# Syllabus for Class XI Session (2022-23)

# **ENGLISH**

# **BOOKS:**

**Hornbill (Course Book)** 

**Snapshots (Supplementary Reader)** 

#### JULY: Hornbill

- 1. The Portrait of a Lady (Prose)
- 2. A Photograph (Poem)

#### **AUGUST: Hornbill**

(1) We're not Afraid to Die if We're Together

# **Snapshots**

(1) The Summer of the Beautiful White Horse (Prose)

# **Writing Task**

- Poster
- Speech

#### Grammar -

- (1) Gap Filling (Tenses, Clauses)
- (2) Transformation of Sentences

#### **SEPTEMBER: Hornbill**

(1) Discovering Tut

# **Snapshots**

(1) The Address ( Prose)

# Writing task

(1) Note- Making & Summarizing **Grammar** 

# **OCTOBER: Hornbill**

- (1) The Adventure
- (2) Father to Son (Poem)

# **Snapshots**

(1) Birth (Prose)

# Writing task

- (1) Debate
- (2) Note- Making & Summarizing

#### Grammar

(1) Gap Filling (Tenses, Clauses)

# **NOVEMBER: Hornbill**

(1) Silk Road

# **DECEMBER: Hornbill**

(1) Childhood (Poem)

# **Snapshots**

(1) Mother's Day (Play)

# Writing task

(1) Classified Advertisement

#### Grammar

(1) Reordering Sentences

# **JANUARY: Snapshots**

(1) The Laburnum Top (Poem)

# Snapshots

- (1) The Tale of the Melon City
- (3) Note Making (Practice)

# **FEBRUARY: Hornbill**

(1) Voice of the Rain (Poem)

# **PHYSICS**

# July:

Physical World & Units and Measurements Motion in a Straight Line Motion in Plane

# August:

# **Motion in Plane (contd)**

Laws of Motion

Work, Energy and Power

September: Revision

October:

Gravitation

**Rotational Motion** 

#### November:

Mechanics of Solids

Mechanics of Fluids

# December:

# **Thermal Properties of Matter**

Thermodynamics & Kinetic Theory of Gases Oscillations

# January:

Oscillations (contd.)

Waves

February: Revision

# **CHEMISTRY**

# July:

Some Basic Concepts of Chemistry Structure of Atom

# August:

Classification of Elements and Periodicity in Properties Chemical Bonding and Molecular Hydrocarbon

# September:

Hydrocarbon(contd.)

#### October:

Chemical Thermodynamics Redox Reaction

#### November:

**Organic Chemistry** 

# December:

Equilibrium

# January:

Equilibrium(contd.)

Revision

#### February:

Revision

# **BIOLOGY**

# July-

The Living World Biological Classification Plant Kingdom

# **Animal Kingdom**

# August-

Morphology of Flowering Plants Anatomy of Flowering Plants Structural Organisation in Animals Cell-The Unit of Life

# September-

Cell Cycle and Cell Division

#### October-

Biomolecules

Photosynthesis in Higher Plants

#### November-

Cellular Respiration
Plant - Growth and Development
Breathing and Exchange of Gases

#### December-

Body Fluids and Circulation
Excretory Products and their Elimination
Locomotion and Movement
Neural Control and Coordination

# January-

Chemical Coordination and Integration Revision

# **BIOTECHNOLOGY**

# July:

Biotechnology: An Overview

# **August-September:**

Biomolecules: Building Blocks

#### October:

Macromolecules: Structure & Function

**Concepts of Genetics** 

#### November:

Genes and Genomes: Structure and Function

# December:

The Basic Unit of Life

#### January:

Cell Growth and Development

# **COMPUTER SCIENCE**

# July:

Computer System and Organization – Architecture, Types of Software Boolean Logic, Number System

Computational Thinking and Programming – Flow charts and Algorithm, Introduction to Python

#### August:

Datatypes, Comments, Operators and types, Errors, conditional Statements

# September:

Conditional Statements contd. – if, if..else, if..elif, Iteration Statements – while and for

#### October:

Strings Traversal Operations, Lists – Definition, traversal and methods

#### November:

**Tuples and Dictionaries** 

#### December:

Introduction to Python Modules – math, random and statistics

#### January:

Society Law and Ethics – Cyber Safety, Appropriate use of Social Networking Sites, IPR, Privacy Laws, Technology and society

# **INFORMATIC PRACTICES**

# July:

Introduction to Computer System – Architecture, Types of Software Memory and Evolution of software devices Introduction Python – Basics, Modes, Variables, data types, input and

