



NOPANY HIGH

(I.C.S.E. & I.S.C Affiliated)
2-C, Nando Mullick Lane, Kolkata – 700006

Syllabus for Unit-I

Academic Session: (2025-2026)

Class-XII(Comm.)

SUBJECT : ENGLISH LANGUAGE

Textbook Name : Total English
Publisher : Morning Star

MONTH	TOPIC	NO. OF PERIODS	WORKSHEETS/ACTIVITY
April'25	1. Statement of Purpose	4	
	2. Class Test	1	
	3. Test paper 2 (grammar)	1	Worksheet
May'25	1. Film Review	4	Worksheet
June'25	1. Cultural review	3	Worksheet
July'25	1. Test paper 3	1	
	2. Test paper 4	1	
	3. Test paper 5	1	
	4. Test paper 6	1	Worksheet
	5. Class test	1	
	6. Proposal writing (revision)	2	
	7. Article writing (revision)	2	
Aug'25	1. Report writing (revision)	2	Worksheet
	2. Speech Writing (revision)	2	
	3. Test paper 7 and 8	2	
Oct'25	1. Test paper 9	1	
	2. Test paper 10	1	
	3. Class test	1	Worksheet
	4. Test paper 11	1	

	5. Test paper 12	1	
Nov'25	1. Test paper 13	1	
	2. Test paper 14	1	
	3. Test paper 15	1	
	4. Class test	1	Worksheet
	5. Revision	2	
Project	An Autobiographical experience		Submission date - 31st July 2024
Note: The above mentioned no. of periods may vary			

SUBJECT : ENGLISH LITERATURE (SCIENCE, HUMANITIES AND COMMERCE)			
Textbook Name : Prism, Rhapsody and Macbeth			
Publisher : Evergreen Publication and Oxford			
MONTH	TOPIC	NO. OF PERIODS	WORKSHEETS/ACTIVITY
<u>Unit I</u> April 25	Atithi	8	
	Indigo	5	
May 25	Small Towns and Rivers	3	
	Tithonus		
June 25	There Will Come Soft Rains	5	
	The Cookie Lady	5	
July 25	Death Not be Proud	2	
	Macbeth Act III	5	
August 25	Macbeth Act IV	5	
			Sample Questions
<u>Unit II</u> October 24	Macbeth Act V	8	
	Telephonic Conversation	3	
November 24	Beethoven	3	
	The Medicine Bag	5	
	Revision		ISC Paper Solve
Project	To be discussed in class		Submission Date - 1st August 2025

SUBJECT : Hindi

Textbook 1. Name : व्याकरण मंजूषा
 Publisher : एवरग्रीन पब्लिकेशन
 Text book 2. Name : गद्य संकलन
 Publisher : एवरग्रीन पब्लिकेशन
 Text book 3. Name : काव्य मंजूरी
 Publisher : एवरग्रीन पब्लिकेशन
 Text book 4 . Name : सारा आकाश (उपन्यास)
 Publisher : राजेन्द्र प्रसाद

MONTH	TOPIC	NO. OF PERIODS	WORKSHEETS/ACTIVITY
April 25	1. दासी	5	Worksheet will be provided
	Class Test	1	
	2. नदी के द्वीप	5	Worksheet will be provided
	Class Test	1	
	3. मुहावरे	2	
May'25	Class Test	1	
	1. सारा आकाश (उत्तरार्द्ध) भाग 1 - 3	4	Worksheet will be provided
	Class Test	1	
	2. अशुद्ध वाक्यों को शुद्ध करिए	2	
	Class Test	1	
Jun'25	1. क्या निराश हुआ जाए	5	Worksheet will be provided
	Class Test	1	
	2. सारा आकाश भाग 4 - 6	4	Worksheet will be provided
	Class Test	1	
	3. अपठित गद्यांश	2	
July'25	1. जाग तुझको दूर जाना	5	Worksheet will be provided
	Class Test	1	

