

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

027-HISTORY

Chapter - Writing and City Life.

Chapter - An Empire Across Three Continents.

Chapter - Nomadic Empire.

Chapter - The Three Orders.

Chapter - Changing Cultural Tradition.

Chapter - Displacing indigenous peoples

028-POLITICAL SCIENCE

PART- (A)

- 1- Constitution why and how
- 2- Fundamental Rights
- 3- Election and Representation
- 4- Legislature
- 5- Executive
- 6- judiciary
- 7- Federalism
- 8- Local Government

PART - (B)

- 1- POLITICAL THEORY AN INTRODUCTION
- 2- FREEDOM
- 3- EQUALITY
- 4- SOCIAL JUSTICE

029-GEOGRAPHY

Book 1:-

1. Origin and evolution of the earth
2. Interior of the earth

3. Distribution of oceans and continent
4. Composition and structure of atmosphere
5. Solar radiation heat and balance
6. Water in atmosphere.

Book-2

1. India location
2. Structure and physiography
3. Drainage system
4. Climate

030-ECONOMICS

Statistic

Chapter -1 Introduction to economics and statistics.

Chapter -2 Collection of data.

Chapter -3 Organisation of data.

Chapter -4 Presentation of data (textual and tabular presentation)

Microeconomics -

Chapter -1 Economics, Economy and its central problems.

Chapter -2 Consumer equilibrium.

Chapter -3 Demand and price elasticity of Demand.

Chapter -4 production function.

Chapter -5 concept of cost.

034-HIND MUSIC.VOCAL

- 1- Brief of the following – Nada, Shreeti, Swar, Saptak, That, Jaati.
- 2- Life sketch and contribution of Tansen and V.D. Plusker.
- 3- Description of prescribed talas along with tala notional with that dudun and chaugun (i) Teentaal (ii) Ektaal
- 4- Knowledge of the structure of Tanpura.
- 5- Writing in notation the composition of prescribed Ragas. Raag Bhimplasi Raag Bhairavi

039-SOCIOLOGY

PART A

1. Sociology and society
2. Term, Concept and Their use in sociology
3. Understanding social Institutions
4. Culture and Socialisation

PART B

1. Social change and social Order in Rural and Urban Society
2. Introducing Western Sociologists

041-MATHEMATICS

1-Sets

Sets and their Representations

The Empty Set

Finite and Infinite Sets

Equal Sets

Subsets

Universal Set

Venn Diagrams

Operations on Sets , Complement of a Set

2-Relations and Functions

Cartesian Product of Sets, Relations, Functions

3- Trigonometric Functions

Trigonometric Functions of Sum and Difference of Two Angles

3-Complex Numbers

Complex Numbers

The Modulus and the Conjugate of a Complex Number Argand Plane and Polar Representation

Algebra of Complex Numbers

5-Linear Inequalities

Inequalities Algebraic Solutions of Linear Inequalities in One Variable

6-Permutations and Combinations

Fundamental Principle of Counting

Permutations

Combinations

7-Binomial Theorem

Binomial Theorem for Positive Integral Indices

042-PHYSICS

Chapter–1: Units and Measurements

Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures. Dimensions of physical quantities, dimensional analysis and its applications.

Chapter–2: Motion in a Straight Line

Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non uniform motion, and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).

Chapter–3: Motion in a Plane

Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion, uniform circular motion.

Chapter–4: Laws of Motion

Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).

Chapter–5: Work, Energy and Power

Work done by a constant force and a variable force; kinetic energy, work energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Chapter–6: System of Particles and Rotational Motion

Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).

Chapter–7: Gravitation

Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite.

043-CHEMISTRY

1. Some basic concepts of chemistry
2. Structure of atom
3. Classification of elements. and periodicity in properties.
4. Chemical bonding and molecular structure
5. Thermodynamics.

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

1. The Living World

- To observe and describe the living things in their world.
- To take note of the abundance and location of various species.
- How different organisms relate to each other as well as to people.

2. Biological Classification

- Identification and description of organisms.
- Arrangement of organisms in various categories.

3. Plant Kingdom

- Compare between Cryptogams and Phanerogams.

- Differentiate between Gymnosperms and Angiosperms.
- Explain the modes of reproduction in Gymnosperms and Angiosperms.

4. Animal Kingdom

- Student should be able to describe unique characters of protozoa, porifera, coelenterate and helminthes.
- Student should be able to recognize life functions of protozoa, porifera, coelenterate and helminthes.

5. Morphology of Flowering Plants

- Explain morphological structures of plants.
- Defines "plant morphology".
- Expresses working area of plant morphology.

