

# **SUBJECT – ENGLISH CORE**

MONTH	SECTION	CONTENT	Objectives/Aims
April & May		Bridge course	To prepare students for advanced studies
	READING	Note Making and Summary	To develop the skill of making notes and summarizing the given passage along with vocabulary enhancement
JULY	WRITING	Classified Ad	To convey needs and requirements in concise and precise way
		Speech/Debate	To develop skill of putting forth arguments both in favour or against the topic
	GRAMMAR	Error Correction	To develop the ability to write flawless language
		The Portrait of a Lady	To point out relevance of strong relationship with elders
	LITERATURE	The Summer of Beautiful White Horse	To know that essential goodness in a human being remains intact
		Photograph	To understand the transient nature of human life.
		Poem- Tale of a Melon City	To point out that misuse of power and lack of wisdom result in catastrophic situation.
	READING	Passages for Note Making	To develop the skill of making notes and summarizing
	WRITING	Posters	To present topics of educational and social relevance aesthetically.
	GRAMMAR	Reordering of Sentences	To develop confidence and proficiency in the use of language skills
AUGUST	LITERATURE	We're Not Afraid to Die	To appreciate the importance of courage and determination in adverse circumstances
		Laburnum Top	To enable them to critically appreciate a poem
		Voice of the Rain	To appreciate the bounties of nature in the form of rain.
		Story -The Address	To explain the impact of war.
	READING	Passages for Comprehension & Note Making (revision)	Same as above
SEPTEMBER	WRITING	Article Writing	To polish writing skills and critical thinking on a given topic.
	WRITING	Commercial ads	To develop the skill of brand promotion in a lucrative way.
	GRAMMAR	Editing Tasks	To develop the ability to identify the mistakes and correct them
	LITERATURE	Discovering Tut	To point out the contribution of technology in studying past.



	READING	Passages for Note Making (practice)Same as above	
	WRITING	Business and Official Letters	To learn writing letters to civic authorities to address relevant issues
	GRAMMAR	Error Correction	to use different grammatical structures in appropriate contexts.
OCTOBER	LITERATURE	Poem- childhood	To know the constraints of adult life.
	READING	Passages for Comprehension (practice)	Same as above
	WRITING	Speech Writing	To present ideas on a given issue in a convincing way.
	WRITING	Posters	To present topics of educational and social relevance aesthetically.
NOVEMBER	GRAMMAR	Revision	To develop confidence and proficiency in the use of language skills
	LITERATURE	Mother's day	to focus on the dignity of mother.
	LITERATURE	P-Father to Son	To point out changing relationship between parents and children.
	READING	Revision & Practice	To develop confidence and proficiency in the use of language skills
	WRITING	REPORT WRITING	To acquaint students to write fact based description.
DECEMBER	GRAMMAR	Revision & Practice	To develop confidence and proficiency in the use of language skills
	LITERATURE	Story-6 Birth	To Know that persistent efforts bring result.
JAN & FEB		Revision	To develop confidence and proficiency in the use of language skills

UN	UNIT TEST/ EXAMWISE SYLLABUS BIFURCATION (2023-24)				
	READING SECTION	Note Making			
	WRITING SECTION	Classified ads, Speech			
	GRAMMAR SECTION	Error Correction			
UT I Aug-23 (30 marks)	LITERATURE SECTION	L-1,( Portrait) Story-1,(White horse)			
		P 1- Photograph & P- 2 Tale of Melon City			
	READING SECTION	Reading Comprehension & Note Making			
	WRITING SECTION	Classified Ads , Posters, Speech, Debate			
HALF YEARLY	GRAMMAR SECTION	Editing, Gap Filling & Reordering of sentences			
Sep-22 80 Theory	LITERATURE SECTION	L1(Portrait) ,L-2(We're), L-3(Tut), S-1(Horse.), S - 2 (Address)			
20 ASL		P 1- Photograph, P 2- Laburnum Top, P 3- Rain			



100 Marks		Speaking & Listening Test
	READING SECTION	Reading Comprehension
	WRITING SECTION	Posters, Debate
UT II Dec-23	GRAMMAR SECTION	Editing & Reordering of sentences
35 Marks	LITERATURE	
	SECTION	L-8 Silk Road, P-4 (Childhood) S-5 (Mother's Day)



# **SUBJECT – GEOGRAPHY**

MONTH	BOOK	NAME OF CHAPTER	OBJECTIVE/AIM	SUBJECT ENRICHME NT
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-1 Geography as a Discipline	<ul> <li>Geography as an integrating discipline, as a science of spatial attributes</li> <li>Branches of Geography: Physical Geography and Human Geography</li> </ul>	
APRIL	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-2 The Origin and Evolution of the Earth	<ul> <li>Origin and evolution of the earth</li> <li>Theories related to formation of Earth, Stars, Moon and Sun</li> </ul>	Diagram
	INDIAN PHYSICAL ENVIRONME NT	CH-1 India- Location	• India : Location, space relations, India's place in the world	Map work
MAY	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-3 Interior of the Earth	<ul> <li>Interior of the earth Earthquakes and volcanoes: causes, types and effects</li> <li>P-waves, S-waves, L-Waves</li> </ul>	Diagram
	PRATICAL WORK IN GEOGRAPHY -I	CH-1 Introduction to Maps	<ul> <li>Concept of Geographical data matrix</li> <li>Point, line, area data</li> </ul>	
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-4 Distribution of Oceans and Continents	<ul> <li>Distribution of oceans and continents</li> <li>Wegener's continental drift theory</li> <li>Plate tectonics</li> </ul>	Map work
JULY	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-5 Minerals and Rocks	<ul> <li>Rock cycle</li> <li>Features of Igneous Rocks, Metamorphic Rocks and Sedimentary Rocks</li> <li>Different types of Minerals, their composition and usage</li> </ul>	
	INDIAN PHYSICAL ENVIRONME NT	CH-2 Structure And Physiography	<ul> <li>Structure and Relief; Physiographic Divisions</li> <li>Himalayan block formation</li> <li>Northern plain formation</li> <li>Peninsular block formation</li> </ul>	Map work