	सारा आकाश भाग 7 - 10	4	Work sheet will be provided
	Class test	1	
	निबंध लेखन	2	
Aug 25	अपठित गद्यांश	2	
	अशुद्ध वाक्यों को शुद्ध करिए	2	
	निबंध लेखन	2	
	Hindi Project परियोजना कार्य	2	
Sep 25	1. भक्तिन	5	Work sheet will be provided
	Class Test		
	2. उद्यमी नर	5	
	Class Test	1	
Octo	निबंध	2	
	1. संस्कृति क्या है	5	
	Class Test	1	
Nov 25	2. मुहावरे	2	
	बादल को घिरते देखा है	5	
Dec 25	Class Test	1	
	अपठित गद्यांश	2	
	सारा आकाश	2	
	अशुद्ध वाक्यों को शुद्ध करिए	2	
	निबंध	2	
	मुहावरे	2	
Revision			

SUBJECT : Bengali (2nd language)

Textbook Name : ISC প্রবন্ধ ও গদ্য সংকলন, ISC কবিতা সংকলন

Publisher : Power Publishers & Cambridge Educational Publishers

MONTH	TOPIC	NO.OF PERIODS	WORKSHEETS/ACTIVITY
April'25	আদাব	2	Classnotes
	লছমেনের মা	8	Classnotes
	যদি নির্বাসন দাও	2	Classnotes
May'25	একটি তুলসি গাছের কাহিনী	6	Classnotes
	Project Explanation	1	
June'25	রাস্তা কারোর একার নয়	4	Classnotes
	স্বাধীনতা তুমি	4	Classnotes
July'25	কোনি (chapter ৭-১১)	18	Classnotes
Aug'25	না-পাহারার পরীক্ষা	4	Classnotes
	নুন	2	Classnotes
	কোনি (chapter ১২-১৩)	7	Classnotes
	বোধ পরীক্ষন	2	Worksheet
Oct'25	কোনি (chapter ১৪)	5	Classnotes
	গল্প লিখন	2	Worksheet
Nov'25	ব্যাকরণ	8	Worksheet
	Revision	6	
Dec'25	Revision		

SUBJECT : ECONOMICS

Textbook Name :ISC Economics

Author :D K Sethi

Publisher :Frank Bros & co.

MONTH	TOPIC	NO.OF PERIODS	WORKSHEETS/ACTIVITY
April'25	1.Microeconomics and Macroeconomics Introduction.	2	

	2. Demand & Law of Demand.	9	Worksheets will be provided
	Class Test	1	
	3. Theory of Consumer Behaviour	7	Project will be given.
	4. Elasticity of Demand	8	Worksheets will be provided
	Class Test	1	
May'25	1.. Supply – law of supply & price elasticity of supply	9	Worksheet will be provided
	2.. Market Mechanism, Equilibrium Price and Quantity.	9	Worksheets will be provided.
June'25	1.. Laws of Returns – Returns to Factors and Returns to Scale	8	
	Class Test	1	
	2.Cost & Revenue	3	
July'25	1.. Cost & Revenue(continuation)	6	Worksheets will be provided
	2. Producer's Equilibrium	5	Worksheets will be provided
	3. Forms of Market	4	
	Class test	1	
	4. Determination of Equilibrium Price & Output under Perfect Competition	4	Worksheets will be Provided.
August'25	1. Money: Meaning & Functions	5	.
	2. Banks: Commercial and Central Banks	8	Worksheets will be provided.
	Class Test	1	
	3. Fiscal Policy	7	Worksheets will be given
	4. Government Budget	6	
September'25	Revision	5	
	Unit 1		
October'25	1.Balance of Payment & Exchange Rate	6	Worksheets will be provided.
	2. NI and Circular Flow of Income.	4	Project -2 will be given.
	Class Test	1	
	Project	1	Project 2 discussed in class.
November'25	1 NI Aggregates	8	Worksheets will be provided.
	2 Methods of Measuring NI.	9	
	Class Test	1	
December'25	Revision	8	Worksheets will be provided.
	Preboards		

