

CHINMAYA VIDYALAYA, NEW DELHI
SYLLABUS: 2022-2023
CLASS XII

ENGLISH

MONTH	TOPIC
MARCH	<ul style="list-style-type: none">• THE LAST LESSON
APRIL	<ul style="list-style-type: none">• THE LAST LESSON (CONT.)• MY MOTHER AT SIXTY-SIX (POEM)• THE THIRD LEVEL (SUPP. RDR.)• LOST SPRING
MAY	<ul style="list-style-type: none">• THE RAT TRAP• DEEP WATER• INDIGO• KEEPING QUIET (POEM) • WRITING- NOTICE, LETTER TO THE EDITOR
JULY	<ul style="list-style-type: none">• A THING OF BEAUTY (POEM)• THE TIGER KING (SUPP. RDR.)• POETS AND PANCAKES • WRITING- JOB APPLICATION, ARTICLE WRITING
AUGUST	<ul style="list-style-type: none">• JOURNEY TO THE END OF THE EARTH (SUPP. RDR.)• AUNT JENNIFER'S TIGERS (POEM)• THE ENEMY (SUPP. RDR.) • WRITING: INVITATION
SEPTEMBER	<ul style="list-style-type: none">• EXAMINATION
OCTOBER	<ul style="list-style-type: none">• A ROADSIDE STAND (POEM)• THE INTERVIEW• GOING PLACES• ON THE FACE OF IT (SUPP. RDR.)• WRITING- JOB APPLICATION (REVISION)
NOVEMBER	<ul style="list-style-type: none">• MEMORIES OF CHILDHOOD (SUPP. RDR.)
DECEMBER	<ul style="list-style-type: none">• WRITING: REPORT WRITING• REVISION FOR BOARD EXAMINATION

MATHEMATICS

MONTH	UNIT WITH TOPIC
MARCH	<p style="text-align: center;">UNIT-I: RELATIONS AND FUNCTIONS</p> <p>1.1 RELATIONS AND FUNCTIONS</p> <ul style="list-style-type: none"> • TYPES OF RELATIONS: REFLEXIVE, SYMMETRIC, TRANSITIVE AND EQUIVALENCE RELATIONS. ONE TO ONE AND ONTO FUNCTIONS.
APRIL	<p>1.2 INVERSE TRIGONOMETRIC FUNCTIONS –</p> <ul style="list-style-type: none"> • DEFINITION, RANGE, DOMAIN, PRINCIPAL VALUE BRANCH. • GRAPHS OF INVERSE TRIGONOMETRIC FUNCTIONS ELEMENTARY PROPERTIES OF INVERSE TRIGONOMETRIC FUNCTIONS <p style="text-align: center;">UNIT-II: ALGEBRA</p> <p>2.1 MATRICES</p> <ul style="list-style-type: none"> • CONCEPT, NOTATION, ORDER, EQUALITY, TYPES OF MATRICES, 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 • NON-COMMUTATIVITY OF MULTIPLICATION OF MATRICES • EXISTENCE OF NON-ZERO MATRICES WHOSE PRODUCT IS THE ZERO MATRIX (RESTRICT TO SQUARE MATRICES OF ORDER)
MAY	<p style="text-align: center;">UNIT-II: ALGEBRA ... CONTINUED</p> <p>2.1 MATRICES</p> <ul style="list-style-type: none"> • INVERTIBLE MATRICES AND PROOF OF THE UNIQUENESS OF INVERSE, IF IT EXISTS; (HERE ALL MATRICES WILL HAVE REAL ENTRIES) <p>2.2 DETERMINANT</p> <ul style="list-style-type: none"> • 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 <p style="text-align: center;">UNIT-III: CALCULUS</p> <p>3.1 CONTINUITY AND DIFFERENTIABILITY</p> <ul style="list-style-type: none"> • CONTINUITY AND DIFFERENTIABILITY • DERIVATIVE OF COMPOSITE FUNCTIONS, CHAIN RULE • DERIVATIVE OF INVERSE TRIGONOMETRIC FUNCTIONS • DERIVATIVE OF IMPLICIT FUNCTIONS • CONCEPT OF EXPONENTIAL AND LOGARITHMIC FUNCTIONS.

