ARMY PUBLIC SCHOOL, PATIALA
FINAL-TERM SYLLABUS(2023-24)
CLASS: XI

SUBJECT: ENGLISH(301)

HORNBILL

1.THE PORTRAIT OF A LADY
2.WE'RE NOT AFRAID TO DIE…IF WE CAN ALL BE TOGETHER
3.DISCOVERING TUT: THE SAGA CONTINUES
4.THE ADVENTURE
5.SILK ROAD

POETRY

1.A PHOTOGRAPH
2.THE LABURNUM TOP
3.THE VOICE OF THE RAIN
4.CHILDHOOD
5.FATHER TO SON

SNAPSHOT

1.THE SUMMER OF THE BEAUTIFUL WHITE HORSE
2.THE ADDRESS
3.MOTHER'S DAY
4.BIRTH
5.THE TALE OF MELON CITY

WRITING SKILLS

SHORT COMPOSITIONS - ADVERTISEMENTS , POSTERS
VERY LONG COMPOSITIONS - SPEECH, DEBATE
GRAMMAR- INTEGRATED GRAMMAR EXERCISES COVERING REARRANGE THE SENTENCES , GAP FILLING (TENSES, CLAUSES, DETERMINERS)
READING SKILLS: THREE PASSAGES (UNSEEN PASSAGE, CASE BASED STUDY PASSAGE AND NOTE MAKING)

SUBJECT: SCIENCE

Physics (042)

1.Units and Measurements
2.Motion in a Straight Line
3.Motion in a Plane
4.Laws of Motion
5. Work, Energy and Power
6.System of Particles and Rotational Motion
7.Gravitation

8.Mechanical Properties of Solids
9.Mechanical Properties of Fluids
10.Thermal Properties of Matter
11.Thermodynamics
12.Kinetic Theory
13.Oscillations
14.Waves

Chemistry (043)
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. Chemical Thermodynamics
6. Equilibrium
7. Redox Reactions
8. Organic Chemistry: Some Basic Principles and Techniques
9. Hydrocarbons

Biology (044)
Chapter 1.The living world
Chapter 2. Biological classification
Chapter-3: Plant Kingdom
Chapter-4: Animal Kingdom
Chapter-5: Morphology of Flowering Plants
Chapter-6: Anatomy of Flowering Plants
Chapter-7: Structural Organisation in Animals
Chapter-8: Cell-The Unit of Life
Chapter-9: Biomolecules
Chapter-10: Cell Cycle and Cell Division
Chapter-11: Photosynthesis in Higher Plants
Chapter-12: Respiration in Plants
Chapter-13: Plant - Growth and Development
Chapter-14: Breathing and Exchange of Gases
Chapter-15: Body Fluids and Circulation
Chapter-16: Excretory Products and their Elimination
Chapter-17: Locomotion and Movement
Chapter-18: Neural Control and Coordination
Chapter-19: Chemical Coordination and Integration

SUBJECT: MATHEMATICS(041)

Chapter-1. Sets
Chapter-2. Relations & Functions
Chapter-3. Trigonometric Functions
Chapter-4. Complex Numbers and Quadratic Equations
Chapter-5. Linear Inequalities
Chapter-6. Permutations and Combinations
Chapter-7. Binomial Theorem
Chapter-8. Sequence and Series
Chapter-9. Straight Lines
Chapter-10. Conic Sections
Chapter-11. Introduction to Three-dimensional Geometry
Chapter-12. Limits and Derivatives
Chapter-13. Statistics
Chapter-14. Probability

SUBJECT: APPLIED MATHEMATICS(241)

UNIT-1: Numbers, Quantification and Numerical applications
UNIT-2: Algebra
UNIT-3: Mathematical Reasoning
UNIT-4: Calculus
UNIT-5: Probability
UNIT-6: Descriptive Statistics
UNIT-7: Basis of Financial Mathematics
UNIT-8: Co-ordinate Geometry

SUBJECT: ECONOMICS(030)
PART – A (STATISTICS)

Ch-1 Concept of Economics & Significance of Statistics in Economics
Ch-2 Collection of Data
Ch-3 Census & Sample Methods
Ch-4 Organisation of Data
Ch-5 Textual & Tabular Presentation of Data
Ch-6 Diagrammatic Presentation of Data
Ch-7 Frequency diagrams
Ch-8 Time Series Graphs
Ch-9 Measures of Central Tendency-Arithmetic   Mean
Ch-10 Measures of Central Tendency-Median & Mode

Ch-11 Correlation
Ch-12 Index Numbers

PART – B (MICRO ECONOMICS)

Ch-1 Economics, Economy & Central Problems of an Economy
Ch-2 Consumer's Equilibrium & Utility analysis
Ch-3 Consumer's Equilibrium- Indifference Curve Analysis
Ch-4 Theory of Demand
Ch-5 Elasticity of Demand
Ch-6 Production Function & Laws of Returns
Ch-7 Concepts of Revenue
Ch-8 Concepts of Costs
Ch-9 Producer's Equilibrium
Ch-10 Theory of Supply
Ch-11 Forms of Market
Ch-12 Market Equilibrium under Perfect Competition

SUBJECT: ACCOUNTANCY(055)

CH- 1   INTRODUCTION TO ACCOUNTING
CH-2   THEORY BASE OF ACCOUNTING
CH- 3   ACCOUNTING PROCESS: VOUCHERS, ACCOUNTING EQUATION, JOURNAL, LEDGER, TRIAL BALANCE, SPECIAL PURPOSE BOOKS.
CH -4   BANK RECONCILATION STATEMENT
CH -5   DEPRECIATION , PROVISION AND RESERVES
CH -6   TRIAL BALANCE AND RECTIFICATION OF ERRORS
CH-7   ACCOUNTS FOR INCOMPLETE RECORDS
CH -8 FINANCIAL STATEMENTS OF SOLE PROPRIETORSHIP

