

**SUDITI GLOBAL ACADEMY, MAINPURI**  
**TERM-1/HALF YEARLY EXAM (2024-25)**  
**SYLLABUS CLASS XII**

**027-HISTORY**

1. Bricks, Beads and Bones
2. King's farmers and towns
3. Kinship caste and class
4. Thinkers beliefs and building

BOOK: 2nd

1. Through the Eyes of Travellers
2. Bhakti- Sufi Traditions
3. An Imperial Capital Vijayanagara
4. Peasants, Zamindars and the State

**028-POLITICAL SCIENCE**

BOOK: 1st

CHAPTER: END OF BIOPOLARITY

CHAPTER: ALTERNATIVE CENTRE OF POWER

CHAPTER: CONTEMPORARY SOUTH ASIA

CHAPTER: INTERNATIONAL ORGANISATIONS

CHAPTER: SECURITY IN THE CONTEMPORARY WORLD

CHAPTER: ENVIRONMENT AND NATURAL RESOURCES

CHAPTER : GLOBALISATION

BOOK: IIInd

CHAPTER: CHALLENGE OF NATION BUILDING

CHAPTER: ERA OF ONE PARTY DOMINATION

CHAPTER: PLANNED DEVELOPMENT

CHAPTER: INDIA'S EXTERNAL FOREIGN RELATIONS

CHAPTER: CHALLENGES TO THE RESTORATION OF THE CONGRESS SYSTEM

**029-GEOGRAPHY**

Book 1 fundamental of human geography:-

1. Human Geography Nature and scope
2. World population distribution and density
3. Human development

4. Primary activities
5. Secondary activities

Book 2 India and economy:-

1. Population density distribution
2. Human settlement
3. Land resource and agriculture
4. Water resources
5. Mineral energy resource

### **030-ECONOMICS**

CH 1 :National Income and Related Aggregates

CH 2 :Money and Banking

CH 3: Determination of Income and Employment

CH 4: Government Budget and the Economy

Part B Indian Economic Development

CH 1 Indian economy on the eve of Independence

CH 2 Development Experience (1947-90)

CH 3 Economic Reforms since 1991 (LPG)

CH 4 Human capital formation

CH 5 Rural development

CH 6 Employment

### **034-HIND MUSIC.VOCAL**

- 1- Brief study of the following – Alankar, Kan, Meend, Khatka, Murki, Alap, Taan.
- 2- Historical development of time theory of Ragas.
- 3- Detail study of the following sangeet Ratnakar sangeet parijat.
- 4- Life sketch and contribution of Faiyaz Khan, Bade gulam ali Khan, Krishna Rao, Sankar Pandit.
- 5- Description of prescribed talas along with Tala notation with thah dugun tigon and chaugun (I) Jhaptaal (II) Dhamar (III) Rupak
- 6- Tuning of Tanpura.
- 7- Writing in notation the compositions of prescribed Ragas. (I) Malkouns (II) Bageshri.
- 8- One tarana and one dhamar with dugun and chaugun in any one of the prescribed Ragas

## **039-SOCIOLOGY**

### PART A : Indian Society

1. The Demographic structure of the Indian Society
2. Social Institutions: Continuity and Change
3. Patterns of Social Inequality and exclusion
4. The Challenges of cultural Diversity

### PART B Social Change and development in india

1. Structural change
2. Cultural change
3. Change and development in rural society

## **041-MATHEMATICS**

### **1.Relations and Functions**

Types of Relations,Types of Functions,

Composition of Functions and Invertible Function

### **2. Inverse Trigonometric Functions**

Basic Concepts

Properties of Inverse Trigonometry

### **3. Matrices**

Matrix, Types of Matrices,Operations on Matrices,Transpose of a Matrix

### **4. Determinants**

Symmetric and Skew Symmetric Matrices,

Invertible Matrices,Determinant, Area of a Triangle , Minors and Cofactors,Adjoint and Inverse of a Matrix, Applications of Determinants and Matrices

### **5. Continuity and Differentiability**

Continuity, Differentiability,Exponential and Logarithmic Functions,Logarithmic Differentiation, Derivatives of Functions in Parametric Forms,Second Order Derivative,

### **6.Application of Derivatives,**

Rate of Change of Quantities, Increasing and Decreasing Functions, Maxima and Minima

### **7. Integrals**

Integration as an Inverse Process of Differentiation,

Methods of Integration,Integrals of Some Particular Functions,Integration by Partial Fractions,Integration by Parts ,Definite Integral

Fundamental Theorem of Calculus, Evaluation of Definite Integrals by substitution, Some Properties of Definite Integrals