MONTH	UNIT WITH TOPIC
	DERIVATIVES OF LOGARITHMIC AND EXPONENTIAL FUNCTION <ul style="list-style-type: none"> • LOGARITHMIC DIFFERENTIATION • DERIVATIVE OF FUNCTIONS EXPRESSED IN PARAMETRIC FORMS.
JULY	<p style="text-align: center;">UNIT-III: CALCULUS... CONTINUED</p> <p>3.1 CONTINUITY AND DIFFERENTIABILITY</p> <ul style="list-style-type: none"> • SECOND ORDER DERIVATIVES <p>3.2 APPLICATIONS OF DERIVATIVES</p> <ul style="list-style-type: none"> • RATE OF CHANGE OF BODIES • 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>3.3 INTEGRALS</p> <ul style="list-style-type: none"> • 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 $\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2+bx+c}}$ $\int \frac{px + q}{ax^2 + bx + c} dx, \int \frac{px + q}{\sqrt{ax^2+bx + c}} dx, \int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx$ $\int \sqrt{ax^2 + bx + c} dx, \int (px + q)\sqrt{ax^2 + bx + c} dx$ <ul style="list-style-type: none"> • FUNDAMENTAL THEOREM OF CALCULUS (WITHOUT PROOF) • BASIC PROPERTIES OF DEFINITE INTEGRALS AND EVALUATION OF DEFINITE INTEGRALS.
AUGUST	<p style="text-align: center;">UNIT-III: CALCULUS... CONTINUED</p> <p>3.4 APPLICATIONS OF THE INTEGRALS</p> <ul style="list-style-type: none"> • APPLICATIONS IN FINDING THE AREA UNDER SIMPLE CURVES, ESPECIALLY LINES, CIRCLES/ PARABOLAS/ELLIPSES (IN STANDARD FORM ONLY), <p>3.5 DIFFERENTIAL EQUATIONS</p> <ul style="list-style-type: none"> • 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:

MONTH	UNIT WITH TOPIC
	$\frac{dy}{dx} + py = q, \text{ where } p \text{ and } q \text{ are functions of } x \text{ or constants.}$ $\frac{dx}{dy} + px = q, \text{ where } p \text{ and } q \text{ are functions of } y \text{ or constants.}$
SEPTEMBER	<p style="text-align: center;">UNIT-V: LINEAR PROGRAMMING</p> <p>5.1 LINEAR PROGRAMMING</p> <ul style="list-style-type: none"> • INTRODUCTION, RELATED TERMINOLOGY SUCH AS CONSTRAINTS • OBJECTIVE FUNCTION, OPTIMIZATION, DIFFERENT TYPES OF LINEAR PROGRAMMING (L.P.) PROBLEMS • MATHEMATICAL FORMULATION OF L.P. PROBLEMS • 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).
OCTOBER	<p style="text-align: center;">UNIT-IV: VECTORS AND THREE-DIMENSIONAL GEOMETRY</p> <p>4.1 VECTORS</p> <ul style="list-style-type: none"> • VECTORS AND SCALARS, MAGNITUDE AND 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 <p>4.2 THREE - DIMENSIONAL GEOMETRY</p> <ul style="list-style-type: none"> • DIRECTION COSINES AND DIRECTION RATIOS OF A LINE JOINING TWO POINTS • CARTESIAN EQUATION AND VECTOR EQUATION OF A LINE, COPLANAR SKEW LINES, SHORTEST DISTANCE BETWEEN TWO LINES • ANGLE BETWEEN TWO LINES
NOVEMBER	<p style="text-align: center;">UNIT-VI: PROBABILITY</p> <p>6.1 PROBABILITY</p> <ul style="list-style-type: none"> • CONDITIONAL PROBABILITY • MULTIPLICATION THEOREM ON PROBABILITY • INDEPENDENT EVENTS • TOTAL PROBABILITY,

MONTH	UNIT WITH TOPIC
DECEMBER	<ul style="list-style-type: none"> BAYES' THEOREM RANDOM VARIABLE AND ITS PROBABILITY DISTRIBUTION, MEAN OF PROBABILITY DISTRIBUTION