	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-6 Geomorphic Process	<ul> <li>Geomorphic processes</li> <li>Weathering, mass wasting, erosion and deposition</li> <li>Soil Formation</li> </ul>	Diagrams
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-7 Landforms and their Evolution	<ul> <li>Landforms and their evolution</li> <li>Erosional and depositional features</li> </ul>	Diagrams
AUGUST	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-8 Composition and Structure of Atmosphere	<ul><li>Composition of Atmosphere</li><li>Structure of Atmosphere</li></ul>	Diagrams
	INDIAN PHYSICAL ENVIRONME NT	CH-3 Drainage System	<ul> <li>Drainage systems: Concept of river basins, watershed</li> <li>The Himalayan and the Peninsular rivers</li> </ul>	
	PRATICAL WORK IN GEOGRAPHY -I	CH-2 Map Scale	<ul> <li>Maps - types; scales-types</li> <li>Construction of simple linear scale, measuring distance</li> <li>Finding direction and use of symbols</li> </ul>	Map Scale making
SEPTEM		REVISION AND HALF YEARLY		
BER		<b>REVISION</b> A	ND HALF YEARLY	
BER	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	REVISION A CH-9 Solar Radiation, Heat Budget and Temperature	<ul> <li>ND HALF YEARLY</li> <li>Solar Radiation-Insolation-angle of incidence and distribution</li> <li>Heat budget of the earth</li> <li>Heating and cooling of atmosphere (conduction, convection, terrestrial radiation and advection)</li> </ul>	Diagrams
BER OCTOBE R	TALS OF PHYSICAL	CH-9 Solar Radiation, Heat Budget and	<ul> <li>Solar Radiation-Insolation-angle of incidence and distribution</li> <li>Heat budget of the earth</li> <li>Heating and cooling of atmosphere (conduction, convection, terrestrial radiation</li> </ul>	Diagrams



	ENVIRONME NT PRATICAL	CH-3	<ul> <li>Spatial and temporal distribution of temperature</li> <li>Indian monsoon: its mechanism</li> <li>Onset and withdrawal</li> </ul>	International
	WORK IN GEOGRAPHY -I	Latitude, Longitude and Time	• Latitude, longitude and time	Date line construction
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-11 Water in Atmosphere	<ul> <li>Evaporation</li> <li>Condensation-dew, frost, fog, mist</li> <li>Cloud; rainfall-types and world distribution</li> </ul>	
NOVEM	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-12 World Climate and Climate Change	<ul> <li>World Climate and Global Concerns</li> <li>Global warming and its causes</li> </ul>	MUN
BER	INDIAN PHYSICAL ENVIRONME NT	CH-5 Natural Vegetation	<ul> <li>Type of Vegetation</li> <li>Forest cover</li> <li>Forest conservation</li> <li>Man and Biosphere program</li> </ul>	Map works on Vegetation Travelogue on UNESCO MAB Program
	PRATICAL WORK IN GEOGRAPHY -I	CH-4 Map Projection	<ul> <li>Map projection- typology, construction and properties of Projection</li> <li>Conical with one standard parallel and Mercator's projection.</li> </ul>	Map projection construction
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH- 13 Water	<ul> <li>Relief features of the Ocean</li> <li>Ocean temperature- Horizontal and vertical temperature of Ocean</li> <li>Salinity</li> </ul>	
DECEMB ER	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-14 Movements of Ocean Water	<ul> <li>Basics of Oceanography</li> <li>Oceans - distribution of temperature and salinity</li> <li>Movements of ocean water- waves, tides and currents; submarine reliefs</li> </ul>	
	INDIAN PHYSICAL ENVIRONME NT	CH-6 Soil	<ul> <li>Soil- Classification and its composition</li> <li>Soil Erosion</li> <li>Soil Degradation</li> </ul>	Map works
	PRATICAL WORK IN GEOGRAPHY -I	CH-5 Topographica 1 Maps	<ul> <li>Study of topographic maps (1 : 50,000 and 1 : 25,000)</li> <li>Contour cross, section</li> </ul>	Contour making Toposheet interpretation



	PRATICAL WORK IN GEOGRAPHY	CH-6 Introduction to Aerial	<ul> <li>Identification of landforms- slopes, hills, valleys, waterfall, cliffs; distribution of settlements</li> <li>Satellite imageries</li> </ul>	Aerial sheet tracing
	-I FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	Photographs CH-15 Life on the Earth	• Biosphere - importance of plants and other organisms	
	FUNDAMEN TALS OF PHYSICAL GEOGRAPHY	CH-16 Biodiversity and Conservation	• Biodiversity and conservation	
JANUAR Y And FEBUAR Y	INDIAN PHYSICAL ENVIRONME NT	CH-7 Natural Hazards and Disaster	<ul> <li>Floods, Cloudbursts</li> <li>Droughts: types and impact</li> <li>Earthquakes and Tsunami Cyclones: features and impact</li> <li>Landslides</li> </ul>	
	PRATICAL WORK IN GEOGRAPHY -I	CH-6 Introduction to Remote Sensing	<ul> <li>Stages in remote sensing</li> <li>Data- acquisition, platform and sensors and data products</li> <li>Photographic and digital</li> </ul>	Analyzing Satellite images
	PRATICAL WORK IN GEOGRAPHY -I	CH-7 Weather Instruments, Maps and Charts	<ul> <li>Weather Observation</li> <li>Space Observation</li> <li>Weather map reading and analysis</li> </ul>	Analyzing weather maps