6. Anatomy of flowering Plants

- Learn basic anatomical plant tissues.
- Learn detailed anatomical structure of root and metamorphotic root.

7. Structural Organisation in Animals

- Learn detail about frog morphology and anatomy.
- Structure and organisation of various organs of frog.

8. Cell: The Unit of Life

- Able to Understand the importance of the nucleus and its components.
- Able to Understand how the endoplasmic reticulum and Golgi apparatus interact with one another and know with which other organelles they are associated.
- Able to Identify the three primary components of the cell's cytoskeleton and how they affect cell shape, function, and movement.

9. Biomolecules

- Define the basic structure of biomolecules such as amino acids, carbohydrates, fatty acids, phospholipids and nucleic acids.
- Define the meaning and significance of essential and non- essential amino acids.

048-PHYSICAL EDUCATION

1. Changing trends and carrier in Physical Education

- **Emphasizing overall physical, mental, and emotional health through physical education, promoting healthy lifestyle choices and stress management.**

- Integrating technological tools to enhance teaching and learning experiences, such as fitness apps, virtual reality for sports simulations, and data analytics for performance assessment.
- Instilling a love for physical activity and sports to encourage a lifelong commitment

2. Olympism

- Instill values of integrity, respect, and fair competition in athletes and stakeholders.
- Encourage adherence to ethical principles, both on and off the field of play.
- Encourage cultural exchange and friendship among athletes from different nations
- Improve flexibility, strength, and overall physical health through various yoga poses and movements.

4. Physical education and sports for children with special needs promote:

- Physical Development
- Emotional Growth
- Cognitive Improvement
- Improved mobility

5. Fundamentals of Anatomy & Physiology in Sports

Bones

- Muscles
- Joints
- Bones
- 1. Energy production
- 2. Muscle function
- 3. Cardiovascular/respiratory responses

049-PAINTING

Unit-1

Chapter – 2 Art of Indus Valley Civilization

Unit-2

Chapter – 1 Buddhist, Jain and Hindu Art

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: Foundations of Business

Chapter 1 - Nature and purpose of business

Chapter 2 – Forms of business organization

Chapter 3 – Public , Private and global enterprises

Chapter 4 - Business Services

Chapter 5 - Emerging Modes of Business

Chapter 6 - : Social Responsibility of Business and Business Ethics

Chapter 7 - Sources of business finance

055-ACCOUNTANCY

CHAPTER	CHAPTER NAME
2	BASIC ACCOUNTING TERM
3	THEORY BASED ACCOUNTING (ACCOUNTING PRINCIPLES)
5	ACCOUNTING EQUATION
6	ACCOUNTING PROCEDURE – RULES OF DEBIT & CREDIT
7	ORIGIN OF TRANSACTION – SOURCE DOCUMENTS AND VOUCHERS
8	JOURNAL
9	LEDGER
10	SPECIAL PURPOSE BOOKS I – CASH BOOK
11	SPECIAL PURPOSE BOOKS II – OTHER BOOKS
12	ACCOUNTING OF GOODS AND SERVICES TAX (GST)
13	BANK RECONCILIATION STATEMENT

14	TRIAL BALANCE
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065-INFORMATICS PRACTICE

S. No.	Unit Name	Learning Objectives
1.	Unit 1: Introduction to computer system	Understand the evolution, components, and basic architecture of computer systems. Differentiate between primary and secondary memory and comprehend data security concerns. Classify and appreciate the roles of different types of software in computing.
2.	Unit 2: Introduction to Python	Grasp foundational concepts of Python programming, including its structure and execution modes. Work effectively with Python data types, operators, and control structures.
3.	Unit 3: Database concepts and the Structured Query Language	Understand database concepts and Relational Database Management Systems. Retrieve and manipulate data in RDBMS using Structured Query Language

066-ENTREPRENEURSHIP

Chapter 1- Entrepreneurship concept and function

Chapter 2- An Entrepreneur

Chapter 3- Entrepreneurship Journey

Chapter 4 - Entrepreneurship as Innovation and Problem Solving

Chapter 5 - Understanding the market

074-LEGAL STUDIES

UNIT 2	BASIC FEATURES OF THE CONSTITUTION OF INDIA
CHAPTER 1	SALIENT FEATURES OF THE CONSTITUTION OF INDIA
CHAPTER 2	ADMINISTRATIVE LAW
UNIT 3	JURISPRUDENCE, NATURE AND SOURCES OF LAW
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: Computer Systems and Organisation