Debugging, conditional Statement

# August:

Iterative Statements - For and while

# September:

Lists – Definition, traversal and methods

#### October:

Dictionaries – Definition, traversal and Methods

#### November:

Database Concepts and Structured Query Language – RDBMS and basic Concepts

#### December:

Introduction to MYSQL - DDL and DML Commands

# January:

Introduction to Emerging Trends

# **MATHEMATICS**

#### July

- 1. Sets
- 2. Relations & Functions
- 3. Trigonometric Functions

# **August**

- 3. Trigonometric Functions TO BE CONTINUED
- 4. Complex Numbers and Quadratic Equations.
- 5.Linear Inequalities

# September:

6. Limits and Derivatives

Revision and first terminal examination

#### October:

- 7. Binomial Theorem
- 8. Sequence and Series

# November:

- 9. Permutations and Combination
- 10. Straight Lines

#### December:

- 11. Conic Sections
- 12. Introduction to Three-dimensional Geometry
- 13. Statistics

#### January:

14. Probability

# **ACCOUNTANCY**

## July:

# Part A: Financial Accounting-1

Theoretical Framework

Introduction to Accounting

**Basic Accounting Terms** 

**Accounting Process** 

Recording of Business Transactions:

Voucher and Transactions Source documents,

Accounting Equation Approach:

Meaning and Analysis, Rules of Debit and Credit.

# August:

Goods and Services Tax (GST):

Characteristics and Objective

Recording of Transactions: Books of Original Entry

Journal and Posting to Ledger: Format, Posting from journal Balancing of

accounts and preparation of Trial Balance

Simple GST calculation:

Special Purpose books: Cash Book: Simple Cash Book with bank column

and petty cashbook;

Purchases Book, Sales Book, Purchases Return Book, Sales Return Book

and Journal Proper, Posting from Subsidiary Books.

# September:

**REVISION** 

MID TERM EXAMINATION

#### October:

Bank Reconciliation Statement: Need and preparation

Depreciation, Provisions and Reserves

# November:

Theory Base of Accounting, Accounting Standards

System of Accounting. Basis of Accounting Trial balance and Rectification of Errors

#### December:

# Part B: Financial Accounting-II

Financial Statements of Sole Proprietorship:

Preparation of Trading and Profit and Loss account and Balance Sheet of a sole proprietorship without adjustments

Preparation of Trading and Profit and Loss account and Balance Sheet of a sole proprietorship with adjustments

**PROJECT WORK** 

#### January:

**REVISION** 

# **BUSINESS STUDIES**

# July:

#### **Part A Foundations of Business**

Unit 1: Evolution and Fundamentals of Business

Unit 2: Forms of Business Organisations and Formation of Company

#### August:

Unit 3: Public, Private and Global Enterprises

Unit 4: Business Services

Unit 5: Emerging Modes of Business

#### September:

**REVISION** 

MID TERM EXAMINATION

#### October:

Unit 6: Social Responsibility of Business and Business Ethics

#### **Part B Finance and Trade**

Unit 7: Sources of Business Finance

# November:

Unit 8: Small Business and Entrepreneurship Development

#### December:

Unit 9: Internal Trade

Unit 10: International Business

#### **PROJECT WORK**

#### January:

**REVISION** 

# **ECONOMICS**

# July:

# Introduction-Micro Consumer's Equilibrium and demand

- i- Consumer's equilibrium
- ii- Demand
- iii- Elasticity of demand

#### **Introduction-Statistics**

- i- What is Economics
- ii- Meaning and scope

# **Collection and Organisation of data**

- i- collection of data
- ii- Organisation of data

#### August:

#### Presentation of data

- v- Tabular presentation
- vi- Diagrammatic presentation
- v- Graphic presentation

#### September:

# Statistical tools and interpretation

i-Measures of central tendency - Mean

#### October:

# Producer's Behaviour and supply

- iii- Cost
- iv-Revenue
- v Producer's Equilibrium

#### November:

**Production function** 

# Forms of market and price determination

i- Features of different markets

Statistical tools and interpretation

ii- Positional Averages and Partition Values

#### December:

Forms of market and price determination (continued)

i- Features of different markets

i-Market equilibrium under Perfect market

# **Measures of Correlation**

# January:

#### **Introduction to Index Numbers**

Preparation of a Project Report

# **PSYCHOLOGY**

# July:

- 1. What is Psychology?
- 2. Methods of Enquiry in Psychology (to be contd.)