### 8. Application of Integrals

Area under Simple Curves

### 9. Differential Equations

Basic concepts, general and particular solution

of differential equations, Methods of Solving First Order, First Degree Differential Equations

### **042-PHYSICS**

Chp no.	Name
1	Electric charges and field
2	Electrostatic Potential and Capacitance
3	Current electricity
4	Moving Charges and Magnetism
5	Electro Magnetic Induction
6	Alternating Current
7	Ray optics
8	Semiconductor

### Question paper pattern

Sec A	16 questions	16×1=16 marks	
Sec B	5 questions	5×2=10 marks	
Sec C	7 questions	7×3=21 marks	
Sec D	2 case studies	2×4=8 marks	
Sec E	3 questions	3×5=15 marks	

### **043-CHEMISTRY**

Chapter 1	Solutions
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Chapter 4	d and f block elements
Chapter 6	Haloalkanes and Haloarenes
Chapter 7	Alcohols, Phenols and Ethers
Chapter 8	Aldehydes, Ketones and Carboxylic Acids
Chapter 9	Amines
Chapter 10	Biomolecules

Question paper pattern

General instructions

- a) There are 33 questions in this paper.
- b) Section A consist of 16 m.c.q carrying one mark each.
- c) Section B consist of 5 short answer type questions carrying 2 marks each.
- d) Section C consist of 7 short and questions carrying 3 marks each.
- e) Section D consist of 2 case based questions carrying 4 marks each.
- f) Section E consist of 3 long answer type questions carrying 5 Mark's each.
- g) all questions are compulsory.

## **044-BIOLOGY**

### **Unit 1: Reproduction**

- \*Explain the importance of reproduction in organisms.
- \*Describe the process of sexual reproduction in flowering plants.
- \*Understand human reproductive systems and processes.
- \*Identify ways to maintain reproductive health.

### **Unit 2: Genetics and Evolution**

- \* Apply Mendel's laws to predict inheritance patterns.
- \*Explain the molecular basis of inheritance.
- \*Describe the mechanisms of evolution.
- \*Understand human evolution and its significance.

### **Unit 3: Biology and Human Welfare**

\*Identify causes and prevention of human diseases.

\*Explain plant breeding techniques.

\*Describe biotechnology applications.

\*Understand environmental issues and their impact.

### **048-PHYSICAL EDUCATION**

UNIT 1 Management of Sporting Events

UNIT 3 Yoga as Preventive measure for Lifestyle Disease

UNIT 4 Physical Education & Sports for (CWSN)

UNIT 5 Sports & Nutrition

UNIT 6 Test and Measurement in Sports

UNIT 7 Physiology & Injuries in Sport

### **049-PAINTING**

#### **Unit-2**

**Chapter – 1** The Mughal School of Miniature Painting

**Chapter – 2** The Deccan School of Miniature Painting

#### **Description of Painting etc.**

#### **Art History**

Study of art movement, artists and their contribution to the art world

#### **Technique and Medium**

Exploring various painting techniques such as water colour, acrylics and mixed media etc.

Themes and styles critique, art appreciation etc.

#### **Learning outcomes-**

**Skill-Development** - Students should acquire proficiency in various painting techniques and mediums.

#### **Artistic Expression-**

They should be able to express their ideas, emotions and creativity through their art work.

Students learn other than this critical thinking, art knowledge etc.

## **054-BUSINESS STUDIES**

### **Unit 1: Principles and Functions of Management**

Chapter 1 - Nature and Significance of Management

Chapter 2 - Principles of Management

Chapter 3 - Business Environment

Chapter 4 – Planning

Chapter 5 - Organizing

Chapter 6 – Staffing

Chapter 7 - Directing

Chapter 8 - Controlling

Chapter 9 - Financial Management

Chapter 10- Financial market

## **055-ACCOUNTANCY**

<b>CHAPTER NO.</b>	<b>CHAPTER'S NAME</b>	<b>VOL. &amp; MARKS</b>	<b>LEARNING OBJECTIVE</b>
<b>1</b>	<b>PARTNERSHIP BASIC CONCEPT</b>	<b>VOL-1 35 MARKS</b>	Student Should Be Able to Know About Partnership Firm & Will Be Able to Calculate Interest on Loan, Rent, Interest on Drawing, Interest on Capital, Prepare the P & L App. A/C, Past Adjustment, Guarantee
<b>2</b>	<b>CALCULATION OF GOODWILL</b>		Student Should Be Able to Calculate the Amount of Goodwill by Using Average Method, Super Profit Method, Capitalisation Method
<b>3</b>	<b>CHANGE IN PROFIT SHARING RATIO</b>		Student Should Be Able to Calculate the Profit-Sharing Ratio, Old Ratio, New Ratio, Gaining Ratio, Sacrificing Ratio, Treatment of Goodwill, Workmen Compensation Reserve, Investment Fluctuation Reserve, Treatment of P & L, Reserve, P & L (Dr.), Advertisement. Suspense, Revaluation A/C, Partner's Capital A/C With Adjustment of Capital, Balance Sheet
<b>4</b>	<b>ADMISSION OF THE PARTNERS</b>		Student Should Be Able to Calculate the Profit-Sharing Ratio, Old Ratio, New Ratio, Gaining Ratio, Sacrificing Ratio, Treatment