PHYSICS

MONTHS	UNITS
MARCH	ELECTROSTATICS
APRIL	ELECTROSTATICS
MAY	CURRENT AND ELECTRICITY
JULY	MAGNETISM
AUGUST	EMI AND AC, EMW
SEPTEMBER	OPTICS
OCTOBER	OPTICS, DUAL NATURE
NOVEMBER	ATOMS AND NUCLEI
DECEMBER	SEMI CONDUCTORS

CHEMISTRY

MONTH	UNITS
MARCH	UNIT 1 - SOLUTIONS
APRIL	UNIT 1- SOLUTIONS
MAY	UNIT 6- HALOALKANES AND HALOARENES UNIT 7- ALCOHOLS, PHENOLS AND ETHERS
JULY	UNIT 2- ELECTROCHEMISTRY UNIT 3-CHEMICAL KINETICS
AUGUST	UNIT 8- ALDEHYDES, KETONES AND CARBOXYLIC ACIDS UNIT 9- AMINES
SEPTEMBER	UNIT 4- d AND f BLOCK ELEMENTS
OCTOBER	UNIT 5- COORDINATION COMPOUNDS
NOVEMBER	UNIT 10- BIOMOLECULES
DECEMBER	UNIT 10- BIOMOLECULES

BIOLOGY

MONTH	CHAPTER
MARCH	CHAPTER 05: PRINCIPLES OF INHERITANCE
APRIL	CHAPTER 05: PRINCIPLES OF INHERITANCE CONTD. CHAPTER 06: MOLECULAR BASIS OF INHERITANCE
MAY	CHAPTER 05: MOLECULAR BASIS OF INHERITANCE CONTD. CHAPTER 11: BIOTECHNOLOGY PRINCIPLES AND PROCESSES
JULY	CHAPTER 12: BIOTECHNOLOGY AND ITS APPLICATIONS CHAPTER 07: EVOLUTION
AUGUST	CHAPTER 02: SEXUAL REPRODUCTION IN FLOWERING PLANTS CHAPTER 03: HUMAN REPRODUCTION
SEPTEMBER	CHAPTER 04: REPRODUCTIVE HEALTH CHAPTER 08: HUMAN HEALTH AND DISEASES
OCTOBER	CHAPTER 10: MICROBES IN HUMAN WELFARE CHAPTER 13: ORGANISMS AND POPULATION
NOVEMBER	CHAPTER 13: ORGANISMS AND POPULATION CONTD. CHAPTER 14: ECOSYSTEM
DECEMBER	CHAPTER 15: BIODIVERSITY AND CONSERVATION

COMPUTER SCIENCE

MONTH	UNIT	TOPIC
MARCH- APRIL	UNIT I: COMPUTATIONAL THINKING AND PROGRAMMING – 2	PYTHON REVISION TOUR-I
		PYTHON REVISION TOUR-II
		WORKING WITH FUNCTIONS
MAY		USING PYTHON LIBRARIES
		FILE HANDLING
JULY		TEXT FILE
		BINARY FILE, CSV FILE
AUGUST		DATA STRUCTURES: STACKS PUSH AND POP
SEPTEMBER	UNIT III: DATABASE MANAGEMENT	RELATED DATABASES
OCTOBER		SIMPLE QUERIES IN SQL
		TABLE CREATION AND MANIPULATION COMMANDS
		GROUPING RECORDS, JOINS IN SQL
		INTERFACE PYTHON WITH MYSQL
NOVEMBER	UNIT II: COMPUTER NETWORKS	COMMUNICATION AND NETWORK CONCEPTS
DECEMBER		COMMUNICATION AND NETWORK CONCEPTS

NOTE- SUBJECT TO CHANGE AS PER CBSE DIRECTIONS.

