

**MAHARSHI PATANJALI VIDYA MANDIR
SYLLABUS
CLASS XI (2024-25)**



Trust yourself that you can do it and get it

English

Month	Hornbill	Snapshots	Advanced writing skills & Grammar
April/May	1. The portrait of a lady - A Photograph	1. The Summer of the Beautiful White Horse	Tenses
Jul/Aug	2. We're Not Afraid to Die... - The Laburnum Top		Classified Advertisement
Aug/Sep	- The Voice of the Rain	2. The Address	Speech
UT-1	The Portrait of a Lady, A Photograph	The Summer of the Beautiful White Horse	Grammar
Half-Yearly	ASL-Speaking	All lessons done from April to September	
October		5. Mother's Day	Jumbled up sentences
November	3. Discovering Tut - Childhood		Debate
December	7. The Adventure	7. Birth	Poster Making
January	8. Silk Road	8. The Tale of Melon City	Clauses, Transformation of sentences
February	- Father to Son		Note Making
UT-2	The Adventure, Childhood	Mother's Day, Birth	Debate, Transformation of sentences
Annual Exam	ASL-Listening	Entire Syllabus	

Subject : Physics

Month	Topics to be covered
April	1. Dimensions and Dimensional analysis 2. Vector and Vector Algebra 3. Significant Figures
May	1. Kinematics
July	1. Kinematics (continued) 2. Laws of motion
August	1. Laws of motion (continued) 2. Work energy and Power 3. Motion of system of particles & Rigid Body
September	1. Motion of system of particles & Rigid Body (continued) 2. Gravitation 3. Properties of Bulk Matter (Mechanical properties of solids and fluids).
October	1. Properties of Bulk Matter (Mechanical properties of solids and fluids). 2. Oscillations
November	1. Oscillations (continued) 2. Waves
December	1. Waves (continued) 2. Thermal properties of Matter 2. Thermodynamics
January	Thermodynamics (continued)
February	Behavior of perfect gases and kinetic theory of gases
Unit Test 1	Dimensions & Dimensional Analysis, Vector & Vector Algebra, Significant Figures.
Unit Test 2	Work Power, Energy and Motion of system of particles & Rigid Body.
Half Yearly	Topics covered for I Unit Test, Kinematics and Laws of Motion.
Annual Examination	Entire CBSE curriculum for class XI (2024-25)

**Experiments –
Section - A**

(1) Vernier Calliper (2) Screw gauge (3) Spherometer (4) Simple Pendulum

Section - B

(1) Helical Spring (2) Sonometer – I (3) Sonometer – II (4) Young’s modulus

Chemistry

April-May	<i>Unit 1: Some Basic concepts of Chemistry</i>
July	<i>Unit – 2 : Structure of Atom</i>
August	<i>Unit 2 : Structure of Atom (Contd.) Unit 3 : Classification of Elements& Periodic Classification</i>
September	<i>Unit 4 : Chemical Bonding and Molecular structure Unit 5 : Chemical Thermodynamics</i>
October	<i>Unit 6 : Chemical Equilibrium</i>
November	<i>Unit 7 : Redox Reactions Unit 8 : Organic Chemistry : Some basic principles and Techniques</i>
December	<i>Unit 8 : Organic Chemistry : Some Basic principles & Techniques(contd.) Unit 13 : Hydrocarbons</i>
January	<i>Unit 13 : Hydrocarbons (Contd.)</i>
February	<i>Revision</i>
1st Unit test	<i>Unit 1 : Some Basic concepts of chemistry Unit 2 : Structure of Atom (half chapter)</i>
Half- Yearly Examination	<i>Unit 1, Unit 2, Unit 3, Unit 4</i>
2nd Unit test	<i>Unit 6 : Equilibrium, Unit 7: Redox Reactions</i>
Annual - Examination	<i>Complete Syllabus</i>

Chemistry Practical

July - October

Analysis of cations

Analysis of anions – Dilute Sulphuric Acid group & concentrated Sulphuric Acid group

Half Yearly – Analysis of cation + analysis of anions (Only dilute Sulphuric Acid group)

November - February

Analysis of Anions – PO_4^{-3} , SO_4^{-2} , $C_2O_4^{-2}$

Volumetric Analysis

Core Experiments

Annual Exam – Complete Syllabus

Standard Mathematics

April	1. Set Theory
May	1. Relations 2. Functions
July	1. A.P. 2. G.P.
August	1. Angle and their Measures 2. Trigonometric Graphs and Identities
September	1. Trigonometric Functions 2. Complex Number
October	1. Quadratic Equations 3. Linear Inequations
November	1. Binomial Theorem 2. Cartesian System of Rectangular Coordinates (Review) 3. Straight Lines
December	1. Circle 2. Parabola 3. Ellipse 4. Hyperbola
January	1. Three-D Geometry 2. Limits & Derivatives 3. Statistics
February	1. Permutations and Combinations 2. Probability

Ist Unit Test	Chapters covered till July
Half Yearly Examination	Chapters covered till September
IInd Unit Test	Binomial Theorem , Cartesian System of Rectangular Coordinates , Straight Lines , Circle
Annual Examination	Whole Syllabus

Applied Mathematics

April	Set Theory
May	Relations & Functions, Graphical representation of functions.
July	Types of functions, Sequence & Series (A.P. & G.P.) and its applications.
August	Numbers and Quantification
September	Numerical Applications.
October	Calculus (Concepts of Limits)
November	Continuity & Differentiation
December	Probability & Coordinate Geometry (Straight lines ,Circle, Parabola)
January	Descriptive Statistics, Permutations and Combinations
February	Financial Mathematics , Mathematical Reasoning