			of Goodwill, Workmen Compensation Reserve, Investment Fluctuation Reserve, Treatment of P & L, Reserve, P & L (Dr.), Advertisement. Suspense, treatment of goodwill at the time of admission of the partners, Revaluation A/C, Partner's Capital A/C With Adjustment of Capital, Balance Sheet
5	<b>RETIREMENT OF THE PARTNERS</b>		Student Should Be Able to Calculate the Profit-Sharing Ratio, Old Ratio, New Ratio, Gaining Ratio, Sacrificing Ratio, Workmen Compensation Reserve, Investment Fluctuation Reserve, Treatment of P & L, Reserve, P & L (Dr.), Advertisement. Suspense, treatment of goodwill at the time of retirement of the partners, Revaluation A/C, Partner's Capital A/C With Adjustment of Capital, Balance Sheet, settlement of the retiring partners
6	<b>DEATH OF PARTNERS</b>		Student Should Be Able to Calculate the Profit-Sharing Ratio, Old Ratio, New Ratio, Gaining Ratio, Sacrificing Ratio, Treatment of Goodwill, Treatment of P & L suspense a/c, Reserve, P & L (Dr.), Advertisement. Suspense, deceased partner's capital a/c, loan account
7	<b>DISSOLUTION OF PARTNERSHIP FIRM</b>		Student Should Be Able to transfer the assets and settlement of liabilities by preparing the realization account, treatment of WCR, able to prepare the partners' capital A/c , cash or bank A/c.
8	<b>SHARE</b>	<b>Volume-2 (25 Marks)</b>	Student Should Be Able to show the share capital in the balance sheet, journalize the different cases like pro rata, forfeiture, calls in arrears, calls in advance
9	<b>DEBENTURE</b>		Student Should Be Able to journalize the other than cash like purchase consideration, issue of debenture for the condition of redemption, interest on debenture, treatment of discount on issue of share, debenture and loss on issue of debenture.

<b>10</b>	<b>HEAD SUB HEAD</b>	<b>Volume-3 (20 Marks)</b>	Student Should Know About Co. Balance Sheet, And Items Covered Under Which Head Subhead
<b>11</b>	<b>COMPARATIVE &amp; COMMON SIZE ANALYSIS</b>		Student should be able to understand the company balance sheet and be able to calculate the comparative and common size balance sheet and profit and loss a/c
<b>12</b>	<b>RATIO ANALYSIS</b>		Students should be able to analyze the balance sheet by using the formula of ratio analysis
<b>13</b>	<b>CASH FLOW STATEMENTS</b>		Students should be able to prepare the operating activity, investing activity, financing activity or full cash flow statement

### **065-INFORMATICS PRACTICE**

<b>S. No.</b>	<b>Unit Name</b>	<b>Learning Objectives</b>
<b>1.</b>	<b>Unit 1: Data Handling using Pandas - I</b>	Understand and utilize key Python libraries: Pandas and Matplotlib. Master the creation, manipulation, and visualization of data using Series and Data Frames. Employ Matplotlib to produce and interpret diverse data visualizations.
<b>2.</b>	<b>Unit 2: Database Query using SQL</b>	Revise foundational database concepts and SQL commands. Apply advanced SQL functions and techniques, including aggregate functions and joins. Conduct advanced data operations with Group by, Having, and Order by commands.
<b>3.</b>	<b>Unit 3: Introduction to Computer Networks</b>	Differentiate among types of networks (PAN, LAN, MAN, WAN) and grasp their usage scenarios. Identify key network devices and their functions. Understand the foundational concepts of the internet, including web browsers, websites, and web pages.