BUSINESS STUDIES

MONTH	TOPIC (PART—II)
	(BUSINESS FINANCE AND MARKETING)
MARCH	MARKETING MANAGEMENT
APRIL	MARKETING MANAGEMENT
MAY	FINANCIAL MARKET CONSUMER PROTECTION
JULY	FINANCIAL MANAGEMENT <u>PROJECT WORK</u>
AUGUST	(<u>PART-I</u>) NATURE & SIGNIFICANCE OF MANAGEMENT PRINCIPLES OF MANAGEMENT
SEPTEMBER	BUSINESS ENVIRONMENT PLANNING
OCTOBER	ORGANIZING STAFFING
NOVEMBER	DIRECTING AND CONTROLLING
DECEMBER	DIRECTING AND CONTROLLING

ACCOUNTANCY

MONTH	TOPIC
MARCH- APRIL	PARTNERSHIP FUNDAMENTALS
MAY	GOODWILL, CHANGE IN PROFIT SHARING RATIO
JULY	ADMISSION OF A PARTNER
AUGUST	RETIREMENT AND DEATH OF A PARTNER
SEPTEMBER	DISSOLUTION OF A PARTNERSHIP FIRM
OCTOBER	1.FINANCIAL STATEMENTS OF A COMPANY 2.FINANCIAL STATEMENTS ANALYSIS- MEANING, IMPORTANCE AND LIMITATIONS
NOVEMBER	1. RATIO ANALYSIS – MEANING, RATIOS, SIGNIFICANCE AND CALCULATIONS 2. CASH FLOW STATEMENT PROJECT WORK
DECEMBER	ACCOUNTING FOR SHARE CAPITAL AND DEBENTURES

POLITICAL SCIENCE

MONTH	TOPIC
	(BOOK 1) CONTEMPORARY WORLD POLITICS
MARCH	UNIT- 1 COLD WAR ERA AND NON- ALIGNED MOVEMENT
APRIL	UNIT- 1 COLD WAR ERA AND NON- ALIGNED MOVEMENT(CONT.) UNIT -2 THE END OF BIPOLARITY
MAY	UNIT -2 THE END OF BIPOLARITY(CONT.) UNIT -3 NEW CENTRES OF POWER
JULY	UNIT -4 CONTEMPORARY SOUTH ASIA WORLD UNIT- 5 UNITED NATIONS AND ITS ORGANISATIONS UNIT -6 SECURITY IN THE CONTEMPORARY WORLD
AUGUST	UNIT -7 ENVIRONMENT AND NATURAL RESOURCES UNIT -8 GLOBALIZATION (BOOK 2) POLITICS IN INDIA SINCE INDEPENDENCE UNIT –1 CHALLENGES OF NATION BUILDING
SEPTEMBER	UNIT - 2 PLANNED DEVELOPMENT UNIT - 3 INDIA’S FOREIGN POLICY
OCTOBER	UNIT - 4 PARTIES AND PARTY SYSTEMS IN INDIA UNIT - 5 DEMOCRATIC RESURGENCE
NOVEMBER	UNIT - 7 REGIONAL ASPIRATION
DECEMBER	UNIT- 8 INDIAN POLITICS: TRENDS AND DEVELOPMENTS

PSYCHOLOGY

MONTH	TOPIC
MARCH	CHAPTER 1 - VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES (HALF)
APRIL	CHAPTER 1 - VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES (HALF)
MAY	CHAPTER 2 - SELF AND PERSONALITY
JULY	CHAPTER 3 - MEETING LIFE CHALLENGES
AUGUST	CHAPTER 4 - PSYCHOLOGICAL DISORDERS
SEPTEMBER	CHAPTER 5 - THERAPEUTIC APPROACHES
OCTOBER	CHAPTER 6 - ATTITUDE AND SOCIAL COGNITION
NOVEMBER	CHAPTER 7 - SOCIAL INFLUENCE AND GROUP PROCESSES (HALF)
DECEMBER	CHAPTER 7 - SOCIAL INFLUENCE AND GROUP PROCESSES (HALF)

INFORMATICS PRACTICES

MONTH	UNIT	TOPIC
MARCH-	UNIT-I : DATA HANDLING USING	PYTHON PANDAS – I

NOTE- SUBJECT TO CHANGE AS PER CBSE DIRECTIONS.