# Exam Syllabus

UNIT TEST-I (AUGUST)	<b>Book 1</b> Ch. 1. Geography as a discipline	Book 2
(A00051)	Ch. 2. The origin and evolution of the earth	Ch.1. India- Location
	Ch. 3. Interior of the Earth	Ch. 2. Structure And
		Physiography
HALF YEARLY	Book 1	Book 2
EXAM	Ch. 3. Interior of the Earth	Ch.1. India- Location
(SEPTEMBER)	Ch.4. Distribution of Oceans and	Ch. 2. Structure And
	Continents	Physiography
	Ch. 5. Minerals And Rocks	Ch. 3. Drainage System
	Ch. 6. Geomorphic Processes	
	Ch. 7. Landforms and Evolution	
	Ch. 8. Composition and Structure of	
	Atmosphere	



LINUT TECT H	Deals 1	Deals 2
UNIT TEST-II	Book 1	Book 2
(DECEMBER)	Ch. 9. Solar radiation heat balance and	Ch. 4. Climate
	temperature	Ch. 5. Natural Vegetation
	Ch. 10. Atmospheric Circulation and	
	Weather System	
	Ch. 11. Water in the atmosphere	
QUAFILYING	Book 1	Book 2
(JANUARY)	Ch. 12. World Climate and Climate Change	Ch. 3. Drainage
	Ch. 13. Water (oceans)	Ch. 4. Climate
	Ch. 14. Movements of ocean water	Ch. 6. Soils
ANNUAL EXAM	Book 1	Book 2
	Ch. 1. Geography as a discipline	Ch. 3. Drainage
	Ch. 2. The origin and evolution of the earth	Ch. 4. Climate
	Ch. 3. Interior of the earth	Ch. 5. Natural vegetation
	Ch. 4. Distribution of Oceans and	Ch. 6. Soils
	continents	Ch. 7 Natural Hazards
	Ch. 6. Geomorphic processes	
	Ch. 8. Composition and structure of	
	atmosphere	
	Ch. 9. Solar radiation heat balance and	
	temperature	
	Ch. 11. Water in the atmosphere	
	Ch. 13. Water (oceans)	
	Ch. 14. Movements of ocean water	
	Ch. 15. Life on the earth	



### **SUBJECT – ECONOMICS**

Month	Chapter	Learning Objectives/	Subject	Project
	Chupter		Enrichment Activity	11 oject
April	Introduction of Statistics Collection of data	To familiarize the students with the meaning, scope and importance of statistics in economics. Learners are expected to acquire skill in collection of data systematically: Methods of data collection.	Students will be asked to make a questionnaire and take a survey to collect information.	
May	Introduction of Microeconomi cs Organisation of data	To make students aware of economy, economic problem and central problems of the economy. To develop the skill among students regarding PPC, change in PPC due to various economic conditions and the concept of MOC. Types of statistical series, Methods of construction of series and Classification techniques.	Organize a class presentation on various recent government programmes and their impact on PPC of the country. Draw a flow chart of different statistical series.	Project
July	Consumer's Equilibrium Theory of demand Presentation of data	Students will understand the concept of utility, total utility, marginal utility and law of diminishing marginal utility. Students would be able to understand the concept of consumer's equilibrium- Utility analysis and Indifference curve analysis. Students will be able to understand the concept of demand, law of demand, factors affecting demand and changes in demand due to various reasons. students will understand the meaning of Histogram, bar diagram, pie diagram, frequency curve etc	Discuss in class the various consumption goods in which law of DMU can be applied. Conduct a classroom presentation on those factors that affect demand. Drawing of various diagrams.	
August	Elasticity of demand	Students will understand Price elasticity of demand, degrees, measurement and factors affecting elasticity of demand.	Collect and compare the marks of students and calculate averages out of it.	

### Introductory Microeconomics & Statistics for Economics



	Mara		
	Measures of	Students will be able to understand the	
	central	meaning of mean & median	
<b>C</b> (	tendency		
Septem	Production	Students will understand the concept of	Conduct a class
ber	Function &	production and law of variable proportions.	presentation of
	cost	Students will understand the cost and	budding
			entrepreneurs.
		meaning and relationship.	
		Continued Revision Half yearly- examination	
October	Concept of	Students will understand types of revenue and	. Collect some
October	Revenue	their relationship.	newspaper cutting
	Revenue	then relationship.	of India's top
	Producer's	Students will understand the producer's	entrepreneurs and
	Equilibrium	equilibrium: meaning and its conditions in	make a collage.
	-1	terms of MC&MR.	
	Mearures of		
	central	Students will learn various methods of finding	
	tendency	mode.	
Novem	Theory of	Students would be able to understand the	Automobile sector
ber	supply	concept of supply, law of supply, factors	is facing a crisis,
		affecting supply and changes in supply.	with a sharp
		Students will understand price elasticity of	decline in sales.
		supply, degrees and measurement.	Analyze the impact
			of this statement on
	Correlation	Students will be able to learn Karl Pearson's	the supply of cars
		methods of correlation: Actual mean, short-	with a PPT.
		cut method and step-deviation method.	
Decem	Correlation	Students would be able to understand	Make a report on
ber	Correlation	Spearman's rank difference methods of	Make a report on the various
001		correlation.	products by
	Forms of		classifying them
	market	Students will understand different forms of	according to
	market	market- perfect competition.	different market
			forms.
January	Index	To understand the meaning of index number	Visit the ration
January	Numbers	To understand the meaning of index number, CPI & WPI.	shops of your city
	110015		and prepare a
	Market	Students will understand the meaning and	project on the
	Equilibrium	price determination under perfect competition	working of ration
	-quinonum	& the shift in demand and supply and their	shop.
		impact on equilibrium price.	· · · ·
Februar		Revision of Annual Examination	
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UT 1	Micro Eco Chap 1 Statistics 1-3			
HY Exam	Micro Eco Chap 1-5 Statistics chap 1-8 (Excluding mode)			
UT 2	Micro Eco Chap 6-7 Statistics chap 8 (mode)& 10(Karl Pearson's method)			
UT 3	Micro Eco Chap 8-10 Statistics chap 10 (Rank difference method)			
Annual Exam	Whole syllabus			