SUBJECT: BUSINESS STUDIES(054)

CH- 1   NATURE AND PURPOSE OF BUSINESS
CH-2   FORMS OF BUSINESS ORGANISATION
CH- 3   PUBLIC ,PRIVATE AND GLOBAL ENTERPRISES
CH -4   BUSINESS SERVICES
CH -5   EMERGING MODES OF BUSINESS
CH -6   SOCIAL RESPONSIBILITY OF BUSINESS AND BUSINESS ETHICS
CH-7   SOURCES OF BUSINESS FINANCE
CH -8   SMALL BUSINESS

CH-9 INTERNAL TRADE
CH-10 INTERNATIONAL BUSINESS

SUBJECT: POLITICAL SCIENCE(028)

Part 1 Indian Constitution At Work

Chapter 1 Constitution : Why and How
Chapter 2 Rights in the Indian Constitution
Chapter 3 Election and Representation
Chapter 4 Executive
Chapter 5 Legislature
Chapter 6 Judiciary
Chapter 7 Federalism
Chapter 8 Local Government
Chapter 9 Constitution as a Living Document
Chapter 10 The Philosophy of the Constitution

Part 2 Political Theory

Chapter 1 Political Theory : An Introduction
Chapter 2 Freedom
Chapter 3 Equality
Chapter 4 Social Justice
Chapter 5 Rights
Chapter 6 Citizenship
Chapter 7 Nationalism
Chapter 8 Secularism

SUBJECT: GEOGRAPHY(029)

Book-fundamentals of physical geography

Ch1.geography as a discipline

Ch2- origin and evolution of the earth

Ch3. Interior of the earth

Ch4. Distribution of ocean and continents

Ch5. Geomorphic processes

Ch7. Composition and structure of the atmosphere

Ch8. Solar radiation heat balance and temperature

Ch9. Atmosphere circulation and weather system

Ch10. Water in the atmosphere

Ch12. Water (ocean)

Ch13. Movement of ocean water

Book- India physical environment

Ch-1 India: location

Ch2. Structure and physiography

Ch3. Drainage system

Ch4. Climate

Ch5. Natural vegetation

SUBJECT: HISTORY(027)

INTRODUCTION TIMELINE-1(6 MYA TO 1 BCE)

L-1 WRITING AND CITY LIFE (INTRODUCTION TIMELINE II C.100 BCE TO 1300 CE)

L-2 AN EMPIRE ACROSS THREE CONTINENTS

L-3 NOMADIC EMPIRES (INTRODUCTION TIMELINE III C1300-1700)

L-4 THE THREE ORDERS

L-5 CHANGING CULTURAL TRADITIONS (INTRODUCTION TIMELINE IV C.1700-2000)

L-6 DISPLACING INDIGENOUS PEOPLE

L-7 PATHS TO MODRENISATION

MAP WORK TO THE RELATED THEMES

SUBJECT: PHYSICAL EDUCATION(048)

Unit I: Changing Trends and Career in Physical Education

Unit II : Olympic Value Education

Unit III : Physical Fitness, Wellness and Lifestyle

Unit IV :Physical Education and Sports for CWSN (Children with Special Needs- Divyang)

Unit V : Yoga

Unit VI: Physical Activity and Leadership Training

Unit VII : Test, Measurement and Evaluation

Unit VIII: Fundamentals of Anatomy, Physiology and Kinesiology in Sports

Unit IX : Psychology and Sports

SUBJECT: PSYCHOLOGY(037)

1) what is psychology?

2) Methods of enquiry in psychology

3) Human development

4) sensory, attention, perception.

5) learing

6) Human Memory

7) Thinking

8) Motivation and emotion

SUBJECT: PAINTING(049)

Unit-1

1. Pre-Historic Rock-Paintings

2. Indus Valley

Unit 2

1. Buddhist, Jain and Hindu Art (3rd century B.C. to 8th century A.D.)

2. Introduction to Ajanta Location Period, No. of caves, Chaitya and Vihara, paintings and sculptures, subject matter and technique etc.

Unit 3

1. Temple Sculpture, Bronzes and artistic aspects of Indo Islamic Architecture (A) Artistic aspects of Indian Temple sculpture (6th Century A.D. to 13thCentury A.D.)

2. Indian Bronzes

3. Artistic aspects of the indo-Islamic architecture: 1. Introduction 2. Study and appreciation of following architecture i. Qutub Minar, Delhi ii. Gol Gumbad of Bijapur

SUBJECT: INFORMATION PRACTICES (065)

Unit 1: Ch – 1 – Computer System

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.

Unit 2: Ch - 3 – Brief Overview of 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 and comments, input and output

statements, data type conversion, debugging. Control Statements: if-else, if-elif-else, while loop, for loop

Ch 4 – Working with lists and Dictionaries

Lists: list operations - creating, initializing, traversing and manipulating lists, list methods and built-in functions – len(),list(),append(),insert(), count(),index(),remove(), pop(), reverse(), sort(), min(),max(),sum() Dictionary: concept of key-value pair, creating, initializing, traversing, updating and deleting elements, dictionary methods and built-in functions – dict(), len(), keys(), values(), items(), update(), del(), clear()

Unit 3: Ch 7 - Database concepts and Ch 8 - Structured Query Language

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 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 DATABASE, CREATE TABLE, DROP, ALTER   Data Query: SELECT, FROM, WHERE with relational operators, BETWEEN, logical operators, IS NULL, IS NOT NULL Data Manipulation: INSERT, DELETE,UPDATE

Unit 4: Ch – 2 - Emerging trends

Introduction to the Emerging 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.