APRIL	PANDAS AND DATA VISUALIZATION	
MAY		PYTHON PANDAS -II
JULY		PLOTTING WITH PYPLOT
		IMPORTING EXPORTING DATA BETWEEN CSV/MYSQL AND PANDAS
AUGUST	UNIT-II : DATABASE QUERY USING SQL	MYSQL REVISION TOUR
		MYSQL FUNCTIONS
SEPTEMBER		QUERYING USING SQL, GROUP BY, HAVING, ORDER BY
OCTOBER	UNIT-III : INTRODUCTION TO COMPUTER NETWORKS	INTRODUCTION TO COMPUTER NETWORKS
NOVEMBER	UNIT-IV : SOCIETAL IMPACTS	SOCIETAL IMPACTS
DECEMBER		SOCIETAL IMPACTS

VALUE EDUCATION

MONTH	TOPIC BOOK: BHAGWAD GITA
MARCH	L-10 VIBHUTI YOGA
APRIL	L-10 VIBHUTI YOGA...Continued
MAY	L-11 VISHWAROOPA DARSHAN YOGA
JULY	L-12 BHAKTI YOGA
AUGUST	L-13 KSHETRA KSHETRAJNA VIBHAGHA YOGA
	L-14 GUNATRAYA VIBHAGA YOGA
SEPTEMBER	L-15 PURUSHOTTAMA YOGA
	L-16 DAIVA ASURA SAMPAT VIBHAGA YOGA
OCTOBER	L-17 SHRADDHATRAYA VIBHAGA YOGA
NOVEMBER	L-18 MOKSHA SANYAASA YOGA
DECEMBER	L-18 MOKSHA SANYAASA YOGA

APPLIED MATHEMATICS

MONTH	UNIT WITH TOPIC
APRIL	UNIT-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS
	1.4 ALLIGATION AND MIXTURE

NOTE- SUBJECT TO CHANGE AS PER CBSE DIRECTIONS.

MONTH	UNIT WITH TOPIC
	1.5 BOATS AND STREAMS (UPSTREAM AND DOWNSTREAM), PIPES AND CISTERNS & RACES AND GAMES 1.6 NUMERICAL INEQUALITIES 1.1 MODULO ARITHMETIC 1.2 CONGRUENCE MODULO
MAY	UNIT-2 ALGEBRA
	2.1 MATRICES AND TYPES OF MATRICES
	2.2 EQUALITY OF MATRICES, TRANSPOSE OF A MATRIX, SYMMETRIC AND SKEW SYMMETRIC MATRIX
	2.3 ALGEBRA OF MATRICES
	2.4 DETERMINANTS
	2.5 INVERSE OF A MATRIX
2.6 SOLVING SYSTEM OF SIMULTANEOUS EQUATIONS USING MATRIX METHOD, CRAMER'S RULE AND ROW REDUCTION METHOD	
JUNE	UNIT - 7 FINANCIAL MATHEMATICS
	7.1 PERPETUITY, SINKING FUNDS
	7.3 CALCULATION OF EMI
	7.4 CALCULATION OF RETURNS, NOMINAL RATE OF RETURN
	7.5 COMPOUND ANNUAL GROWTH RATE
7.7 LINEAR METHOD OF DEPRECIATION	
JULY	UNIT- 3 CALCULUS
	3.1 HIGHER ORDER DERIVATIVES
	3.2 APPLICATION OF DERIVATIVES
	3.3 MARGINAL COST AND MARGINAL REVENUE USING DERIVATIVES
	3.4 INCREASING /DECREASING FUNCTIONS
3.5 MAXIMA AND MINIMA	
AUGUST	UNIT- 3 CALCULUS...CONTINUED
	3.6 INTEGRATION
	3.7 INDEFINITE INTEGRALS AS FAMILY OF CURVES
	3.8 DEFINITE INTEGRALS AS AREA UNDER THE CURVE
	3.9 APPLICATION OF INTEGRATION
	3.10 DIFFERENTIAL EQUATIONS
	3.11 FORMULATING AND SOLVING DIFFERENTIAL EQUATIONS
	3.12 APPLICATION OF DIFFERENTIAL EQUATIONS
SEPTEMBER	UNIT – 6 INDEX NUMBERS AND TIME BASED DATA
	6.4 TIME SERIES
	6.5 COMPONENTS OF TIME SERIES
	6.6 TIME SERIES ANALYSIS FOR UNIVARIATE DATA
	6.7 SECULAR TREND
	6.8 METHODS OF MEASURING TREND
OCTOBER	UNIT- 4 PROBABILITY DISTRIBUTIONS
	4.1 PROBABILITY DISTRIBUTION
	4.2 MATHEMATICAL EXPECTATION
	4.3 VARIANCE
	4.4 BINOMIAL DISTRIBUTION
	4.5 POISSON DISTRIBUTION
4.6 NORMAL DISTRIBUTION	