SUBJECT : COMMERCE

Textbook Name : ISC Commerce Vol. II

Author : C.B. Gupta

Publisher : S. Chand

MONTH	TOPIC UT-I	NO. OF PERIODS	WORKSHEETS/ACTIVITY
April'25	1. Capital- Fixed and Working 2. Sources of Finance for a Joint Stock Company	4 8	Worksheets will be provided for the mentioned chapters
	Class Test	1	
May'25	1. Banking – Latest trends 2. Marketing – Concept and Functions 3. Marketing Mix	3 4 6	Worksheets will be provided for the mentioned chapter
	Class Test	1	
June'25	1. Management – Meaning, Nature and Importance	4	Worksheets will be provided for the mentioned chapters
	2. Principles of Management	6	
	Class Test	1	
July'25	1. Planning 2. Organising 3. Staffing	7 6 6	Worksheets will be provided for the mentioned chapters
	Class test	2	
August'25	1. Directing 2. Controlling	8 4	
	Class Test	2	Worksheets will be provided for the mentioned chapters
	Revision for UT-I	4	
PRE-BOARD			
October '25	1. Functions of Management and Coordination 2. Business Environment Class Test	3 5 2	Worksheets will be provided for the mentioned chapters
November '25	1. Consumer Protection Class Test Revision	8 1 4	Worksheets will be provided for the mentioned chapters

- All mentioned periods are approximate
- All chapters of UT- I are included in Pre-board
- Projects as per CISCE guidelines will be discussed in the class.

SUBJECT : ACCOUNTS

Textbook Name : Double Entry Book Keeping and Management Accounting

Author : T.S. Grewal

Publisher : Sultan Chand

MONTH	TOPIC UT-I	NO. OF PERIODS	WORKSHEETS/ACTIVITY
April'25	1. Financial Statement Analysis	2	Worksheets will be provided for the mentioned chapters
	2. Comparative Statement and Common Size Statement.	8	
	3. Ratio Analysis	10	
	4. Joint Stock Company – Issue of Shares	6	
	Class Test	2	
May'25	1. Joint Stock Company – Issue of Shares	5	Worksheets will be provided for the mentioned chapter
	2. Final Accounts of Company, Schedule III, Part I of the Companies Act, 2013	6	
	Class Test	1	
June'25	1. Joint Stock Company – Issue of Debentures	5	Worksheets will be provided for the mentioned chapters
	2. Partnership Accounts – Fundamentals	8	
	Class Test	1	
July'25	1. Joint Stock Company – Redemption of Debentures	10	Worksheets will be provided for the mentioned chapters
	2. Partnership Accounts – Fundamental	10	
	3. Goodwill: Concept and Mode of Valuation	10	
	4. Admission of a Partner	6	
	Class Test	3	
August'25	1. Admission of a Partner	10	Worksheets will be provided for the mentioned chapters
	2. Retirement of a Partner	10	
	3. Cash Flow Analysis	14	
	Revision for UT-I	6	
PRE-BOARD			
October '25	1. Death of a Partner	12	Worksheets will be provided for the mentioned chapters
	2. Dissolution of Partnership Firm	4	
	Class Test	1	

November '25	1. Dissolution of Partnership Firm	14	Worksheets will be provided for the mentioned chapters
	Class Test	2	
	Revision for Pre-board	8	

Note:

- All mentioned periods are approximate
- All chapters of UT- I are included in Pre-board
- Projects as per CISCE guidelines will be discussed in the class.