Ist Unit Test	Chapters covered till July
Half Yearly Examination	Chapters covered till September
IIInd Unit Test	Chapters covered in November & December
Annual Examination	Whole Syllabus

COMPUTER SCIENCE

MONTH	CHAPTER/UNIT	TOPICS
APRIL	GETTING STARTED WITH PYTHON, PYTHON FUNDAMENTALS	FAMILIARIZATION WITH THE BASICS OF PYTHON PROGRAMMING: INTRODUCTION TO PYTHON, FEATURES OF PYTHON, EXECUTING A SIMPLE "HELLO WORLD" PROGRAM, EXECUTION MODES: INTERACTIVE MODE AND SCRIPT MODE, PYTHON CHARACTER SET, PYTHON TOKENS (KEYWORD, IDENTIFIER, LITERAL, OPERATOR, PUNCTUATOR), VARIABLES, CONCEPT OF L-VALUE AND R-VALUE, USE OF COMMENTS, ACCEPTING DATA AS INPUT FROM THE CONSOLE AND DISPLAYING OUTPUT
MAY	INTRODUCTION TO PROBLEM SOLVING	INTRODUCTION TO PROBLEM SOLVING: STEPS FOR PROBLEM SOLVING (ANALYSING THE PROBLEM, DEVELOPING AN ALGORITHM, CODING, TESTING AND DEBUGGING). REPRESENTATION OF ALGORITHMS USING FLOW CHART AND PSEUDO CODE, DECOMPOSITION
JULY	DATA HANDLING	KNOWLEDGE OF DATA TYPES: NUMBER (INTEGER, FLOATING POINT, COMPLEX), BOOLEAN, SEQUENCE (STRING, LIST, TUPLE), NONE, MAPPING (DICTIONARY), MUTABLE AND IMMUTABLE DATA TYPES OPERATORS: ARITHMETIC OPERATORS, RELATIONAL OPERATORS, LOGICAL OPERATORS, ASSIGNMENT OPERATOR, AUGMENTED ASSIGNMENT OPERATORS, IDENTITY OPERATORS (IS, IS NOT), MEMBERSHIP OPERATORS (IN, NOT IN) EXPRESSIONS, STATEMENT, TYPE CONVERSION & INPUT/OUTPUT: PRECEDENCE OF OPERATORS, EXPRESSION, EVALUATION OF EXPRESSION, PYTHON STATEMENT, TYPE CONVERSION (EXPLICIT & IMPLICIT CONVERSION), ERRORS: SYNTAX ERRORS, LOGICAL ERRORS, RUNTIME ERRORS
AUGUST	DATA HANDLING (CONTINUED)	INTRODUCTION TO PYTHON MODULES: IMPORTING MODULE USING 'IMPORT <MODULE>' AND USING FROM STATEMENT, IMPORTING MATH MODULE (PI, E, SQRT, CEIL, FLOOR, POW, FABS, SIN, COS, TAN); RANDOM MODULE (RANDOM, RANDINT, RANDRANGE), STATISTICS MODULE (MEAN, MEDIAN, MODE)
SEPTEMBER	FLOW OF CONTROL	FLOW OF CONTROL: INTRODUCTION, USE OF INDENTATION, SEQUENTIAL FLOW, CONDITIONAL AND ITERATIVE FLOW CONTROL CONDITIONAL STATEMENTS: IF, IF-ELSE, IF-ELIF-ELSE, FLOWCHARTS, SIMPLE PROGRAMS: E.G.: ABSOLUTE VALUE, SORT 3 NUMBERS AND DIVISIBILITY OF A NUMBER ITERATIVE STATEMENTS: FOR LOOP, RANGE FUNCTION, WHILE LOOP, FLOWCHARTS, BREAK AND CONTINUE STATEMENTS, NESTED LOOPS, SUGGESTED PROGRAMS: GENERATING PATTERN, SUMMATION OF SERIES, FINDING THE FACTORIAL OF A POSITIVE NUMBER ETC.

