)	<ul style="list-style-type: none"> ● Unit – 5 Inferential Statistics (5.1 to 5.3)	
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST)		
September (23 Days)	<ul style="list-style-type: none"> ● Unit - 6 Index number and time based data (6.4 to 6.8) <ul style="list-style-type: none"> ● Unit - 7 Financial mathematics (7.1 , 7.3, 7.4 , 7.5, 7.7)	
October (18 Days)	<ul style="list-style-type: none"> ● Unit - 8 Linear Programming (8.1 to 8.6)	PRACTICAL 3: Collect data from newspapers on traffic, sports activities and market trends and use excel to study future trends.
November (21 Days)	<ul style="list-style-type: none"> ● Revision 	
December (19 Days)	<ul style="list-style-type: none"> ● Revision 	
January (25 Days)	<ul style="list-style-type: none"> ● Revision 	

NOTE –

- COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024
- COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
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- MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT : ECONOMICS**

MONTH	CHAPTERS TO BE TAUGHT	ACTIVITY/ PROJECT WORK/ GRAPH/ MAPWORK/SEA etc.
April (24 Days)	<ul style="list-style-type: none"> Indian Economy on the eve of independence. Basic concepts of Macroeconomics. (Up to circular flow of income)	Concept Map Pictorial Representation
May(08 Days)	<ul style="list-style-type: none"> Indian Economy 1950- 1990 Money and Banking. 	Group wise class presentation by students
June (15 Days)	<ul style="list-style-type: none"> Indian Economy 1950- 1990 (to complete) Money and Banking (to complete) 	Mind Map
July (25 Days)	<ul style="list-style-type: none"> Liberalization, Privatization and Globalization: An appraisal. Human Capital Formation (to start). National Income and related aggregates. Measurements of National Income. 	Infographics
August (24 Days)	<ul style="list-style-type: none"> Human Capital Formation (to complete) Rural development 	Class presentation by students
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST)		
September (23 Days)	<ul style="list-style-type: none"> Government budget and the economy. Foreign Exchange Employment Balance of payments. 	Mind Map
October (18 Days)	<ul style="list-style-type: none"> Environment and sustainable development. Theory of income and employment. 	Mind map to summarise the chapter. Diagrammatic representations
November (21 Days)	<ul style="list-style-type: none"> Comparative development experience of India and its neighbours. Theory of income and employment (to complete) 	Class presentation Quiz
December (19 Days)	-----	
January (25 Days)		

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- COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024
- FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.
- SECOND PRE-BOARD (X & XII) - TENTATIVELY IN THE SECOND WEEK OF DECEMBER.
- MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.

D.A.V. INSTITUTIONS, WEST BENGAL ZONE**SESSION: 2024–2025****MONTH-WISE BIFURCATED SYLLABUS****CLASS: XII****SUBJECT : COMPUTER SCIENCE**

MONTH	CHAPTERS TO BE TAUGHT	PRACTICAL
April (24 Days)	Computational Thinking and Programming – 2 -Revision of Python topics covered in Class XI. Functions- Introduction, types of function (built-in functions, functions defined in module, user defined functions)	Practical on Revision of Python Topics covered in Class XI.
May(08 Days)	Functions: creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)	Practical on Python using User defined Functions with List, Tuple, Dictionary, Local and Global variables, LEGB Scope
June (15 Days)	Database Management <ul style="list-style-type: none">• Database concepts,• Relational data model• Structured Query Language: SQL Queries based on DDL, DML Commands and Aggregate Functions.	Practical on Database Using MYSQL with Queries.
July (25 Days)	Database Management <ul style="list-style-type: none">• Structured Query Language: Join Operations.• Interface of python with an SQL database Exception Handling: Introduction, handling exceptions using try-except-finally blocks Data File Handling: Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths. <ul style="list-style-type: none">• Text file Operations	Practical on Database Using MYSQL with Queries and Python with MYSQL Connectivity. Practical on exception handling Practical on File Operations: Text File, Binary File and CSV File
August (24 Days)	Data File Handling <ul style="list-style-type: none">• Binary file Operations• CSV File Operations	Practical on File Operations: Text File, Binary File and CSV File
MID TERM EXAMINATION (TENTATIVELY 3RD WEEK OF AUGUST)		
September (23 Days)	Data Structure: Stack and its Operations using List, Implementation of stack using list. (Infix to Postfix conversion using Stack, Evaluation of Postfix Expression using Stack.)	Practical on Stack Using List in Python
October (18 Days)	Computer Networks: Evolution of networking, Data communication	Practical: Revision of Data File Handling and SQL Queries,

	terminologies, Transmission media, Network topologies and Network types.	FINAL PROJECT WORK
November (21 Days)	Computer Networks: Network devices, Network protocol, Introduction to web services. Revision	
December (19 Days)	Revision Preboard-I	
January (25 Days)	Preboard-II	

D.A.V. INSTITUTIONS, WEST BENGAL ZONE

SESSION: 2024-2025

MONTH-WISE BIFURCATED SYLLABUS

CLASS: XII

SUBJECT: PHYSICAL EDUCATION (048)

MONTH	CHAPTERS TO BE TAUGHT	PRACTICAL WORK
March (15 Days)	Unit I- Management of Sporting Events	1. Anyone IOA recognised Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.
April (24 Days)	Unit II- Children & Women in Sports	
May (08 Days)	Unit III- Yoga as Preventive measure for Lifestyle Disease	
HOLIDAY HOME WORK (SUMMER BREAK) : - Anyone IOA recognised Sport/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.		
June (15 Days)	Unit IV- Physical Education & Sports for CWSN (Children with Special Needs - Divyang)	2. Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease
July (25 Days)	Unit V- Sports & Nutrition Unit VI- Test & Measurement in Sports	
August (24 Days)	Unit VI- Test & Measurement in Sports (Remaining Part) REVISION (UNIT-1 TO UNIT-5)	
PORTION FOR MIDTERM EXAMINATION: (THIRD WEEK OF AUGUST) 1. Unit I Management of Sporting Events 2. Unit II Children & Women in Sports 3. Unit III Yoga as Preventive measure for Lifestyle Disease 4. Unit IV Physical Education & Sports for CWSN (Children with Special Needs - Divyang) 5. Unit V Sports & Nutrition		
September (23 Days)	Unit VII- Physiology & Injuries in Sports Unit VIII- Biomechanics & Sports	Fitness tests administration. (SAI Khelo India Test)
October (18 Days)	Unit IX- Psychology & Sports	
November (21 Days)	Unit X- Training in Sports	
December (19 Days)	Revision (UNIT-1 TO UNIT-10)	

NOTE :-

COMPLETION OF SYLLABUS FOR GRADE X & XII – 09.11.2024

COMPLETION OF SYLLABUS FOR GRADE VIII, IX & XI – 24.12.2024

FIRST PRE-BOARD (X & XII) – TENTATIVELY IN THE LAST WEEK OF NOVEMBER.

SECOND PRE-BOARD (X & XII) - TENTATIVELY IN THE SECOND WEEK OF DECEMBER.

MOCK TEST FOR GRADE VIII, IX & XI – TENTATIVELY IN THE FIRST WEEK OF JANUARY.