SUBJECT : BUSINESS STUDIES

Textbook Name : ISC Business Studies

Author : C. B. Gupta

Publisher : Goyal Brothers Prakashan

MONTH	TOPIC	NO. OF PERIODS	WORKSHEETS/ACTIVITY
April'24	Ch 1 - Introduction to Human Resource Management	3	
	Class Test	1	
	Ch 2 - Job Analysis and Manpower Planning	4	
	Class Test	1	
	Ch 3 - Staff Recruitment	3	Worksheet
May'24	Class Test	1	
	Ch 4 - Staff Selection	3	
	Class Test	1	
	Ch 5 - Staff Training	4	
	Class Test	1	
June'24	Ch 6 - Staff Morale	3	
	Class Test	1	
	Ch 7 - Staff Motivation	4	
July'24	Class Test	1	
	Ch 8 - Staff Remuneration	4	Worksheet
	Class Test	1	
	Ch 9 - Staff Leadership	3	
	Class Test	1	

	Ch 10 - Staff Appraisal	3	
	Class Test	1	
	Ch 11 - Staff Promotion and Transfer	3	
	Class Test	1	
	Ch 12 - Staff Separation	3	
	Class Test	1	
	Ch 13 - Emerging Trends in Human Resources	1	
August'24	Ch 14 - Business Communication	6	
	Class Test	1	
October'24	Ch 16 - Reports and Report Writing	3	
	Class Test	1	
	Ch 17 - Various Business Entities	2	
	Class Test	1	
	Ch 18 - Sources of Business Finance	5	
	Class Test	1	
November'24	Ch 19 - Globalisation	2	
	Class Test	1	
	Ch 20 - E Business	3	Worksheet
	Class Test	1	
	Ch 21 - Outsourcing	2	
	Class Test	1	
	Ch 22 - Business Regulators and Intermediaries	5	
December'24	Class Test	1	
	Ch 15 - Business Correspondence	4	

SUBJECT :COMPUTER SCIENCE

Textbook Name : Understanding ISC Computer Science (Java with BlueJ) Class XII			
Publisher : Arya Publishing Company			
Author Name : Vijay Kumar Pandey and Dilip Kumar Dey			
MONTH	TOPIC	NO.OF PERIODS	WORKSHEETS/ACTIVITY
April'25	Chapter 1: Boolean Algebra	10	Worksheet
May'25	Chapter 1:	12	Worksheet

	Boolean Algebra(Cont.)		
	Class Test (Theory)	1	
June'25	Chapter 2: Computer Hardware	9	Worksheet
July'25	Chapter 2: Computer Hardware(Cont.)	15	
	Class Test (Theory)	1	
	Chapter 3: Implementation of Algorithms to Solve Problems	3	
	Chapter 4: Objects and classes	1	Worksheet
	Chapter 5: Data Types and Variables	1	Lab Activity
	Chapter 6: Statements and Scope	2	
Aug'25	Chapter 7: String Manipulations	7	Lab Activity
	Chapter 7: Arrays	7	Lab Activity
	Chapter 8: Methods	7	Lab Activity
Sept'25	Revision	5	
Oct'25	Chapter 12: Inheritance, Interfaces and Polymorphism	10	
Nov'25	Chapter 13: Data Structure	8	
	Chapter 14: Computational Complexity	2	
Dec'25	Class Test (Theory)	1	
	Revision	4	
Project			Total 15 programs to be done as a part of Unit I project. List of programs will be provided later. Total 15 programs to be done as a part of Unit II project. List of programs will be provided later.
* Note: No. of Periods mentioned may vary			

SUBJECT: ENVIRONMENTAL SCIENCE

Text book Name: ISC ENVIRONMENTAL SCIENCE Author : AMITA GANGULY
Publisher : MARINA

MONTH	TOPIC	NO.OF PERIODS	WORKSHEETS/ACTIVITY
April'25	1.HUMAN BEINGS	4	Worksheet will be provided
	Class Test	1	
	2.POPULATION ECOLOGY	6	Worksheet will be provided
	Class Test	1	