MONTH	UNIT WITH TOPIC
NOVEMBER	UNIT - 8 LINEAR PROGRAMMING
	8.1 INTRODUCTION AND RELATED TERMINOLOGY
	8.2 MATHEMATICAL FORMULATION OF LINEAR PROGRAMMING PROBLEM
	8.3 DIFFERENT TYPES OF LINEAR PROGRAMMING PROBLEMS
	8.4 GRAPHICAL METHOD OF SOLUTION FOR PROBLEMS IN TWO VARIABLES
	8.5 FEASIBLE AND INFEASIBLE REGIONS
	8.6 FEASIBLE AND INFEASIBLE SOLUTIONS, OPTIMAL FEASIBLE SOLUTION
DECEMBER	UNIT - 5 INFERENTIAL STATISTICS
	5.1 POPULATION AND SAMPLE
	5.2 PARAMETER AND STATISTICS AND STATISTICAL INTERFERENCES
	5.3 T-TEST (ONE SAMPLE T-TEST AND TWO INDEPENDENT GROUPS T-TEST)

ENTREPRENEURSHIP

MONTH	TOPIC
MARCH-APRIL	<p>UNIT 1 : ENTREPRENEURIAL OPPORTUNITIES</p> <ul style="list-style-type: none"> • SENSING ENTREPRENEURIAL OPPORTUNITIES • ENVIRONMENT SCANNING • PROBLEM IDENTIFICATION • IDEA FIELDS • SPOTTING TRENDS • CREATIVITY AND INNOVATION • SELECTING THE RIGHT OPPORTUNITY <p>PROJECT WORK- SURVEY</p>
MAY	<p>UNIT 2: ENTREPRENEURIAL PLANNING</p> <ul style="list-style-type: none"> • FORMS OF BUSINESS ENTITIES- SOLE PROPRIETORSHIP, PARTNERSHIP, COMPANY- MEANING, CHARACTERISTICS AND SUITABILITY. • BUSINESS PLAN – CONCEPT AND FORMAT • ORGANIZATIONAL PLAN • OPERATIONAL PLAN • PRODUCTION PLAN • FINANCIAL PLAN • MARKETING PLAN • HUMAN RESOURCE PLAN

JULY	UNIT 3 : ENTERPRISE MARKETING <ul style="list-style-type: none"> • MARKETING AND SALES STRATEGY • BRANDING, LOGO, TAG LINE • PROMOTION STRATEGY PROJECT WORK – BUSINESS PLAN
AUGUST - SEPTEMBER	UNIT 4: ENTERPRISE GROWTH STRATEGIES <ul style="list-style-type: none"> • FRANCHISING • MERGER AND ACQUISITION UNIT 5: BUSINESS ARITHMETIC <ul style="list-style-type: none"> • UNIT OF SALE, UNIT COST FOR MULTIPLE PRODUCTS OR SERVICES • BREAK EVEN ANALYSIS FOR MULTIPLE PRODUCTS OR SERVICES
OCTOBER	<ul style="list-style-type: none"> • COMPUTATION OF WORKING CAPITAL • INVENTORY CONTROL AND EOQ • RETURN ON INVESTMENT (ROI) AND RETURN ON EQUITY (ROE)
NOVEMBER	UNIT 6: RESOURCE MOBILISATION <ul style="list-style-type: none"> • CAPITAL MARKET- CONCEPT • PRIMARY MARKET – CONCEPT, METHODS OF ISSUE • ANGEL INVESTOR - FEATURES • VENTURE CAPITAL – FEATURES, FUNDING
DECEMBER	REVISION PROJECT WORK DISCUSSION