OCTOBER	STRING	STRINGS: INTRODUCTION, INDEXING, STRING OPERATIONS (CONCATENATION, REPETITION, MEMBERSHIP & SLICING), TRAVERSING A STRING USING LOOPS, BUILT-IN FUNCTIONS: LEN(), CAPITALIZE(), TITLE(), LOWER(), UPPER(), COUNT(), FIND(), INDEX(), ENDSWITH(), STARTSWITH(), ISALNUM(), ISALPHA(), ISDIGIT(), ISLOWER(), ISUPPER(), ISSPACE(), LSTRIP(), RSTRIP(), STRIP(), REPLACE(), JOIN(), PARTITION(), SPLIT()
	LIST	LISTS: INTRODUCTION, INDEXING, LIST OPERATIONS (CONCATENATION, REPETITION, MEMBERSHIP & SLICING), TRAVERSING A LIST USING LOOPS, BUILT-IN FUNCTIONS: LEN(), LIST(), APPEND(), EXTEND(), INSERT(), COUNT(), INDEX(), REMOVE(), POP(), REVERSE(), SORT(), SORTED(), MIN(), MAX(), SUM(); NESTED LISTS, SUGGESTED PROGRAMS: FINDING THE MAXIMUM, MINIMUM, MEAN OF NUMERIC VALUES STORED IN A LIST; LINEAR SEARCH ON LIST OF NUMBERS AND COUNTING THE FREQUENCY OF ELEMENTS IN A LIST
NOVEMBER	TUPLES	TUPLES: INTRODUCTION, INDEXING, TUPLE OPERATIONS (CONCATENATION, REPETITION, MEMBERSHIP & SLICING), BUILT-IN FUNCTIONS: LEN(), TUPLE(), COUNT(), INDEX(), SORTED(), MIN(), MAX(), SUM(); TUPLE ASSIGNMENT, NESTED TUPLE, SUGGESTED PROGRAMS: FINDING THE MINIMUM, MAXIMUM, MEAN OF VALUES STORED IN A TUPLE; LINEAR SEARCH ON A TUPLE OF NUMBERS, COUNTING THE FREQUENCY OF ELEMENTS IN A TUPLE.
	DICTIONARY	DICTIONARY: INTRODUCTION, ACCESSING ITEMS IN A DICTIONARY USING KEYS, MUTABILITY OF DICTIONARY (ADDING A NEW ITEM, MODIFYING AN EXISTING ITEM), TRAVERSING A DICTIONARY.
DECEMBER	DICTIONARY : CONTINUED	BUILT-IN FUNCTIONS/METHODS: LEN(), DICT(), KEYS(), VALUES(), ITEMS(), GET(), UPDATE(), DEL, CLEAR(), FROMKEYS(), COPY(), POP(), POPITEM(), SETDEFAULT(), MAX(), MIN(), COUNT(), SORTED(), COPY(); SUGGESTED PROGRAMS : COUNT THE NUMBER OF TIMES A CHARACTER APPEARS IN A GIVEN STRING USING A DICTIONARY, CREATE A DICTIONARY WITH NAMES OF EMPLOYEES, THEIR SALARY AND ACCESS THEM.
JANUARY	COMPUTER SYSTEMS AND ORGANISATION	BASIC COMPUTER ORGANIZATION: INTRODUCTION TO COMPUTER SYSTEM, HARDWARE, SOFTWARE, INPUT DEVICE, OUTPUT DEVICE, CPU, MEMORY (PRIMARY, CACHE AND SECONDARY), UNITS OF MEMORY (BIT, BYTE, KB, MB, GB, TB, PB) TYPES OF SOFTWARE: SYSTEM SOFTWARE (OPERATING SYSTEMS, SYSTEM UTILITIES, DEVICE DRIVERS), PROGRAMMING TOOLS AND LANGUAGE TRANSLATORS (ASSEMBLER, COMPILER & INTERPRETER), APPLICATION SOFTWARE OPERATING SYSTEM (OS): FUNCTIONS OF OPERATING SYSTEM, OSUSER INTERFACE BOOLEAN LOGIC: NOT, AND, OR, NAND, NOR, XOR, TRUTH TABLE, DE MORGAN'S LAWS AND LOGIC CIRCUITS NUMBER SYSTEM: BINARY, OCTAL, DECIMAL AND HEXADECIMAL NUMBER SYSTEM; CONVERSION BETWEEN NUMBER SYSTEMS. ENCODING SCHEMES: ASCII, ISCII AND UNICODE (UTF8, UTF32)

FEBRUARY	SOCIETY, LAW AND ETHICS	<p>DIGITAL FOOTPRINTS</p> <p>DIGITAL SOCIETY AND NETIZEN: NET ETIQUETTES, COMMUNICATION ETIQUETTES, SOCIAL MEDIA ETIQUETTES</p> <p>DATA PROTECTION: INTELLECTUAL PROPERTY RIGHT (COPYRIGHT, PATENT, TRADEMARK), VIOLATION OF IPR (PLAGIARISM, COPYRIGHT INFRINGEMENT, TRADEMARK INFRINGEMENT), OPEN SOURCE SOFTWARES AND LICENSING (CREATIVE COMMONS, GPL AND APACHE)</p> <p>CYBER-CRIME: DEFINITION, HACKING, EAVESDROPPING, PHISHING AND FRAUD EMAILS, RANSOMWARE, CYBER TROLLS AND CYBER BULLYING.</p> <p>CYBER SAFETY: SAFELY BROWSING THE WEB, IDENTITY PROTECTION, CONFIDENTIALITY.</p> <p>MALWARE: VIRUSES, TROJANS, ADWARE</p> <p>E-WASTE MANAGEMENT: PROPER DISPOSAL OF USED ELECTRONIC GADGETS.</p> <p>INFORMATION TECHNOLOGY ACT (IT ACT)</p> <p>TECHNOLOGY AND SOCIETY: GENDER AND DISABILITY ISSUES WHILE TEACHING AND USING COMPUTERS</p>
UNIT TEST – I	INTRODUCTION TO PROBLEM SOLVING, GETTING STARTED WITH PYTHON, PYTHON FUNDAMENTALS & DATA HANDLING	
HALF YEARLY EXAMINATION	INTRODUCTION TO PROBLEM SOLVING, GETTING STARTED WITH PYTHON, PYTHON FUNDAMENTALS, DATA HANDLING, FLOW OF CONTROL	
UNIT TEST – II	STRING, LIST, TUPLES, DICTIONARY	
ANNUAL EXAMINATION	INTRODUCTION TO PROBLEM SOLVING, GETTING STARTED WITH PYTHON, PYTHON FUNDAMENTALS , DATA HANDLING, FLOW OF CONTROL, STRING, LIST, TUPLES, DICTIONARY, COMPUTER SYSTEMS AND ORGANISATION, SOCIETY, LAW AND ETHICS	

COMPUTER SCIENCE (PRACTICAL)

MONTH	CHAPTER
JULY - SEPTEMBER	<ul style="list-style-type: none"> ● GETTING STARTED WITH PYTHON ● PYTHON FUNDAMENTALS ● DATA HANDLING ● FLOW OF CONTROL
OCTOBER- FEBRUARY	<ul style="list-style-type: none"> ● STRING ● LIST ● TUPLES ● DICTIONARY ● COMPUTER SYSTEMS AND ORGANISATION