# Exam Wise Syllabus



### **SUBJECT – POLITICAL SCIENCE**

# BOOK-1 INDIAN CONSTITUTION AT A WORK – CHAPTERS- 1- 7 BOOK-2 POLITICAL THEORY – CHAPTERS 8 - 15

MONT H	CHAPTER	OUTCOME		PROJ ECT
APRIL	1. Constitution	Constitution: Why and How, The Making of the Constitution, Fundamental Rights and Duties, Directive Principles of State Policy, constitutional Amendments.		
MAY	2. Election and Representation	Elections and Democracy, Election System in India, Electoral Reforms.	QUIZ	
	3. Legislature	Why do we need a Parliament? Unicameral / Bicameral Legislature. Functions and Power of the Parliament, Parliamentary committees. Parliamentary Officials: Speaker, Deputy Speaker, Parliamentary Secretary.		CBSE
JULY	4. Executive	. What is an Executive? Different Types of Executive. Parliamentary Executive in India, Prime Minister and Council of Ministers. Permanent Executive: Bureaucracy.		
	5. Judiciary	Why do we need an Independent Judiciary? Structure of the Judiciary, Judicial Review, Judicial Activism, Judicial Over-reach.	MUN	
AUG	6. Federalism	What is Federalism? Evolution & Growth of the Indian Federalism: Quasi Federalism, Cooperative Federalism & Competitive Federalism.		
	7. Local Governments.	Why do we need Local Governments? Growth of Local Government in India, 73rd and 74th Amendments, Working and Challenges of Local Governments		
SEP	8. Political Theory	An Introduction 08 Periods What is Politics? Politics V/s Political Theory, Importance of Political Theory.		
OCT	9. Liberty 10. Equality	Liberty V.s Freedom, Negative and Positive Liberty. What is Equality? Significance of Equality. Various dimensions of Equality. How can we promote Equality	SKIT	
NOV	11. Justice	What is Justice? Different dimensions of Justice, Distributive Justice.		
	12. Rights	What are Rights? Where do Rights come from? Legal Rights and the State. Kinds of Rights. Human Rights.		
DEC	13. Citizenship	What is citizenship? Citizen and Citizenship, Citizen and Nation, Global Citizenship		
	14. Nationalism	Nations and Nationalism, Variants of Nationalism, Nationalism, Pluralism and Multiculturalism.	PRESENT ATION	



JAN	15. Secularism	What is Secularism? What is Secular State? The	What is Secularism? What is Secular State? The		
		Western and the Indian perspectives to Secularism.			
		Salient Features of Indian Secularism.			
		EXAM WISE SYLLABUS			
	UNIT-1	CH-1&2	15%		
	HALF	CH -1- 6	40%		
	YEARLY				
	UNIT-II	CH – 7 - 9	20%		
	QUALIFYING	СН -1-13	86%		
	Е				
	ANNUAL	WHOLE SYLLABUS	100%		
	EXAM				



# **SUBJECT – MATHEMATICS**

MONTH	CH NO.	CHAPTERS NAME	LEARNING OBJECTIVES/OUTCOMES	ACTIVITIES
APRIL	3	TRIGONOMETRIC FUNCTION	To know trigonometric functions using unit circle, identities, formulas and their application.	
AFNIL	10	STRAIGHT LINES	To use algebra advantageously in study of straight line ,their slopes and their properties.	
MAY	1	SETS	To know about sets, sub- sets, and their representation, Venn diagrams, operations on sets, practical problems on Union and Intersection.	To verify operations on sets using venn diagrams.
JULY	2	RELATIONS AND FUNCTIONS	To know ordered pair, Cartesian product, relations, functions, domain, co-domain, range and graphs of different functions.	To find the no. of relatons from set A to B.
5021	5	COMPLEX NUMBERS & QUADRATIC EQUATIONS	To make clear about complex numbers and real numbers operations on complex numbers and multiplicative Inverse ,conjugate,modulus and their properties.	To differentiate between funtions and relation.
AUGUST	6	LINEAR INEQUALITIES	To make clear about the symbols less than ,more than use in inequality, meaning of atleast and atmost, solution of inequality algebraically and graphically ,word problems.	To find out the solution of linear inequations graphically
AUGUST	7	PERMUTATIONS & COMBINATIONS	To understand the concept of fundamental principle of counting, factorial notation ,permutations and combination and their properties with daily life examples	
SEPTEMBER	8	BINOMIAL THEOREM	Binomial expansion for a given positive integeral power	To construct a pascal tringale and to write binomial expansion for a given positive integer power



OCTOBER	9	SEQUENCES AND SERIES	Arithmetic and		
NOVEMBER	11	CONIC SECTION	To learn about the intersection of a plane with a double napped cone right circular cone results in different types of the curve.	To construct an ellepse	
	12	THREE DIMENSIONAL GEO.	To extend the knowledge of two dimensional geometry to three dimensional geometry.		
DECEMBER	13	LIMITS & DERIVATIVES	To find out the limits and derivatives of different functions		
JANUARY	15	STATISTICS	To learn about the important measures of dispersion and their methods of calculation for ungrouped and grouped data.		
	16 PROBABILITY		To know about the basic terms, for random experiments with different cases to interpret the probability.	To find the sample space of (i) dices (ii) coins.	
FEBRUARY	REVISION				

# Unit Wise Syllabus: Mathematics

UT-I	CH-3, 10	30	
HALFYEARLY(TER M I)	CH- 1,2,3,5,6,7, 8,10	80	20 marks Internal assesment
UT-II	CH- 9, 11	35	
UT-III	CH- 12,13	35	
ANNUAL	WHOLE SYLLABUS	80	20 marks Internal assessment