May'25	3.CONSERVATION ECOLOGY	6	Worksheet will be provided
	Class Test	1	
June'25	4.CONSERVATION ECOLOGY	8	Worksheet will be provided
	Class Test	1	
			Worksheet will be provided
July'25	5.POLLUTION MONITORING	6	Worksheet will be provided
	Class test	1	
August'25	6. THE THIRD WORLD DEVELOPMENT	6	Worksheet will be provided
	Class test	1	
Sept'25	REVISION		Worksheet will be provided
Oct'25	7. ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS	8	Worksheet will be provided
	Class test	1	
Nov'25	8.INTERNATIONAL RELATIONS AND THE ENVIRONMENT	8	Worksheet will be provided
	Class test	1	
	REVISION		
Dec'24	PRE-BOARD		

SUBJECT: PHYSICAL TRAINING (P.T.) & GAMES.

MONTH	TOPIC	NO. OF PERIODS	ACTIVITY
April'24	1. FITNESSGRAM	3	<ul style="list-style-type: none"> • FREE HAND EXERCISES
	Class Test	1	
	2. CRICKET	3	<ul style="list-style-type: none"> • RULES RAGULATIONS • TECHNIQUES AND SKILLS
	Class Test	1	
May'24	1. FITNESSGRAM	3	<ul style="list-style-type: none"> • FREE HAND EXERCISES
	Class Test	1	
	2. BADNINTON	3	<ul style="list-style-type: none"> • RULES RAGULATIONS • TECHNIQUES AND SKILLS
	Class Test	1	
June'24	1. MASS DRILL & FITNESSGRAM	3	<ul style="list-style-type: none"> • CALLISTHENICS, AEROBICS & YOGA.
	Class Test	1	
	2. BASKET BALL	3	<ul style="list-style-type: none"> • RULES RAGULATIONS • TECHNIQUES AND SKILLS
	Class Test	1	
July'24	1. MASS DRILL & FITNESSGRAM	3	<ul style="list-style-type: none"> • CALLISTHENICS, AEROBICS & YOGA.
	Class Test	1	
	2. FOOTBALL	3	<ul style="list-style-type: none"> • RULES RAGULATIONS • TECHNIQUES AND SKILLS
	Class Test	1	
August'24	1. MASS DRILL & FITNESSGRAM	3	<ul style="list-style-type: none"> • CALLISTHENICS, AEROBICS & YOGA.
	Class Test	1	
	2. TABLE TENNIS, CHESS & CARROM	3	<ul style="list-style-type: none"> • RULES RAGULATIONS • TECHNIQUES AND SKILLS
	Class Test	1	

SUBJECT : MATHEMATICS

Textbook Name : *ISC Mathematics (XII) (Volume I & II)*

Author : *M L AGGARWAL*

Publisher : *Avichal Publishing Company*

MONTH	TOPIC	NO.OF PERIODS	WORKSHEETS /ACTIVITY
April'25	<p style="text-align: center;">SECTION - A</p> <p>1. Relations and Functions</p> <ul style="list-style-type: none"> • <i>Relations as:</i> <ul style="list-style-type: none"> ➤ <i>Relation on a set A</i> ➤ <i>Identity relation, empty relation, universal relation.</i> ➤ <i>Types of Relations: reflexive, symmetric, transitive and equivalence relation.</i> • <i>Binary Operation: all axioms and properties</i> <ul style="list-style-type: none"> • <i>Functions:</i> <ul style="list-style-type: none"> ➤ <i>As special relations, concept of writing "y is a function of x" as $y = f(x)$.</i> ➤ <i>Types: one to one, many to one, into, onto.</i> <ul style="list-style-type: none"> ➤ <i>Real Valued function.</i> ➤ <i>Domain and range of a function.</i> ➤ <i>Conditions of invertibility.</i> ➤ <i>Composite functions and invertible functions (algebraic functions only).</i> 	5	Worksheet will be provided
	Class Test	1	
	<p>2. Inverse Trigonometric Functions</p> <p>Definition, domain, range, principal value branch.</p> <p>Graphs of inverse trigonometric functions.</p> <p>Elementary properties of inverse trigonometric functions.</p> <ul style="list-style-type: none"> ➤ <i>Principal values.</i> ➤ <i>$\sin^{-1}x, \cos^{-1}x, \tan^{-1}x$ etc. and their graphs.</i> ➤ <i>-Formulae for $2\sin^{-1}x, 2\cos^{-1}x, 2\tan^{-1}x, 3\tan^{-1}x$ etc. and application of these formulae.</i> 	5	Worksheet will be provided
	Class Test	1	
	<p>3. Matrices</p> <p>Concept, notation, order, equality, types of matrices,</p>	6	Worksheet will be provided