COMPUTER SCIENCE (PRACTICAL)

MONTH	Topics	PRACTICAL
JULY	Programming in Python: I	<ol style="list-style-type: none"> 1. Input a welcome message and display it. 2. Input two numbers and display the larger / smaller number. 3. Input three numbers and display the largest / smallest number. 4. Given two integers x and n, compute x^n. 5. Write a program to input the value of x and n and print the sum of different series. 6. Determine whether a number is a perfect number, an armstrong number or a palindrome. 7. Input a number and check if the number is a prime or composite number. 8. Display the terms of a Fibonacci series. 9. Compute the greatest common divisor and least common multiple of two integers.
AUGUST		
SEPTEMBER		
OCTOBER	Programming in Python: II	<ol style="list-style-type: none"> 10. Count and display the number of vowels, consonants, uppercase, lowercase characters in string. 11. Input a string and determine whether it is a palindrome or not; convert the case of characters in a string. 12. Find the largest/smallest number in a list/tuple. 13. Input a list of numbers and swap elements at the even location with the elements at the odd location. 14. Input a list/tuple of elements, search for a given element in the list/tuple. 15. Input a list of numbers and find the smallest and largest number from the list. 16. Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75.
NOVEMBER		
DECEMBER		
JANUARY		
FEBRUARY	PYTHON PROJECT BASED ON TOPICS LEARNT IN CLASS	

Biology

Month	Topics to be covered
April- May	Chapter-1 : The Living World Chapter-2 : Biological Classification Chapter – 3 : Plant Kingdom
July	Chapter - 4 : Animal Kingdom Chapter – 5 : Morphology of Flowering Plants
August	Chapter – 6 : Anatomy of Flowering Plants Chapter – 7 : Structural Organisation in Animals Chapter – 8 : Cell-The Unit of Life
September	Chapter – 9 : Biomolecules Chapter – 10 : Cell Cycle and Cell Division Chapter – 11 : Photosynthesis in Higher Plants
October	Chapter – 12 : Respiration in Plants Chapter – 13 : Plant Growth and Development
November	Chapter – 14 : Breathing and Exchange of Gases Chapter – 15 : Body Fluids and Circulation
December	Chapter – 16 : Excretory Products and their Elimination Chapter – 17 : Locomotion and Movement
January- February	Chapter – 18 : Neural Control and Coordination Chapter – 19 : Chemical Coordination and Integration Revision
Unit Test - I	CHAPTER 1, 2, 3 and 4
Half Yearly	CHAPTER 1, 2, 3, 4, 5, 6, 7, 8.
Unit test - II	CHAPTER 9, 10
Annual Exam	All Chapters.

PRACTICALS:

A: List of Experiments:

1. Study and describe locally available common flowering plants, including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
3. Study of osmosis by potato osmometer.
4. Study of distribution of stomata on the upper and lower surfaces of leaves and to calculate stomatal index.

5. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
6. Separation of plant pigments through paper chromatography.

B : Study and Observe the following (Spotting):

1. Parts of a compound microscope.
2. Specimens/slides/models and identification with reasons - Bacteria, *Oscillatoria*, *Spirogyra*, *Rhizopus*, mushroom, yeast, liverwort, moss, fern, pine, one monocot ledonous plant, one dicotyledonous plant and one lichen.
3. Virtual specimens/slides/models and identifying features of - *Amoeba*, *Hydra*, liverfluke, *Ascaris*, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, Rohu, frog, lizard, pigeon and rabbit.
4. Different types of inflorescence (cymose and racemose).
5. Human skeleton and different types of joints with the help of virtual images / models only.

Biotechnology

Month	Topics to be covered
April- May	Unit – I : Biotechnology : An overview Unit – II : Biomolecules: Building blocks
July	Unit – II : Macromolecules: Structure and function
August	Unit – III : Concepts of genetic
September	Unit - III : Genes and genomes: Structure and function
October	Unit – IV : The basic unit of life
November	Unit – IV : Cell growth and development
December	Concepts of genetics, Structure and function of genes revision
January- February	Unit - III and Unit – IV Revision

Unit Test - I	Biotechnology : an overview, Biomolecules : Building blocks
Half Yearly	Unit - I (Chapter 1), Unit II (Chapter 2, 3)
Unit test - II	Unit - III (Chapter 4, 5)
Annual Exam	All Chapters.

Practical -

1. Safety rules in biotechnology lab.
2. Preparation of buffers and pH determination.
3. Sterilization techniques.
4. Preparation of bacterial growth medium.
5. Isolation of milk protein.
6. Study of various stages of mitosis.
7. Calculation of mitotic index.
8. Study of permanent slide of mitosis.
9. Preparation of karyotype.
10. Performing dilution.
11. Pouring of the media and spreading the culture

ECONOMICS

MONTH	BOOK	CHAPTERS
April/May July	Microeconomics	1) Central Problems of an Economy 2) Consumer's Equilibrium 3) Theory Of Demand 4) Elasticity Of Demand
April/May	Statistics For Economics	1) Introduction to Economics and Statistics 2) Collection of Data Primary and Secondary Data.
August	Statistics For Economics	3) Methods Of Collection of Data
August	Micro Economics	5) Supply and Elasticity of Supply.
UNIT TEST-1	MICROECONOMICS	CHAPTERS 1- 4
	STATISTICS FOR ECONOMICS	CHAPTERS 1- 3
September	Microeconomics	6) Concept Of Cost 7) Concept Of Revenue
	Statistics For Economics	4) Organisation Of Data 5) Presentation Of Data 6) Mean, Median and Mode
HALF YEARLY EXAMINATION	MICROECONOMICS	CHAPTERS 1-7
	STATISTICS FOR ECONOMICS	CHAPTERS 1-6
October	Statistics For Economics	7) Diagrammatic and Graphic Presentation Of Data
	Microeconomics	8) Producer's Equilibrium
November	Microeconomics	9) Forms Of Market