### **SUBJECT – COMPUTER SCIENCE WITH PYTHON**

MONTH	CHAPTER	OBJECTIVE / AIM	LAB ACTIVITY
April	NAME         Ch – 1         Computer         System         Organization	Description of a computer system and mobile system, CPU, memory, hard disk, I/O, Types of software, OS, utility, libraries, Language of Bits: bit, byte, MB, GB, TB, and PB. Execution of a program, Interpreters, Compiler and an interpreter, how an operating system runs a program, idea of loading, operating system as a resource manager, Concept of cloud computers, cloud storage (public/private), and brief introduction to parallel computing.	Introduction to Python environment > Interactive Mode > Script Mode > Operators & Operands
May	Ch – 2 Data Representation & Boolean Logic	Information representation: numbers in base 2, 8, 16, unsigned integers, binary addition, Strings: ASCII, UTF8, UTF32, ISCII (Indian script code), Boolean logic: OR, AND, NAND, NOR, XOR, NOT, truth tables, De Morgan's laws	<ul> <li>Basic Programs of Python:</li> <li>➢ Add 2 numbers.</li> <li>➢ Make a simple calculator.</li> <li>➢ Calculate total &amp; percentage of a student.</li> </ul>
June		SUMMER BREAK	
July	Ch – 3 Computational Thinking & Getting Started with Python Ch –4 Python Programming Fundamentals	Introduction to problem solving, Steps for problem solving, Algorithms, Flowcharts, Pseudocode, computational thinking & its components, Familiarization with the basics of Python, features, advantages, disadvantages, how to install python, Python IDLE, Exiting Python. Variables, Multiple assignments, Keywords, expressions, Operators & its types, User Defined Functions, Indentation, Tokens, Comments process of writing a program, running it, and print statements; simple data-types: integer, float, string	<ul> <li>Basic Programs of Python:</li> <li>Swap the values of two variables.</li> <li>Conversion of Celsius to Fahrenheit &amp; vice -versa.</li> <li>Conversion of units of measurement.</li> <li>Basic Programs of Python:</li> <li>To calculate the area &amp; perimeter of various shapes.</li> <li>Conversion from amount-in-dollars and dollar-to-rupee.</li> </ul>
August	Ch – 5 Conditional &	Conditional statements: if, if-else, if-elif- else; simple programs: e.g.: absolute value, sort 3 numbers, and divisibility. Notion of	Basic Programs of Python: → Print numbers from 1 to 100.



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	Looping Constructs Ch – 6 Strings in Python	iterative computation and control flow: for, while, Nested loop, jump Statements- break, continue & pass. Strings: compare, concatenation, substring; various string operations & functions.	<ul> <li>Print the table of a given number.</li> <li>Check for Palindrome, Armstrong number</li> <li>Print Fibonacci Series</li> <li>Basic Programs of Python:</li> <li>Reverse a string</li> <li>Check whether a string is palindrome or not</li> <li>Count the occurrence of a character in a string.</li> </ul>
September		HALF YEARLY EXAMINATIONS	
October	Ch – 7 Lists in Python Ch – 8 Tuples and Dictionary	Lists: finding the maximum, minimum, mean; linear search on list/tuple of numbers, and counting the frequency of elements in a list using a dictionary. Introduce the notion of accessing elements in a collection using numbers and names. Tuples and dictionary: finding the maximum, minimum, mean; linear search on list/tuple of numbers, and counting the frequency of elements in a list using a dictionary. Introduce the notion of accessing elements in a collection using numbers and names.	<ul> <li>Basic Programs of Python:</li> <li>Enter elements in a list and find the sum.</li> <li>Find the minimum &amp; maximum element in a list/tuple.</li> <li>Input a list of numbers and swap elements at the even location with the elements at the odd location.</li> <li>Input a list/tuple of elements, search for a given element in the list/tuple.</li> <li>Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have scored marks above 75.</li> </ul>
November	Ch – 9 Introduction to Python Modules Ch – 10 Society, Law & Ethics	Importing module using import statement/ from statement, importing math module, random module, statistics module. Digital Footprints, Digital society & Netizen, Data Protection, Intellectual Property Rights, its violation, Cyber crime	Basic Programs of Python: → Create a module Area and define functions to find the area of circle, square, rectangle etc. Import the module and calculate the area of a shape.



December	Ch – 11 Cyber Safety	Cyber safety: safely browsing the web, identity protection, confidentiality, social networks, cyber trolls and bullying, Appropriate usage of social networks: spread of rumours, and common social networking sites (Twitter, LinkedIn, and Facebook) and specific usage rules, Safely accessing web sites: adware, malware, viruses, Trojans, Safely communicating data: secure connections, eavesdropping, phishing and identity verification, IT Act, 2000, E-Waste management.	Revision of all the programming concepts.
DDOJECT			

#### PROJECT:

The aim of the class project is to create something that is tangible and useful using Python file handling/ Python-SQL connectivity. This should be done in groups of two to three students. The aim here is to find a real-world problem that is worthwhile to solve. Students will choose a topic and prepare synopsis on the topic.