### **066-ENTREPRENEURSHIP**

Chapter 1- Entrepreneurial Opportunity

Chapter 2- Entrepreneurial Planning

Chapter 3- Enterprise Marketing

Chapter 4- Enterprise Growth Strategies

Chapter 5 - Business Airthmetic

Chapter 6 - Resource Mobilization

## **074-LEGAL STUDIES**

<b>UNIT/ CHAPTER NO.</b>	<b>CHAPTER'S NAME</b>
<b>UNIT 1</b>	<b>JUDICIARY</b>
<b>UNIT 2</b>	<b>ALTERNATIVE DISPUTE RESOLUTION IN INDIA</b>
<b>UNIT 3</b>	<b>TOPICS IN LAW I (BUSINESS LAWS)</b>
CHAPTER 3 (A)	LAW OF CONTRACT
CHAPTER 3 (B)	LAW OF TORTS
CHAPTER 3 (C)	LAW OF PROPERTY
CHAPTER 3 (D)	INTELLECTUAL PROPERTY LAW
<b>UNIT 4</b>	<b>TOPICS IN LAW II (GENERAL LAWS)</b>
CHAPTER 4 (A)	LAW AND SUSTAINABLE DEVELOPMENT
CHAPTER 4 (B)	FORMS OF LEGAL ENTITIES
CHAPTER 4 (C)	CRIMINAL LAWS IN INDIA
<b>UNIT 5</b>	<b>CONCEPT OF HUMAN RIGHTS</b>
CHAPTER 5 (A)	HUMAN RIGHTS IN INDIA
CHAPTER 5 (B)	HUMAN RIGHTS VIOLATIONS - COMPLAINT MECHANISM (QUASI-JUDICIAL BODIES)
<b>UNIT 6</b>	<b>INTERNATIONAL LAW</b>
<b>UNIT 7</b>	<b>LEGAL PROFESSION IN INDIA</b>
<b>LEGAL STUDIES XI</b>	
<b>UNIT 2</b>	<b>BASIC FEATURES OF THE CONSTITUTION OF INDIA</b>
CHAPTER 1	SALIENT FEATURES OF THE CONSTITUTION OF INDIA
CHAPTER 2	ADMINISTRATIVE LAW
<b>UNIT 3</b>	<b>JURISPRUDENCE, NATURE AND SOURCES OF LAW</b>
CHAPTER 1	JURISPRUDENCE, NATURE AND MEANING OF LAW
CHAPTER 2	CLASSIFICATION OF LAWS
CHAPTER 3	SOURCES OF LAWS
CHAPTER 4	LAW REFORMS
CHAPTER 5	CYBER LAWS, SAFETY AND SECURITY IN INDIA

## **083-COMPUTER SCIENCE**

### **Unit 1:**

#### **Computational Thinking and Programming – 2**

- Revision of Python topics covered in Class XI.
- Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Exception Handling: Introduction, handling exceptions using try-except-finally blocks
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths
- Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file

- Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- CSV file: import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader()
- Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.

## **Unit 2: Computer Networks**

- Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- Data communication terminologies: concept of communication, components of data communication (sender,receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
- Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
- Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

## **Unit 3: Database Management**

- Database concepts: introduction to database concepts and its need
- Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
- Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
- Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries

## **301-ENGLISH CORE**

- 1. Reading Comprehension through Unseen Passage**
- 2. Literature Text Book and Supplementary Reading Text**

### **Flamingo:**

- **The Last Lesson**
- **Lost Spring**
- **Deep Water**

- **The Rattrap**
- **Indigo**

**Poetry:**

- **My mother at sixty Six**
- **Keeping Quiet**
- **A Thing of Beauty**

**Vistas:**

- **The Third Level**
- **The tiger King**
- **Journey to The end of the Earth**
- **The Enemy**

**Creative Writing skills:**

**Short writing task:**

- **Notice**
- **Invitation- formal/Informal**

**Long writing task:**

- **Application for a job with biodata or resume**
- **Article /Report**

**302-HINDI CORE**

**805-FINANCIAL MARKETS MANAGEMENT**

CHAPTER1: Introduction to Indian Securities Market and Trading Membership .

CHAPTER 2 : TRADING

CHAPTER3: Clearing, Settlement and Legal Framework

CHAPTER 4: Introduction to Derivatives

**811-BANKING**

Unit 1: Ancillary Services of Banks

Unit 2: Innovations in Banking Technology

Unit 3: Organization of a Bank Branch

Unit 4: Basics of Business Mathematics

Unit 5: Reserve Bank of India Regulations on Banks

Unit 6: Performa of Final Accounts of Banking Companies

Employability Skills (second book )

CH 1 communication skills

CH 2 Self management skills

### **843-ARTIFICIAL INTELLIGENCE**

Part A:

Unit 1: Communication Skills

Unit 2: Self-Management Skills

Unit 4: Entrepreneurial Skills

Unit 5: Green Skills

Part B:

Unit 1. Capstone Project

Unit 2: Model Life Cycle

Unit 3: Story Telling Through Data