	Statistics For Economics	8) Correlation
December	Microeconomics	10) Price Determination under perfect Competition
	Statistics for Economics	9) Index Numbers
UNIT TEST-2	MICROECONOMICS	CHAPTERS 8 & 9
	STATISTICS FOR ECONOMICS	CHAPTERS 7,8 & 9
January & February	Revision & Project Work	
FINAL TERM EXAMINATION	MICRO AND STATISTICS	FULL SYLLABUS Covered in Class.

LEGAL STUDIES

April

Concept of State

- I. What is a State?
 - II. The concept of State and Article 12 of the Indian Constitution
 - III. What is a Government?
 - IV. Emergence of the State from Society
 - V. Definition of State
- Forms and Organs of Government
- I. Introduction to the Organs of Government
 - II. Forms of Government
 - A. Monarchy
 - B. Aristocracy
 - C. Dictatorship
 - D. Democracy
 - III. Main organs of Government and its functions
 - A. General Functions of Legislature as Organ of Government
 - B. General Functions of Executive as Organ of Government

MAY

Separation of Powers

- I. Concept of Separation of Powers
- II. Historical Background and Evolution of Montesquieu's Doctrine of Separation of Powers
 - A. Montesquieu's Doctrine of Separation of Powers
 - B. Basic Features of the Doctrine Separation of Powers as Enunciated by Montesquieu
 - C. Checks and Balances of Power
 - D. Impact of the Doctrine
- III. Evaluation of The Doctrine of Separation of Powers
 - A. Key Benefits and Advantages of The Doctrine of Separation of Powers
 - B. Defects of the Doctrine
- IV. Separation of Powers In Practice
 - A. Separation of Powers in Britain
 - B. Separation of Powers in the United States of America
 - C. Separation of Powers in India

JULY

Unit 2 Basic Features of The Constitution of India

Salient Features of The Constitution of India

- i. Meaning of the term Constitution
- ii. Definition of the term Constitution
- iii. Historical Perspective of Indian Constitution
- iv. Salient Features of The Constitution of India
 - A. A Modern Constitution
 - B. Longhiest written Constitution
 - C. Preamble to the Constitution
 - D. Fundamental Rights; Directive Principles of State Policy; Fundamental Duties
 - E. Constitutional Provision for Amendment of the Indian Constitution

- F. Adult Suffrage
- G. Single Citizenship
- H. Independent Judiciary
- I. Emergency Provisions
- J. Federal in form Unitary in character
- K. Division of Power- Centre- State Relations
- L. Schedules to the Constitution

AUGUST

Unit 3 Jurisprudence, Nature and Sources of Laws

- I. Classification of Law based on Subject matter
- II. Classification of Law based on Scope of Law
- III. Classification of Law based on Jurisdiction
- IV. Classification of Law based on Subject matter
- V. Classification of Law based on Scope of Law
- VI. Classification of Law based on Jurisdiction

SEPTEMBER

Sources of Law

- i. Where does law come from?
- ii. Custom as a source of Law
- iii. Importance of Custom as a source of Law in India
- iv. Judicial Precedent as a Source of Law
- v. Legislation as a Source of Law
- vi. Law Reform
- vii. Need for Law Reform
- viii. Law Reforms in India
- ix. Recent Law Reforms in Independent India

OCTOBER

Cyber Laws, Safety and Security in India

- i. Introduction
- ii. Why do we need Cyber Laws
- iii. What is Cyber Law?
- iv. What is Cyber safety and Security?
- v. What is cyber Crime?
- vi. Categories of Cyber Crime
- vii. Cyber law in India
- viii. Scope and Extent of The Information and Technology Act, 2000(IT Act)
- ix. What was Section 66A of IT Act, 2000?

NOVEMBER

Unit 4 JUDICIARY : CONSTITUTIONAL, CIVIL AND CRIMINAL COURTS AND PROCESSES

Judiciary: Constitutional, Civil and Criminal Courts and Processes

- i. Introduction: Establishment of the Supreme Court and High Courts
- ii. Constitution, roles and impartiality
- iii. Independence and Impartiality of the Supreme Court
- iv. Structure and Hierarchy of the Courts in India
- v. The civil process and functioning of Civil courts
- vi. The civil court structure

- vii. Common legal terminology
- viii. Types of jurisdiction
- ix. Res subjudice and Res judicata in code of civil procedure 1908

DECEMBER

IV. STRUCTURE AND FUNCTIONING OF CRIMINAL COURTS IN INDIA

- a) Types of offences
- b) Criminal investigation and First Information Report
- c) The criminal process- Investigation and prosecution
- d) Doctrine of autrefois acquit and autrefois convict
- V. Other courts in India a) Family Courts b) Administrative Tribunals

JANUARY

Unit 5 Family Justice System

Institutional Framework; Marriage and Divorce

- I. Nature of Family law in India
- II. Human rights and gender perspective
- III. Institutional framework- family Courts
- IV. Role of women in the creation of family courts
- V. Role of lawyers and counsellors in Family courts.
- VI. Role of counsellors and gender issues
- VII. Marriage and Divorce