### **EXAMINATION SCHEDULE**

UT I	HALF – YEARLY	UT II	QUALIFYING EXAM	ANNUAL EXAM
Ch – 1, 2 & 3	Ch – 1 to 6	Ch – 7, 8	Ch – 4 to 9	Complete Syllabus
(27%)	(55%)	(18%)	(55%)	(100%)



# **SUBJECT – INFORMATICS PRACTICES**

Month	Unit name	Chapter Name	Objective / Aim	Lab Activity
April	Unit 1: Introduct ion to Compute r System	Introduction to Computer System	Introduction to computers 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. 2 Software: purpose and types – system and application software, generic and specific purpose software.	Identify the components of the Computer System.
April & May	Unit 2: Introduct ion to Python	Introduction to 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 of expressions, comments, input and output statements, data type conversion, debugging, control statements: if-else, for loop	<ol> <li>To find average and grade for given marks.</li> <li>To find sale price of an item with given cost and discount (%).</li> <li>To calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle.</li> <li>To calculate Simple and Compound interest. 5. To calculate profit-loss for given Cost and Sell Price.</li> <li>To calculate EMI for Amount, Period and Interest.</li> <li>To calculate tax - GST / Income Tax.</li> </ol>
July		List	Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions.: len(), list(), append(), extend(), insert(), count(), find(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum()	<ul><li>8. To find the largest and smallest numbers in a list.</li><li>9. To find the third largest/smallest number in a list.</li></ul>



			Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions: len(), dict(), keys(), values(), items(), get(), update(), clear(), del()	<ul> <li>10. To find the sum of squares of the first 100 natural numbers.</li> <li>11. To print the first 'n' multiples of given number.</li> <li>12. To count the number of vowels in user entered string.</li> <li>13. To print the words starting with a alphabet in a user entered string. 14. To print number of occurrences of a given alphabet in each string.</li> </ul>
August		Dictionary		<ul> <li>15. Create a dictionary to store names of states and their capitals.</li> <li>16. Create a dictionary of students to store names and marks obtained in 5 subjects.</li> <li>17. To print the highest and lowest values in the dictionary.</li> </ul>
October	Unit 3: Database concepts and the Structure d Query Languag e		Database Concepts: Introduction to database concepts and its need, Database Management System. Relational data model: concept of attribute, domain, tuple, relation, candidate key, primary key, alternate key, foreign key. Structured Query Language: Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL: Creating a database, using database, showing tables using MySQL, Data Types : char, varchar, int, float, date Data Definition Commands: CREATE, DROP, ALTER (Add and Remove primary key, attribute). Data Query Commands: SELECT-FROM- WHERE, LIKE, BETWEEN, IN, ORDER BY, using arithmetic, logical, relational operators and NULL values in queries, Distinct clause Data Manipulation Commands: INSERT, UPDATE, DELETE.	<ul> <li>19. To create student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.</li> <li>20. To insert the details of at least 10 students in the above table.</li> <li>21. To display the entire content of table.</li> <li>22. To display Rno, Name and Marks of those students who are scoring marks more than 50.</li> <li>23. To find the average of marks from the student table.</li> <li>24. To find the number of students, who are from section 'A'.</li> <li>25. To display the information all the students, whose name starts with 'AN' (Examples: ANAND, ANGAD,)</li> </ul>



			<ul> <li>26. To display Rno, Name, DOB of those students who are born between '2005- 01-01' and '2005-12-31'.</li> <li>27. To display Rno, Name, DOB, Marks, Email of those male students in ascending order of their names.</li> <li>28. To display Rno, Gender, Name, DOB, Marks, Email in descending order of their marks.</li> <li>29. To display the unique section available in the table.</li> </ul>
Novem ber	Unit 4: Introduct ion to the Emergin g Trends	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 Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.	• Identify the Emerging trends in the fields of Information Technology.
Decem ber	Revision		
January	Revision		

### **EXAMINATION SCHEDULE**

	WEIGHTAGE	UNIT AND CHAPTER NAME
UT-I	(25% OF SYLLABUS)	UNIT-I
		Introduction to Computer System
		Unit 2: Introduction to Python
HALF YEARLY	(50 % OF SYLLABUS)	UNIT-I
		Introduction to Computer System
		Unit 2: Introduction to Python
		List
		Dictionary
UT-II	(25 % OF SYLLABUS)	Unit 3: Database concepts and the Structured
		Query Language
QUALIFYING	(75% OF SYLLABUS)	Unit 2: Introduction to Python
		List
		Dictionary
		Unit 3: Database concepts and the Structured
		Query Language
ANNUAL		COMPLETE SYLLABUS



# **SUBJECT – PSYCHOLOGY**

MONTH	NAME OF THE CHAPTER	OBJECTIVE/ AIM	LAB ACTIVITY / SUBJECT ENRICHME NT ACTIVITY	PROJECT
APRIL	Ch-1 What is Psychology ?	After studying this chapter students would be able to: i. Develop the understanding of role mind and behaviour. ii. Explain the different fields of Psychology, its discipline, and professions. iii. Develop the understanding of value of psychology in daily life to understand themselves and others better.		
MAY	Ch-2 Methods of enquiry	After studying this chapter students would be able to: i. Explain the goal and nature of Psychological enquiry. ii. Explain the important methods of psychological enquiry. iii. Develop the understanding about the limitations of psychological enquiry and ethical considerations.		Students will prepare project by using different methods of psycho logical enquiry.
JULY	Ch-4	After studying this chapter students would be able to: i. Explain the meaning and process of development. ii. Explain and identify the stages of development and describe the major characteristics of infancy, childhood, Adolescence, adulthood and old age		
AUG.	Ch-5 Sensory Attentional and Perceptual Processes	After studying this chapter students would be able to: i. Develop the understanding of the nature of sensory processes. ii. Explain the types and process of attention. iii. Develop the understanding of the role of socio-cultural factors in perception.		
SEPT.	Ch-6 Learning	After studying this chapter students would be able to: i. Develop the understanding of the nature and features of learning. ii. Explain the types of learning. iii. Acquainted with the leaning principles.		