	<ul style="list-style-type: none"> • zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. • Operation on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. <p>Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order upto 3).</p> <ul style="list-style-type: none"> • Concept of elementary row and column operations. • Invertible matrices and proof of the uniqueness of inverse, if it exists (here all matrices will have real entries). 		
May'25	<ul style="list-style-type: none"> • Determinants • Determinant of a square matrix (up to 3×3 matrices), • Properties of determinants, 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. • <i>Types of matrices ($m \times n$; $m, n \leq 3$), order; Identity matrix, Diagonal matrix.</i> <ul style="list-style-type: none"> • <i>Symmetric, Skew symmetric.</i> • <i>Operation – addition, subtraction, 3. multiplication of a matrix with scalar, multiplication of two matrices (the compatibility).</i> <ul style="list-style-type: none"> • <i>Singular and non-singular matrices.</i> • <i>Existence of two non-zero matrices whose product is a zero matrix.</i> <ul style="list-style-type: none"> • <i>Inverse (2×2, 3×3)</i> • <i>Martin's Rule (i.e. using matrices)</i> <ul style="list-style-type: none"> • <i>Problems based on above.</i> <p><i>NOTE 1: The conditions for consistency of equations in two and three variables, using matrices, are to be covered.</i></p> <p><i>NOTE 2: Inverse of a matrix by elementary operations to be covered.</i></p> <p><i>Determinants - Order.</i></p> <p><i>➤ Minors.</i></p>	8	Worksheet will be provided

	<ul style="list-style-type: none"> ➤ Cofactors. ➤ Expansion. ➤ Applications of determinants in finding the area of triangle and collinearity. <ul style="list-style-type: none"> • Properties of determinants. Problems based on properties of determinants. 		
	Class Test	1	
May '25	<p>5. Continuity & Differentiability</p> <p>Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.</p> <ul style="list-style-type: none"> • Continuity <ul style="list-style-type: none"> ➤ Continuity of a function at a point $x = a$. ➤ Continuity of a function in an interval. <ul style="list-style-type: none"> ➤ Algebra of continuous function. ➤ Removable discontinuity. • Differentiation <ul style="list-style-type: none"> ➤ Concept of continuity and differentiability of x, $[x]$, etc. ➤ Derivatives of trigonometric functions. ➤ Derivatives of exponential functions. ➤ Derivatives of logarithmic functions. ➤ Derivatives of inverse trigonometric functions - differentiation by means of substitution. ➤ Derivatives of implicit functions and chain rule. <ul style="list-style-type: none"> ➤ e for composite functions. ➤ Derivatives of Parametric functions. <ul style="list-style-type: none"> ➤ Differentiation of a function with respect to another function e.g. differentiation of $\sin x^3$ with respect to x^3. ➤ Logarithmic Differentiation - Finding dy/dx when $y = x^{xx}$. ➤ Successive differentiation up to 2nd order. <p>NOTE 1: Derivatives of composite functions using chain rule.</p> <p>NOTE 2: Derivatives of determinants to be covered.</p> <ul style="list-style-type: none"> • L' Hospital's theorem. • Rolle's Mean Value Theorem - its geometrical interpretation. • Lagrange's Mean Value Theorem - its geometrical interpretation. 	15	Worksheet will be provided