FEBURARY

Prevention of Violence against Women

- I. What is Domestic abuse / violence?
- II. International legal framework
- III. Laws in India on prevention of violence against women

UNIT TEST 1 –

Concept of State Forms
of Government
Main organs of Government and its functions

HALF YEARLY -

Separation of Powers
Basic Features of The Constitution of India

UNIT TEST –

Nature and Sources of Laws
Sources of Law
Cyber Laws, Safety and Security in India
Judiciary : constitutional, civil and criminal courts and processes

FINAL – ENTIRE SYLLABUS

History

MONTH	CHAPTERS
April / May	2. Writing and City Life
July / August	3. An Empire across three continents
UNIT TEST-1	CHAPTER 2
September	5. Nomadic Empires
HALF YEARLY EXAMINATION	CHAPTERS 2,3 and 5
October	6. The Three Orders
November	7. Changing Cultural Traditions
December	10. Displacing Indigenous People
UNIT TEST-2	CHAPTERS 6
January & February	11. Paths To Modernization
FINAL TERM EXAMINATION	FULL SYLLABUS

BUSINESS STUDIES

Term I HALF YEARLY EXAMINATION

April, May To September

1. Nature and Purpose Of Business /Evolution and Fundamentals of Business.
(Business trade and Commerce)
2. Social responsibility of Business
3. Business services
4. Forms of Business Organization

Term II FINALS

October – December

1. Private, public and Global Enterprises
2. Emerging modes of Business. E-Business Concept, Scope and Benefits.
3. Sources of Finance
4. Small Business

December-January – February

5. Internal Trade
6. International Trade.
7. Project Work

- 1st Unit Test Syllabus –**
1. Nature and Purpose of Business
 2. Social responsibility of Business
 3. Business services

Half – Yearly Exams Term 1 syllabus – Chapters 1- 4

2nd Unit Test Syllabus –

1. Private, public and global enterprise
2. Emerging Modes of Business.
3. Sources of Finance

Annual Examinations – Full Syllabus Term 1 and Term 2



MAHARSHI PATANJALI VIDYA MANDIR, PRAYAGRAJ

SYLLABUS BREAKUP: 2024 - 2025

SUBJECT: INFORMATICS PRACTICES (065)

CLASS: XI

Subject Teacher : Rakesh Kumar Pathak [PGT CS]

MONTH	CHAPTER	TOPICS
APRIL-JULY	UNIT 1: INTRODUCTION TO COMPUTER SYSTEM	INTRODUCTION TO COMPUTER AND COMPUTING: EVOLUTION OF COMPUTING DEVICES, COMPONENTS OF A COMPUTER SYSTEM AND THEIR INTERCONNECTIONS, INPUT/OUTPUT DEVICES. COMPUTER MEMORY: UNITS OF MEMORY, TYPES OF MEMORY – PRIMARY AND SECONDARY, DATA DELETION, ITS RECOVERY AND RELATED SECURITY CONCERNS. SOFTWARE: PURPOSE AND TYPES – SYSTEM AND APPLICATION SOFTWARE, GENERIC AND SPECIFIC PURPOSE SOFTWARE.
AUGUST	UNIT 2: GETTING STARTED WITH PYTHON	BASICS OF PYTHON PROGRAMMING, PYTHON INTERPRETER - INTERACTIVE AND SCRIPT MODE, THE STRUCTURE OF A PROGRAM, INDENTATION, IDENTIFIERS, KEYWORDS, CONSTANTS, VARIABLES, TYPES OF OPERATORS, PRECEDENCE OF OPERATORS, DATA TYPES, MUTABLE AND IMMUTABLE DATA TYPES, STATEMENTS, EXPRESSIONS, EVALUATION AND COMMENTS, INPUT AND OUTPUT STATEMENTS, DATA TYPE CONVERSION, DEBUGGING.
SEPTEMBER	UNIT 2: CONTROL STATEMENTS	IF, IF-ELSE, FOR LOOP
OCTOBER	UNIT 2: LIST AND DICTIONARY	LISTS: LIST OPERATIONS - CREATING, INITIALIZING, TRAVERSING AND MANIPULATING LISTS, LIST METHODS AND BUILT-IN FUNCTIONS. DICTIONARY: CONCEPT OF KEY-VALUE PAIR, CREATING, INITIALIZING, TRAVERSING, UPDATING AND DELETING ELEMENTS, DICTIONARY METHODS AND BUILT-IN FUNCTIONS.
NOVEMBER		
DECEMBER	UNIT 3: DATABASE MANAGEMENT & SQL	DATABASE CONCEPTS: INTRODUCTION TO DATABASE CONCEPTS AND ITS NEED, DATABASE MANAGEMENT SYSTEM. RELATIONAL DATA MODEL: CONCEPT OF DOMAIN, TUPLE, RELATION, CANDIDATE KEY, PRIMARY KEY, ALTERNATE KEY, FOREIGN KEY. ADVANTAGES OF USING STRUCTURED QUERY LANGUAGE, DATA DEFINITION LANGUAGE, DATA QUERY LANGUAGE AND DATA MANIPULATION LANGUAGE, INTRODUCTION TO MYSQL, CREATING A DATABASE USING MYSQL, DATA TYPES DATA DEFINITION: CREATE TABLE, DROP TABLE, AND ALTER TABLE. DATA QUERY: SELECT, FROM, WHERE. DATA MANIPULATION: INSERT
JANUARY	UNIT 4: INTRODUCTION TO THE EMERGING	ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, NATURAL LANGUAGE PROCESSING, IMMERSIVE EXPERIENCE (AR, VR), ROBOTICS, BIG DATA AND ITS CHARACTERISTICS, INTERNET OF THINGS (IOT), SENSORS, SMART CITIES, CLOUD COMPUTING AND