OCT.	Ch-7 Memory	<ul><li>After studying this chapter students would be able to:</li><li>i. Develop the understanding of the nature of memory.</li><li>ii. Develop the understanding of the nature and causes of forgetting.</li><li>iii. Develop the skills for improving memory.</li></ul>	Experiment on methods of verbal Learning.	
NOV.	Ch-8 Thinking	<ul> <li>After studying this chapter students would be able to: <ul> <li>Understand the nature of thinking and Reasoning.</li> <li>Understand the nature and process of creative thinking and learn the ways of enhancing it.</li> <li>Understand the relationship between language and thought.</li> </ul> </li> </ul>	Experiment based on Memory processes.	
DEC.	Ch-9 Motivation and Emotion	<ul> <li>After studying this chapter students would be able to: <ul> <li>Understand the nature of human motivation.</li> <li>Describe the nature of some important motives.</li> <li>Describe the nature of emotional expression.</li> <li>Students will get to know about managing emotions.</li> </ul> </li> </ul>	7	
UNIT -1		UNIT WISE SYLLABUS PSYCHOLOGY CHAPTER 1 & 2	34%	
UNIT-2		CHAPTER 4&5	27%	
H.Y.E		CHAPTER 1 TO 6	74%	
QUALYFY	ING	CHAPTER 1 TO 8 92%		
ANNUAL		COMPLETE SYLLABUS	100%	



Month	Theory	Practical	
May	Unit 1: Pre-historic Roack Paintings and Art of Indus Valley (2500 B.C. to 1500 B.C.) 1 A. Pre-Historic Rock-Paintings Introduction (1) Period and Location (2) Study of following Pre-historic Paintings	Fundamentals of art,	
July	<ul> <li>Unit 1:</li> <li>B. Introduction <ul> <li>(i) Period and Location.</li> <li>(2) Study of Sculptures and Terracottas:</li> <li>Unit 2:</li> <li>Buddhist, Jain and Hindu Art</li> <li>(3rd century B.C. to 8th century A.D.)</li> <li>(1) General Introduction to Art during Mauryan, Shunga, Kushana Gandhra and Mathura style &amp; Gupta period:</li> <li>(2) Study of Sculptures:</li> </ul> </li> </ul>	Still life composition	
August	Recapitulation of Unit 1 & Unit-2 (2) Study of Sculptures:	Calligraphy and texture	
September	<ul> <li>(3) Introduction to Ajanta</li> <li>Location, period, No. of caves, Chaitya and Vihara,</li> <li>Paintings and Sculptures, subject matter and technique etc.</li> <li>(4) Study of Painting &amp; Sculpture:</li> </ul>	Poster masking	
October	<ul> <li>Unit 3: Temples Sculpture, Bronzes and Artistic aspects of Indo-Islamic</li> <li>Architecture 36 Pds.</li> <li>(A) Artistic aspects of Indian Temple sculpture 6th</li> <li>Century A.D. to 13th Century A.D.)</li> <li>(1) Introduction to Temple Sculpture</li> <li>(6th Century A.D. to 13th Century A.D.)</li> <li>(2) Study of Temple-Sculptures;</li> </ul>	Indian folk art	
November	<ul> <li>B) Bronzes :</li> <li>(1) Introduction to Indian Bronzes</li> <li>(2) Method of casting (solid and hollow)</li> <li>(3) Study of south Indian Bronzes:</li> </ul>	Master copys	
December	<ul> <li>(C) Artistic Aspects of the Indo-Islamic Architecture</li> <li>(1) Introduction</li> <li>(2) Study of architectures:</li> </ul>	Revision	

### **SUBJECT – COMMERCIAL ART**



### UNIT WISE SYLLABUS

UNIT TEST 1:	Fundamentals of Art, Pre-Historic Rock Paintings, Indus Valley Civilization and its artistic aspects
HALF YEARLY EXAM:	Buddhist and Jain and Hindu Art. Ajanta Caves location,
UNIT TEST 2:	technique and painting and sculpture. Indian Temple Architecture and Sculpture, Indian Bronzes-
QUALIFYING EXAM: ANNUAL EXAM:	Nataraj and Devi. Complete Syllabus Complete Syllabus
	Complete Syllabus



# **SUBJECT – HOME SCIENCE**

MONTH	NAME OF THE CHAPTER	OBJECTIVE/ AIM	LAB ACTIVITY/ SUBJECT ENRICHMENT ACTIVITY	PROJECT
APRIL	CH-1 Introduction to Home Science Ch-2 Understanding the Self	-Understand different areas of Home science and its scope -discuss the importance of knowing oneself and the significance of developing a positive sense of self.	Students will write a detailed report on different domains of development related to themselves	
	Ch-3 Food, Nutrition, Health and Fitness	<ul> <li>-list the factors that influence the development of selfhood and identity.</li> <li>-define the terms — food, nutrition, nutrients, health, fitness and the role of food and nutrition in maintaining health.</li> <li>-understand the basis for defining the Recommended Dietary Allowances (RDAs) and the difference between Dietary Requirement and RDA.</li> </ul>		
MAY	Ch-4 Management of Resources Ch-5 Fabrics Around Us	<ul> <li>-discuss the concept of a resource.</li> <li>-identify various resources.</li> <li>-discuss the diversity in fabrics.</li> <li>-name and classify the fabrics commonly seen around.</li> </ul>	Students will make handloom miniature.	Project work- Different types of fabrics( light, medium and heavy)
JULY	Ch-6 Media and Communication Ch-7 A. Nutrition, Health and Hygiene	<ul> <li>-define the concept of communication.</li> <li>-discuss the significance of communication in everyday life</li> <li>-discuss the importance of health and its dimensions.</li> <li>-understand the interrelationship of nutrition and health.</li> </ul>	Group activity related to different types of communication	



AUGUST	Ch-7 B. Resource Availability and Management Ch- 8 Survival, Growth and Development	<ul> <li>-describe time and space as important resources.</li> <li>- analyse the need for managing time and space.</li> <li>-explain the concepts of survival, growth and development.</li> <li>-analyse the relationship between growth and health.</li> <li>-make suggestions for planning balanced meals for children</li> </ul>	Time plan
SEPTEMBER	Ch-9 Nutrition, Health and Wellbeing	-describe the nutritional needs of children at different stages of development.	Flow chart on Food Guide Pyramid
OCTOBER	Ch-10 Our Apparel Ch- 11 Health and Wellness	<ul> <li>-discuss the clothing functions and the factors influencing selection of clothes.</li> <li>-identify general clothing needs of the children.</li> <li>-discuss the importance of health and fitness.</li> <li>-explain the health concerns and challenges of adults.</li> </ul>	Flip book on selection of clothing
NOVEMBER	Ch- 12 Financial Planning and Management	-understand the meaning and concept of financial management. -know the different types of income.	Budget making
DECEMBER	Ch- 13 Care and Maintenance of Fabrics	<ul> <li>-understand the aspects of care and maintenance of different fabrics.</li> <li>-know the procedure of removing different stains.</li> </ul>	Different stain removal activity
JANUARY	Revision for Ann	ual Exam	· · · · ·
FEBRUARY	Annual Exam		