	Class Test	1	
June'25	<p>6. Integrals</p> <p><i>Indefinite integral</i></p> <ul style="list-style-type: none"> ➤ <i>Integration as the inverse of differentiation.</i> ➤ <i>Anti-derivatives of polynomials and functions $(ax + b)^n$, $\sin x$, $\cos x$, $\sec^2 x$, $\operatorname{cosec}^2 x$ etc .</i> ➤ <i>Integrals of the type $\sin^2 x$, $\sin^3 x$, $\sin^4 x$, $\cos^2 x$, $\cos^3 x$, $\cos^4 x$.</i> <ul style="list-style-type: none"> ➤ <i>Integration of $1/x$, e^x.</i> ➤ <i>Integration by substitution.</i> ➤ <i>Integrals of the type $f'(x)[f(x)]^n$</i> ➤ <i>Integration of $\tan x$, $\cot x$, $\sec x$, $\operatorname{cosec} x$.</i> <ul style="list-style-type: none"> ➤ <i>Integration by parts.</i> ➤ <i>Integration using partial fractions.</i> 	15	Worksheet will be provided
	Class Test	1	
July , 25	<p>7. Application of Derivatives</p> <p>Equation of a tangent and normal</p> <p>Rate measure</p> <p>Increasing and decreasing function</p> <p>Maxima and minima .</p> <p>--stationary / turning points</p> <p>--Absolute maxima / minima</p> <p>--local maxima / minima</p> <p>--First derivative test and second derivative test</p> <p>--Application problems based on maxima and minima .</p>	15	
	Class Test	1	
August'25	<p>SECTION B</p> <p>Vectors</p> <ul style="list-style-type: none"> ➤ <i>As directed line segments.</i> ➤ <i>Magnitude and direction of a vector.</i> ➤ <i>Types: equal vectors, unit vectors, zero vector.</i> <ul style="list-style-type: none"> ➤ <i>Position vector.</i> ➤ <i>Components of a vector.</i> ➤ <i>Vectors in two and three dimensions.</i> ➤ <i>\hat{i}, \hat{j}, \hat{k} as unit vectors along the x, y and the z axes; expressing a vector in terms of the unit vectors.</i> ➤ <i>Operations: Sum and Difference of vectors; scalar multiplication of a vector.</i> <ul style="list-style-type: none"> ➤ <i>Section formula.</i> ➤ <i>Triangle inequalities.</i> ➤ <i>Scalar (dot) product of vectors and its geometrical significance.</i> ➤ <i>Cross product - its properties - area of a triangle, area of parallelogram, collinear vectors.</i> 	10	Worksheet will be provided

	<p>➤ Scalar triple product - volume of a parallelepiped, co-planarity.</p> <p>NOTE: Proofs of geometrical theorems by using Vector algebra are excluded.</p>		
	Class Test	1	
August'25	<p>SECTION C</p> <p>Application of Calculus</p> <p>Application of Calculus in Commerce and Economics in the following:</p> <ul style="list-style-type: none"> ➤ Cost function, ➤ average cost, ➤ marginal cost and its interpretation ➤ demand function, ➤ revenue function, ➤ marginal revenue function and its interpretation, ➤ Profit function and breakeven point. ➤ Rough sketching of the following curves: <p>AR, MR, R, C, AC, MC and their mathematical interpretation using the concept of maxima & minima and increase- decreasing functions .</p> <p>NOTE: Application involving differentiation, integration, increasing and decreasing function and maxima and minima to be covered.</p>	8	Worksheet will be provided
	Class Test	1	

SUBJECT : SUPW			
Textbook Name : No Book			
MONTH	SUPW	NO.OF PERIODS	WORKSHEETS/ACTIVITY
April'25 to July' 26	Project 1	6	To Make a Fridge magnet in the shape of school logo.