	TRENDS	CLOUD SERVICES (SAAS, IAAS, PAAS); GRID COMPUTING, BLOCK CHAIN TECHNOLOGY.
FEBRUARY	PROJECT WORK.	
TEST -I	INTRODUCTION TO COMPUTER SYSTEM , GETTING STARTED WITH PYTHON	
HALF YEARLY EXAMINATION	INTRODUCTION TO COMPUTER SYSTEM , GETTING STARTED WITH PYTHON, CONTROL STATEMENTS	
TEST-II	DATABASE MANAGEMENT SYSTEM	
ANNUAL EXAMINATION	INTRODUCTION TO COMPUTER SYSTEM, GETTING STARTED WITH PYTHON, CONTROL STATEMENTS, LIST AND DICTIONARY , DATABASE MANAGEMENT & SQL, INTRODUCTION TO THE EMERGING TRENDS	

**MAHARSHI PATANJALI VIDYA MANDIR,
PRAYAGRAJSYLLABUS BREAKUP: 2024 –
2025
SUBJECT: INFORMATICS PRACTICES (065)
PRACTICALCLASS - XI**

MONTH	UNIT	CHAPTER
APRIL - SEPTEMBER	UNIT-1 & UNIT-2	<ul style="list-style-type: none">▣ INTRODUCTION TO COMPUTER SYSTEM▣ GETTING STARTED WITH PYTHON▣ CONTROL STATEMENTS
OCTOBER- FEBRUARY	UNIT -2, UNIT-3 & UNIT-4	<ul style="list-style-type: none">▣ LIST AND DICTIONARY▣ DATA HANDLING▣ DATABASE MANAGEMENT & SQL▣ INTRODUCTION TO THE EMERGING TRENDS



MAHARSHI PATANJALI VIDYA MANDIR, PRAYAGRAJSYLLABUS
BREAKUP: 2024 - 2025
SUBJECT: INFORMATICS PRACTICES (065) PRACTICAL
CLASS: XI

Subject Teacher : Rakesh Kumar Pathak [PGT CS]

MONTH	TOPICS	LIST OF PRACTICALS
APRIL-JULY	Programmingin Python:	1) To find average and grade for given marks. 2) To find sale price of an item with given cost and discount (%). 3) To calculate perimeter/circumference and area of shapes suchas triangle, rectangle, square and circle.
AUGUST		4) To calculate Simple and Compound interest. 5) To calculate profit-loss for given Cost and Sell Price. 6) To calculate EMI for Amount, Period and Interest. 7) To calculate tax - GST / Income Tax.
SEPTEMBER		8) To find the largest and smallest numbers in a list. 9) To find the third largest/smallest number in a list. 10) To find the sum of squares of the first 100 natural numbers. 11) To print the first 'n' multiples of given number. 12) To count the number of vowels in user entered string. 13) To print the words starting with a alphabet in a user enteredstring. 14) To print number of occurrences of a given alphabet in eachstring.
		15) Create a dictionary to store names of states and their capitals. 16) Create a dictionary of students to store names and marksobtained in 5 subjects.
OCTOBER		17) To print the highest and lowest values in the dictionary.
NOVEMBER	Data Management : SQL Commands	18) To create a database 19) To create student table with the student id, class, section, gender, name, dob, and marks as attributes where the student idis the primary key.
		20) To insert the details of at least 10 students in the above table.
DECEMBER		21) To display the entire content of table. 22) To display Rno, Name and Marks of those students who arescoring marks more than 50.
JANUARY		23) To find the average of marks from the student table. 24) To find the number of students, who are from section 'A'. 25) To display the information all the students, whose name startswith 'AN' (Examples: ANAND, ANGAD,..)
		26) To display Rno, Name, DOB of those students who are bornbetween '2005- 01-01' and '2005-12-31'. 27) To display Rno, Name, DOB, Marks, Email of those male studentsin ascending order of their names. 28) To display Rno, Gender, Name, DOB, Marks, Email in descendingorder of their marks. 29) To display the unique section available in the table.

Accountancy

- April & May - 1. Introduction to Accounting
2. Recording of Transactions
- July - 3. Theory Base of Accounting
4. Preparation of Ledger
5. G.S.T.
- August - 6. Trial Balance
7. Subsidiary Books
- September - 8. Cash Book
9. Bank Reconciliation Statement
- October – 10. Rectification of Errors
- November - 11. Depreciation, Reserves & Provisions
- December - 12. Financial Statement
- January - Financial Statement (Continued)
13. Incomplete Records
- February - Project Work

Unit Test I - Unit - 1, 2

Half Yearly - Unit - 1 - 9

Unit Test II - Unit - 10 & 11

Annual Exam - Complete Syllabus

Psychology

April	-	Chapter 1	-	What is Psychology
May	-	Chapter 2	-	Methods of Enquiry in Psychology
July	-	Chapter 4	-	Human Development, Experiment – 1
August	-	Chapter 5	-	Sensory, Attention & Perceptual Processes
September	-	Chapter 6	-	Learning
October	-	Chapter 7	-	Human Memory
November	-	Experiment – 2		
December	-	Chapter 8	-	Thinking
January	-	Chapter 9	-	Motivation & Emotion
February	-	Revision		
Unit Test - I	-	Chapter 1 & 2		
Half Yearly	-	Chapter 1 to 5 except Chapter 3		
Unit Test – II	-	Chapter 6 & 7		
Annual Exam	-	Chapter 1 to 9 except Chapter 3		

Physical Education

April / May : 2024

Unit I : Changing trends and career in physical education.