# Exam Wise Syllabus

UT-1 Ch-1,2,3	UT-3 Ch-9, 10
UT-2 Ch-4,5,6	UT-4—Ch- 11,12
HYE- Ch-1 to 8	Annual- Complete Syllabus



# <u>SUBJECT – HINDUSTANI MUSIC VOCAL</u>

MONTH	NAME OF THE TOPIC	OBJECTIVE/ AIM	LAB ACTIVITY/ SUBJECT ENRICHMENT ACTIVITY	PROJECT
APRIL	Basics of raag & taal Alankar & teen taal	Explain the basic terms of Indian classical music.	Sargam practice in different laya in practical class.	
MAY	Raag Vihag General Introduction Aroh Avroh palta \$ Swar vistar Teen taal on hand.	Introduction of raag ,& taal.	Sargam geet practice in raag & Basic Knowledge of taal on hands in practical class.	
JULY	Raag Vihag drut Khayal With Alap - taan teen taal thah, dugun chargun laykari on hands. Brief Description - Naad, Shruti, Swar, Saptak,MargeeGaan	Explain raag with notation Taal on hands in different layakari. Knowledge of basic terms of indian classical music.	Practice of raag & taal in detail.	
AUGUST	Raag Vihag -notation with alap taan. Raag Bhimpalasi parichay Teen taal with thah dugun & chargun laykari and taal notation. Life sketch Tansen. Dhrupad.	Introduction of bhimpalasi raag and explain raag in detail. To show different laya on hands. To know about the contribution of indian classical musician.	Practice of raag & taal in detail.	
SEPTEMBER	Raag Bhimpalasi drut Khayal with Alap – taan. Ek Taal thah & dugun on hands & taal lipi	To give knowledge of raag bhimpalasi.	Practice of raag & taal in detail.	



r				na
		Explain ektaal in		
		different laya and		
		practice to write it.		
OCTOBER	Raag Bhimpalasi Notation With Alap taan EkTaal thah, dugun, chargun on hands \$ taal lipi . Brief Description of that, laya ,raag ,raag jati,khayal ,Thaat, life sketch V.N Bhathkhende,	To give knowledge raag & taal. To give knowledge of basic terms of indian music and contribution of indian musician	Practice of raag & taal in detail.	
NOVEMBER	Raag Bhairvi Parichay & Drut khayal, taal char taal thah & taal lipi. Brief Description - taal,tarana,sangeet Natyeshastr, Life sketch V.N Palusker, Tanpura sachitr varnan	Description of raag & taal through drut khyal and taal notation . Know about the life history & contribution of musician . Explain the structure of tanpura.	Practice of raag & taal in detail.	
DECEMBER	Raag Bhairvi Notation, char taal thah, dugun chargun with taal lipi raag pehchaan \$ Bhairvee Alap -Taan	To know about the raag & taal in detail.	Practice of raag & taal in detail.	
JANUARY	Vilambit khayal /dhrupad bandish with Notation. Revision of previous ragas & taal.	Explain dhrupad singing style with bandish.	Practice of raag & taal in detail.	Music practical file



FEBRUARY	Vilambit khayal/dhrupad with alap /laykaree.	Discuss & explain raag drut khyal , dhrupad & taal.	Practice of raag & taal in detail.	
	Annual Exam			

#### EXAM WISE SYLLABUS

Unit 1 Topics

Naad,Shruti, swar,Saptak,Margee gaan,Dhrupad,Tansen, Teen taal thah,dugun chargun parichay & taal lipi,Ektaal parichay thah laya. Raag vihag parichay,pehchaan, drut khayalRaag Bhimpalasi Parichay.

Half Yearly

Raag Vihag drut Khayal With Alap & taan drut khayal with alap taan teen taal thah, dugun chargun laykari on hands.

Brief Description - Naad, Shruti, Swar,margee gaan,Saptak , raag pehchaan Raag Vihag - notation with alap taan, raag Bhimpalasi Parichay ektaal parichay \$ taal lipi life sketchof Tansen Raag & Taal parichay Dhrupad. Raag Bhimpalasi drut Khayal . With Alap -taan Unit 2

Raag Bhimpalasi Notation With Alap taan EkTaal thah, dugun, chargun on hands & taal lipi . Brief Description thaat, laya ,raag ,raag jati,khayal.

Life sketch - V.N Bhathkhende, V.N Palusker, tanpure ka sachitr varnan

Raag Bhairvi Parichay & Drut khayal, taal char taal thah & taal lipi

Brief Description - taal, tarana, sangeet Natyeshastra,

Raag Bhairvi Notation, char taal thah, dugun chargun with taal lipi

raag pehchaan & Bhairvee Alap -Taan

Qualifying & Annual Exam

Raag Bhimpalasi Notation With Alap taan

Brief Description thaat, laya ,raag ,raag jati,khayal.

life sketch- V.N Bhathkhende, V.N Palusker,

tanpure ka sachitr varnan

Raag Bhairvi Parichay & Drut khayal, Raag Bhairvi notation, Bhairvee Alap –Taan char taal thah, dugun chargun with taal lipi

Brief Description - taal,tarana,sangeet Natyeshastra, raag pehchaan & Vilambit khayal /dhrupad bandish with Notation.