- Basic computer organisation: 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, and interpreter), application software
- Operating System(OS): functions of the operating system, OS user interface
- Boolean logic: NOT, AND, OR, NAND, NOR, XOR, NOT, truth tables and De Morgan's laws, Logic circuits
- Number System: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems
- Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32) Unit 2: Computational Thinking and Programming – I
 - Introduction to Problem-solving: Steps for Problem-solving (Analyzing the problem, developing an algorithm, coding, testing, and debugging), representation of algorithms using flowchart and pseudocode, decomposition
 - 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

Unit-2

- 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 operators, augmented assignment operators, identity operators (is, is not), membership operators (in not in)
 - Expressions, statement, type conversion, and input/output: precedence of operators, expression, evaluation of an expression, type-conversion (explicit and implicit conversion), accepting data as input from the console and displaying output.
 - Errors- syntax errors, logical errors, and run-time errors
 - Flow of Control: introduction, use of indentation, sequential flow, conditional and iterative flow
 - Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number.
 - Iterative Statement: for loop, range(), while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number, etc.

241-APPLIED MATHEMATICS

- 1.. Numbers
2. Indices and Logarithms
3. Quantitative Aptitude
- 4.Sets and Relations
5. Permutations and Combinations
- 6.Logical Reasoning
- 7.Taxation

8.Utility Bills

9.functions

301-ENGLISH CORE

- I. Reading Comprehension through Unseen Passage**
- II. Note Making and Summarization based on a passage**
- III. Literature Text Book and Supplementary Reading Text**

.Hornbill:

- The Portrait of a Lady
- “We’re Not Afraid to Die... if We Can be Together
- Discovering Tut: the Saga Continues

Poetry

- A Photograph
- The Laburnum Top

Snapshots:

- The Summer of the Beautiful White Horse
- The Address
- Mother’s Day

IV. Grammar

- Gap filling
- Tenses
- Clauses
- Re-ordering sentences
- Transformation of sentences

V. Creative Writing Skills

Short writing task:

- Classified Advertisements
- Poster

Long writing task:

- Speech
- Debate

302-HINDI CORE

आरोह - गद्य खंड - नमक कादरोगा , मियां नसीरुद्दीन , अप्पू के साथ ढाई साल , विदाई संभाषण , गलता लोहा रजनी ,

पद्य खंड - कबीर दास , मीराबाई , घर की याद , चंपा काले-काले अक्षर नहीं चीन्हती ।

नोट - पठित गद्यांश पद्यांश पर आधारित बहुविकल्पीय प्रश्न एवं अति लघु तथा दीर्घ उत्तरीय प्रश्न पूछे जाएंगे ।

वितान - भारतीय गायिकाओं में बेजोड़ लता मंगेशकर , राजस्थान की रजत बूढ़ें ।

नोट - बहुत विकल्पीय एवं अति लघु प्रश्न पूछे जाएंगे ।

अभिव्यक्ति और माध्यम - पत्रकारिता के विविध आयाम, विभिन्न माध्यमों के लिए लेखन , कथा पटकथा ,
।बहुत विकल्पीय एवं लघु उत्तरीय और दीर्घ उत्तरीय प्रश्न पूछेजाएंगे ।

805-FINANCIAL MARKETS MANAGEMENT

Chapter - 1

Financial market management

What is investment, when to start investing, what is meant by a stock exchange, what is a depository, what is meant by securities, regulator, participants what is sebi and role .

Chapter 2nd

Primary and secondary market

What is primary market , different kind of issue , public issue and private placement , cut off price , what is asba, what is prospectus, Nse provide any facilities for IPO, what is ADR, what is the secondary market what is depository , custodian , screen based trading system, contract note , what is Neat, portfolio , diversification , advantage, what is dividend , stock split , buy back shares , Investor protection fund .

811-BANKING

Unit 1: Introduction: Indian banking system

Unit 2: Banker & Customer

Unit 3: Employment of Bank Funds

- Liquid Assets – Cash in Hand,

Cash with RBI & Cash with

other Banks.

- Investment in securities

- Advances – Secured and

Unsecured.

- Loans

843-ARTIFICIAL INTELLIGENCE

Part A:

Unit 1: Communication Skills

Unit 2: Self-Management Skills

Unit 5: Green Skills

Part B:

Unit 1. Introduction – AI for Everyone

Unit 2: Unlocking Your Future in AI

Unit 4: Introduction to Capstone Project

Unit 5: Data Literacy -Data Collection to Data Analysis

Unit 6: Machine Learning Algorithms