ECONOMICS

MONTH	TOPIC
MARCH- APRIL	<u>MACRO ECONOMICS- UNIT: MONEY AND BANKING</u> MONEY – MEANING AND FUNCTIONS, SUPPLY OF MONEY - CURRENCY HELD BY THE PUBLIC AND NET DEMAND DEPOSITS HELD BY COMMERCIAL BANKS. MONEY CREATION BY THE COMMERCIAL BANKING SYSTEM. CENTRAL BANK AND ITS FUNCTIONS (EXAMPLE OF THE RESERVE BANK OF INDIA): BANK OF ISSUE, GOVT. BANK, BANKER'S BANK, CONTROL OF CREDIT THROUGH BANK RATE, CRR, SLR, REPO RATE AND REVERSE REPO RATE, OPEN MARKET OPERATIONS, MARGIN REQUIREMENT.

	<p>MONEY – MEANING AND SUPPLY OF MONEY – CURRENCY HELD BY THE PUBLIC AND NET DEMAND DEPOSITS HELD BY COMMERCIAL BANKS.</p> <p><u>MACRO ECONOMICS- UNIT: GOVERNMENT BUDGET AND THE ECONOMY.</u></p> <p>GOVERNMENT BUDGET - MEANING, OBJECTIVES AND COMPONENTS. CLASSIFICATION OF RECEIPTS - REVENUE RECEIPTS AND CAPITAL RECEIPTS; CLASSIFICATION OF EXPENDITURE – REVENUE EXPENDITURE AND CAPITAL EXPENDITURE. BALANCED, SURPLUS AND DEFICIT BUDGET – MEASURES OF GOVERNMENT DEFICIT.</p>
MAY	<p><u>INDIAN ECONOMIC DEVELOPMENT-UNIT 4: DEVELOPMENT EXPERIENCE (1947-90) AND ECONOMIC REFORMS SINCE 1991.</u></p> <p>A BRIEF INTRODUCTION OF THE STATE OF INDIAN ECONOMY ON THE EVE OF INDEPENDENCE. INDIAN ECONOMIC SYSTEM AND COMMON GOALS OF FIVE-YEAR PLANS. MAIN FEATURES, PROBLEMS AND POLICIES OF AGRICULTURE (INSTITUTIONAL ASPECTS AND NEW AGRICULTURAL STRATEGY), INDUSTRY (IPR 1956; SSI – ROLE & IMPORTANCE) AND FOREIGN TRADE.</p> <p>PROJECT WORK</p>
JULY	<p><u>INDIAN ECONOMIC DEVELOPMENT-UNIT 4: DEVELOPMENT EXPERIENCE (1947-90) AND ECONOMIC REFORMS SINCE 1991.</u></p> <p><u>ECONOMIC REFORMS SINCE 1991: FEATURES AND APPRAISALS OF LIBERALIZATION, GLOBALIZATION AND PRIVATIZATION (LPG POLICY); CONCEPTS OF DEMONETIZATION AND GST</u></p> <p><u>MACRO ECONOMICS UNIT: NATIONAL INCOME AND RELATED AGGREGATES</u></p> <p>WHAT IS MACROECONOMICS? BASIC CONCEPTS IN MACROECONOMICS: CONSUMPTION GOODS, CAPITAL GOODS, FINAL GOODS, INTERMEDIATE GOODS; STOCKS AND FLOWS; GROSS INVESTMENT AND DEPRECIATION. CIRCULAR FLOW OF INCOME (TWO SECTOR MODEL); METHODS OF CALCULATING NATIONAL INCOME - VALUE ADDED OR PRODUCT METHOD, EXPENDITURE METHOD, INCOME METHOD. AGGREGATES RELATED TO NATIONAL INCOME: GROSS NATIONAL PRODUCT (GNP), NET NATIONAL PRODUCT (NNP), GROSS DOMESTIC PRODUCT (GDP) AND NET DOMESTIC PRODUCT (NDP) - AT MARKET PRICE, AT FACTOR COST; REAL AND NOMINAL GDP. GDP AND WELFARE</p> <p>PROJECT WORK</p>
AUGUST	<p><u>MACRO ECONOMICS UNIT: DETERMINATION OF INCOME AND EMPLOYMENT</u></p> <p>AGGREGATE DEMAND AND ITS COMPONENTS. PROPENSITY TO CONSUME AND PROPENSITY TO SAVE (AVERAGE AND MARGINAL). SHORT-RUN EQUILIBRIUM OUTPUT; INVESTMENT MULTIPLIER AND ITS MECHANISM. MEANING OF FULL EMPLOYMENT AND INVOLUNTARY UNEMPLOYMENT. PROBLEMS OF EXCESS DEMAND AND DEFICIENT DEMAND; MEASURES TO CORRECT THEM - CHANGES IN GOVERNMENT SPENDING, TAXES AND MONEY SUPPLY.</p> <p>PROJECT WORK</p>
SEPTEMBER	<p><u>INDIAN ECONOMIC DEVELOPMENT-UNIT: CURRENT CHALLENGES FACING INDIAN ECONOMY</u></p> <p>HUMAN CAPITAL FORMATION: HOW PEOPLE BECOME RESOURCE; ROLE OF HUMAN CAPITAL IN ECONOMIC DEVELOPMENT; GROWTH OF</p>