# August:

- 2. Methods of Enquiry in Psychology
- 3. Human Development

# September:

Revision & Mid Term Exam

#### October:

4. Sensory, Attentional and Perceptual Processes

#### November:

5. Learning

#### December:

- 6. Human Memory
- 7. Thinking

# January:

8. Motivation and Emotion

# February:

Revision and Final Exam

# **LEGAL STUDIES**

# April, July

Unit 1: Introduction to Political Institutions

Unit 2: Basic Features of The Constitution of India

# August

Unit 3: Jurisprudence, Nature and Sources of Laws

# September

Revision

#### October

Unit 3: Historical Evolution of Indian Legal System

#### **November**

Unit 4: Judiciary: Constitutional, Civil And Criminal Courts And Processes

#### December

Unit 5: Family Justice System

#### Jan-Feb

(cont.) Family justice system Case study & Revision

# **POLITICAL SCIENCE**

**PART-A: Indian Constitution at Work** 

#### July

Chapter-1 Constitution

Chapter-3 Election and Representation

# August

Chapter-4 The Executive Chapter-5 The Legislature Chapter-6 The Judiciary

# September

Chapter-7 Federalism

Revision

# **PART-B: Political Theory**

#### October:

Chapter-1 Political Theory: An Introduction

Chapter-2 Liberty

# November:

Chapter-3 Equality Chapter-4 Justice Chapter-5 Rights

#### December

Chapter-6 Citizenship Chapter-7 Nationalism

# January

Chapter-8 Secularism

#### **February:**

Revision

# **HINDUSTANI MUSIC MELODIC INSTRUMENTS- (30% Theory, 70% Practical)**

# July:

**Theory:** (Unit – 1.1, 4.1, 4.2) Brief study of the following: Nada, Shruti, Swara, Saptak, Thaat, jati, Laya, Tala. Knowledge of the Structure of the Instrument opted for.

**Practical**: Alankars with fingering and strocks. Description of prescribed Talas along with Tala Notation- in Thah, Dugunand Chaugun Prescribed Talas- Teentala.

**Theory:** Brief study of the following: Margi- Desi, Nibaddha- Anibaddha Gan, Raga, Gat.

**Practical:** Description of prescribed Talas along with Tala Notation- in Thah, Dugunand Chaugun Ektaal. Introduction of Raga – Bihag and Razakhani Gat .

#### August:

**Theory:** Dhrupad , Maseetkhani and Razakhani Gat.

**Practical:** Description of prescribed Talas along with Tala Notation- in Thah, Dugunand Chaugun Prescribed Tala – Chautaal. Introduction of Raga Bhimpalasi and Razakhani Gat.

**September:** Revision and Mid-term

#### October:

**Theory:** Brief study of Musical Elements of NatyaShastra.

**Practical:** Description of prescribed Talas along with Tala Notation- in Thah, Dugunand Chaugun Prescribed Talas- Teentaal, Ektaal & Chautala.

Introduction of Raga Bhairavi and Razakhani Gat.

#### November:

**Theory:** Life sketch and Contribution of Tansen, V.N. Bhatkhande and V.DPaluskar.

**Practical:** Raga- Bihag, Bhimpalasi, Bhairavi- Taan and Jhala.

#### December:

**Theory:** Critical study of prescribed Ragas along with Recognizing Ragas from phrases of Swaras and elaborating them. Writing in Notation the Compositions of prescribed Ragas

Practical: Raga-Bihag, Bhairavi & Bhimpalasi Taan and Jhala.

**January: Theory:** Elaboration and Revision of all the Ragas and Taals.

**February:** Evaluation.

# **HEALTH AND PHYSICAL EDUCATION**

## July:

Unit 1 - Changing Trends and Career in Physical Education

Unit 2- Olympism

Practical - Physical Fitness Components

#### August:

Unit 3 – Yoga

Unit 4 - Physical Education for CWSN

Practical - Yoga Asanas

# September:

Unit 5- Physical Fitness, Health and Wellness

Revision

#### October:

Unit 6 - Test and Measurement

Unit 7- Fundamentals of Anatomy, Physiology in sports

Practical - Record File - Physical Fitness evaluation

#### November:

Unit 8 - Fundamentals of Kinesiology and biomechanics in Sports

Unit 9 - Psychology and sports

Practical - Fitness Activities

#### December:

Unit 10 - Training and doping in sports

Practical - Physical Fitness - Games Skills

Jan. & Feb.:

Revision

Practical - exam

# **PAINTING**

**APRIL-** A. Pre-Historic Rock-Paintings Introduction

- 1) Period and Location
- 2) Study and appreciation of following pre-historic paintings:
- I. Wizard's Dance, Bhimbethaka

MAY- B. Introduction

- 1) Period and Location.
- 2) Extension: In about 1500 miles.
- i. Harappa & Mohenjo-Daro (Now in Pakistan)
- ii. Ropar, Lothal, Rangpur, Alamgirpur, Kali Bangan, Banawali and Dholavira (in India)