July : 2024

Unit II : Olympism

August : 2024

Unit III : YOGA

September : 2024

Unit IV : Physical education & Sports for CWSN

Unit V : Physical Fitness, Health and Wellness

October : 2024

Unit VI : Test, Measurement & Evaluation

November : 2024

Unit VII : Fundamentals of Anatomy, Physiology in Sports

December : 2024

Unit VIII : Fundamentals of Kinesiology and Biomechanics in Sports

January : 2025

Unit IX: Psychology & Sports

February : 2025

Unit X : Training and Doping in Sports

Practical –

All the practical topics given in the theory book.

Ist Unit Test: Unit I and Unit II

Half Yearly – Unit II to VI and Unit I of 1st Unit also.

Unit Test II : Unit VII and Unit VIII

Syllabus for Annual Examination - Full Syllabus of all Unit (Unit I to Unit X)

हिंदी

पाठ्य पुस्तकें –

1. आरोह भाग 1
2. वितान भाग 1
3. अभिव्यक्ति और माध्यम

अप्रैल-

गद्य - नमक का दरोगा,
पद्य - कबीर दास का पहला पद
व्याकरण - प्रिंट माध्यम

मई -

गद्य - मियां नसीरुद्दीन,
पद्य - मीराबाई के पद (पहला पद)
वितान - गायिकाओं में बेजोड़ लता मंगेशकर
व्याकरण - जनसंचार माध्यम एवं पत्रकारिता के विभिन्न आयाम

जुलाई -

गद्य - अप्पू के साथ ढाई साल
पद्य - घर की याद
व्याकरण - डायरी लेखन एवं पटकथा लेखन

अगस्त-

गद्य-विदाई संभाषण
पद्य-चंपा काले काले अच्छर नहीं चीन्हती
वितान - राजस्थान की रजत बूंदें
व्याकरण - रचनात्मक लेखन, स्ववृत्त लेखन

सितंबर-

गद्य - गलता लोहा
पद्य - दुष्यंत कुमार की गजल
व्याकरण - डायरी लेखन, पटकथा लेखन, दृश्य लेखन, शब्दकोश

अक्टूबर-

गद्य - रजनी
पद्य - अक्क महादेवी की दो रचनाएं

वितान - आलो आंधारि बेबी हालदार
व्याकरण - प्रतिवेदन, प्रेस विज्ञप्ति

नवंबर -

गद्य- जामुन का पेड़
पद्य- सबसे खतरनाक
वितान- समस्त पाठों की पुनरावृत्ति

व्याकरण-पत्र लेखन रोजगार संबंधी आवेदन पत्र इत्यादि का पुनः अभ्यास

दिसंबर -जनवरी :

गद्य - भारत माता

पद्य - आओ मिलकर बचाएं

फरवरी -वर्ष भर पढ़ाए गए संपूर्ण पाठों की पुनरावृत्ति एवं व्याकरणिक अंशों का अभ्यास

विषय हिंदी

प्रथम यूनिट परीक्षा

गद्य - नमक का दरोगा, मियां नसीरुद्दीन

पद्य - कबीर दास का प्रथम पद, मीराबाई का प्रथम पद

वितान - गायिकाओं में बेजोड़ लता मंगेशकर

व्याकरण - संचार माध्यम, समाचार लेखन

अर्धवार्षिक परीक्षा

गद्य - नमक का दरोगा, मियां नसीरुद्दीन, अप्पू के साथ ढाई साल, विदाई संभाषण, गलता लोहा

पद्य - कबीर दास के पद, मीराबाई के पद, घर की याद, चंपा काले काले अक्षर नहीं चिन्हती

वितान - गायिकाओं में बेजोड़ लता मंगेशकर, राजस्थान की रजत बूंदें

व्याकरण - रचनात्मक लेखन, पत्र लेखन, जनसंचार माध्यम एवं पत्रकारिता, अपठित गद्यांश एवं पद्यांश, शब्दकोश, स्ववृत्त लेखन

द्वितीय इकाई परीक्षा

गद्य - रजनी, जामुन का पेड़

पद्य - गजल, अक्कमहादेवी की दो कविताएं

वितान - आलो आंधारि बेबी हालदार

व्याकरण - डायरी लेखन, पटकथा लेखन

वार्षिक परीक्षा

वर्ष भर पढ़ाया गया संपूर्ण पाठ्यक्रम

क्रियाकलाप

त्वरित भाषण, कविता वाचन एवं वाद-विवाद

परियोजना कार्य

लेखक, कवि, साहित्य एवं विभिन्न सामाजिक विषयों जैसे -

*हिंदी भाषा और साहित्य से जुड़े विविध विषयों / विधाओं / साहित्यकारों / समकालीन लेखन / भाषा के तकनीकी पक्ष / प्रभाव

/ अनुप्रयोग एवं साहित्य के सामाजिक संदर्भों एवं जीवन मूल्य संबंधी प्रभाव आदि

भक्ति काल हिंदी साहित्य का स्वर्ण युग

संचार माध्यम

किसी एक विषय पर सीबीएसई द्वारा निर्देशित मानकों के आधार पर फाइल वर्क

Maharshi Patanjali Vidya Mandir, Allahabad

Syllabus Breakup :2024-25

Sewa
Class- XI

April May	1. Sustainable development and its importance for the environment. Or 2. Climate change and its impacts on the environment.
July	Photography (conceptual) with one page writeup
August	Paper bag big size.
September October	Plant Sapling with writeup
November December	Newspaper Made Product Best out of Waste
January February	Sewa form n work submission