	<p>EDUCATION SECTOR IN INDIA</p> <p>RURAL DEVELOPMENT: KEY ISSUES - CREDIT AND MARKETING - ROLE OF COOPERATIVES; AGRICULTURAL DIVERSIFICATION; ALTERNATIVE FARMING - ORGANIC FARMING</p>
OCTOBER	<p><u>INDIAN ECONOMIC DEVELOPMENT-UNIT: CURRENT CHALLENGES FACING INDIAN ECONOMY (CONTINUED)</u></p> <p>EMPLOYMENT: GROWTH AND CHANGES IN WORK FORCE PARTICIPATION RATE IN FORMAL AND INFORMAL SECTORS; PROBLEMS AND POLICIES</p> <p>SUSTAINABLE ECONOMIC DEVELOPMENT: MEANING, EFFECTS OF ECONOMIC DEVELOPMENT ON RESOURCES AND ENVIRONMENT, INCLUDING GLOBAL WARMING</p> <p><u>MACRO ECONOMICS- UNIT: BALANCE OF PAYMENTS</u></p> <p>BALANCE OF PAYMENTS ACCOUNT - MEANING AND COMPONENTS</p> <p><u>PROJECT WORK</u></p>
NOVEMBER	<p><u>MACRO ECONOMICS- UNIT: BALANCE OF PAYMENTS (CONT)</u></p> <p>FOREIGN EXCHANGE RATE- MEANING OF FIXED AND FLEXIBLE EXCHANGE RATE AND MANAGED FLOATING RATE</p>
DECEMBER	<p><u>INDIAN ECONOMIC DEVELOPMENT-UNIT: DEVELOPMENT EXPERIENCE OF INDIA.</u></p> <p>A COMPARISON WITH NEIGHBOURS INDIA AND PAKISTAN INDIA AND CHINA ISSUES: GROWTH, POPULATION, SECTORAL DEVELOPMENT AND OTHER DEVELOPMENTAL INDICATORS</p> <p><u>COMPLETION OF PROJECT WORK</u></p>

PHYSICAL EDUCATION(SIXTH SUBJECT)

MONTH	TOPIC
MARCH - APRIL	UNIT I. MANAGEMENT OF SPORTING EVENTS
MAY	UNIT II CHILDREN & WOMEN IN SPORTS
JULY	UNIT III YOGA & LIFESTYLE
	UNIT IV PHYSICAL EDUCATION & SPORTS FOR CWSN (CHILDREN WITH SPECIAL NEEDS - DIVYANG)
AUGUST	UNIT V. SPORTS & NUTRITION
	UNIT VI. TEST & MEASUREMENT IN SPORTS
SEPTEMBER	UNIT VII. PHYSIOLOGY AND INJURIES IN SPORTS
OCTOBER	UNIT VIII. BIOMECHANICS & SPORTS
NOVEMBER	UNIT IX. PSYCHOLOGY & SPORTS
DECEMBER	UNIT X. TRAINING IN SPORTS