**JULY-** Study and appreciation of following:

Sculptures and Terra cottas:

- i. Dancing girl (Mohenjo-Daro) Bronze, 10.5 x 5 x 2.5 cm. Circa 2500 B.C. (Collection: National Museum, New Delhi).
- ii. Male Torso (Harappa) Red lime Stone, 9.2 x 5.8 x 3 CMS. Circa 2500 B.C. (Collection: National Museum, New Delhi)
- iii. Mother Goddess (Mohenjo-Daro) terracotta, 22 x 8 x 5 c Circa 2500 B.C. (Collection: National Museum, New Delhi).

**AUGUST-** Study and appreciation of following Seal:

I. Bull (Mohenjo-Daro) Stone (Steatite), 2.5 x 2.5 x 1.4 cm. Circa 2500 B.C. (Collection: National Museum, New Delhi). Decoration on earthen wares: Painted earthen-ware (Jar) Mohenjo-Daro (Collection: National Museum, New Delhi).

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

- 1. General Introduction to Art during Mauryan, Shunga, Kushana (Gandhara and Mathura styles) and Gupta period:
- 2. Study and appreciation of following Sculptures:
- **I.** Lion Capital from Sarnath (Mauryan period) Polished sandstone, Circa 3rd Century B.C. (Collection: Sarnath Museum, U.P.)
- II. Chauri Bearer from Didar Ganj (Yakshi) (Mauryan period) Polished sandstone Circa 3rd Century B.C. (Collection: Patna Museum, Bihar)
- **III.** Seated Buddha from Katra Mound, Mathura-(Kushan Period Mathura Style) Red-spotted Sand Stone, Circa 3rd Century AD. (Collection: Govt. Museum, Mathura)
- **IV.** Jain Tirathankara (Gupta period) Stone Circa 5th Century A.D. (Collection: State Museum, Lucknow U.P.)
- 3. Introduction to Ajanta Location Period, no of caves, Chaitya and Vihara, paintings and sculptures, subject matter and technique etc.
- OCTOBER- Temple Sculpture, Bronzes and artistic aspects of Indo-Islamic Architecture
- (A) Artistic aspects of Indian Temple sculpture (6th Century A.D. to 13th Century A.D.)
- 1) Introduction to Temple Sculpture (6th Century A.D. to 13th Century A.D.)
- 2) Study and appreciation of following Temple-Sculptures:
- i. Descent of Ganga (Pallava period, Mahabalipuram, Tamil Nadu), granite rock Circa 7 th Century A.D.
- ii. Trimuti (Elephanta, Maharashtra) Stone Circa 9th Century A.D.
- iii. Lakshmi Narayana (Kandariya Mahadev Temple) (Chandela period, Khajuraho, Madhya Pradesh) Stone Circa 10th Century A.D.
- iv. Cymbal Player, Sun Temple (Ganga Dynasty, Konark, Orrisa) Stone Circa 13th Century A.D.
- v. Mother and Child (Vimal-Shah Temple, Solanki Dynasty, Dilwara, Mount Abu; Rajasthan) white marble, Circa 13th Century A.D.

#### **NOVEMBER-** Bronzes:

- 1. Introduction to Indian Bronzes.
- 2. Method of casting (solid and hollow)
- 3. Study and appreciation of following South Indian Bronze:

i. Nataraj (Chola period Thanjavur Distt., Tamil Nadu) 12th Century A.D. (Collection : National Museum, New Delhi)

**DECEMBER-**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

# **YOGA**

# July:

Unit 1 – Introduction to Yoga and Yogic Practices - I (Subject Specific Skills)

Practical

Unit 1 - Communication Skills – III (Employability Skills)

# August:

Unit 2 – Introduction to Yoga Texts - I (Subject Specific Skills),

Practical

# Sep:

Revision

#### Oct:

Unit 3 – Yoga for Health Promotion – I (Subject Specific Skills)

Practical

Unit 3 - Information and Communication Technology Skills - III

#### Nov:

Practical

Unit 3 - Information and Communication Technology Skills - III

Unit 4 - Entrepreneurial Skills- IIIDec:

Practical

Unit 5 - Green Skills - III

#### Jan & Feb:

**Revision and Practical** 

# WORK EXPERIENCE July: Graphics & Layout Techniques August: Logo Designing & Typography September: Project Work October: Vector Designing using Power point November: Presentations and Motion Graphics December: Professional Office - Word Processor January: Professional Office — Word Processor Contd.

**February**: Project Work