

# SYLLABUS 2021-22

*A good plan today is better than a perfect plan tomorrow.*

## CLASS - XI

Subject	Page No.
English	2-3
Mathematics	3
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Chemistry	4-5
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Accountancy	6-7
Economics	7
History	8
Psychology	9
Political Science	9-10
<b>Optional Subjects</b>	
Physical Education	10
Web Application	11
Computer Science	11-12
Applied Arts	13
Legal Studies	14
Kathak	15
Bharatnatyam	15-16
Odissi	16
Vocal Music	17-18
Hawaiian Guitar-Instrumental Melodic	18-19
Tabla - Instrumental Percussion	19-20

### **Note**

- ❖ *The planning is subject to change as per the availability of number of working days.*
- ❖ *The Chapters mentioned in the Semesters might be interchanged according to the CBSE ruling. This will be notified later.*

# **ENGLISH**

## **Semester I**

### **A. Reading Section –**

- i) Unseen Passage
- ii) Note Making

### **B. Writing Section**

- i) Poster
- ii) Notice
- iii) Advertisement
- iv) Letters
- v) Article
- vi) Speech

### **C. Grammar Section – Integrated Grammar**

### **D. Literature Section**

#### **Horn Bill**

- i) The Portrait of a lady
- ii) A Photograph
- iii) The Voice of the Rain
- iv) Ailing Planet

#### **Snapshots**

- i) The Summer of the Beautiful White Horse
- ii) The Address
- iii) Albert Einstein at School

## **Semester II**

### **A. Reading Section –**

- i) Note Making
- ii) Unseen Passage

### **B. Writing Section -**

- i) Invitation
- ii) Debate
- iii) Report

### **C. Grammar Section – Integrated Grammar**

## **D. Literature Section**

### **Horn Bill**

- i) Childhood
- ii) The Browning Version
- iii) Father to Son
- iv) Ailing Planet

### **Snapshot**

- i) Birth
- ii) The Tale of the Melon City
- iii) Mother's Day

### **Flamingo**

- i) My Mother at Sixty Six
- ii) An Elementary School classroom in a slum
- iii) Keeping Quiet

## **MATHEMATICS**

### **Semester I**

- i) Sets
- ii) Relations and Functions
- iii) Trigonometric Functions
- iv) Principle of Mathematical Induction
- v) Complex Numbers and Quadratic Equations
- vi) Linear Inequalities
- vii) Permutations and Combinations
- viii) Binomial Theorem
- ix) Sequences and Series

### **Semester II**

- i) Straight Lines
- ii) Conic Sections
- iii) Introduction to Three Dimensional Geometry
- iv) Mathematical Reasoning
- v) Statistics
- vi) Probability
- vii) Limits & Derivatives

# **PHYSICS**

## **Semester I**

- i) Physical World
- ii) Units and Measurements
- iii) Motion in a Straight Line
- iv) Motion in a Plane
- v) Laws of Motion
- vi) Work, Energy and Power

## **Semester II**

- i) System of Particles and Rotational Motion
- ii) Gravitation
- iii) Mechanical Properties of Solids
- iv) Mechanical Properties of Fluids
- v) Thermal Properties of Matter
- vi) Thermodynamics
- vii) Kinetic Theory of Gases
- viii) Oscillations
- ix) Waves

# **CHEMISTRY**

## **Semester I**

- i) Some Basic Concepts of Chemistry
- ii) Structure of Atom
- iii) Classification of Elements and Periodicity in Properties
- iv) Chemical Bonding and Molecular Structure
- v) States of Matter : Gases and Liquids
- vi) Hydrogen
- vii) Environmental Chemistry

## **Semester II**

- i) Thermodynamics
- ii) Equilibrium
- iii) Redox Reactions
- iv) Organic Chemistry: Some Basic Principles & Techniques
- v) Hydrocarbons
- vi) s-Block Elements
- vii) Some p- Block Elements

## **BIOLOGY**

### **Semester I**

#### **Unit 1 - Diversity in the Living World**

- i) The living World
- ii) Biological Classification
- iii) Plant Kingdom
- iv) Animal Kingdom

#### **Unit 2 - Structural Organization in plants and animals**

- i) Morphology of Flowering Plants
- ii) Anatomy of Flowering Plants
- iii) Structural Organization in Animals

#### **Unit 3 - Cell: Structure and Functions**

- i) Cell: The Unit of Life
- ii) Biomolecules
- iii) Cell Cycle and Cell Division

### **Semester II**

#### **Unit 5 - Human Physiology**

- i) Digestion & Absorption
- ii) Breathing & Exchange of gases
- iii) Body fluids and Circulation
- iv) Excretory products and their elimination
- v) Locomotion and Movement
- vi) Neural Control and Coordination
- vii) Chemical Coordination and Integration

## **Unit 4 - Plant Physiology**

- i) Photosynthesis in Higher Plants
- ii) Respiration in Plants
- iii) Transportation in plants
- iv) Mineral Nutrition
- v) Plant growth and Development

## **BUSINESS STUDIES**

### **Semester I**

- i) Nature and Purpose of Business
- ii) Forms of Business organization
- iii) Private Public and Global Enterprises
- iv) Business Services
- v) Emerging Mode of Business
- vi) Social Responsibilities of Business and Business Ethics

### **Semester II**

- i) Formation of Company
- ii) Sources of Business Finance
- iii) Small Business
- iv) Internal Trade
- v) International Business – I
- vi) International Business – II
- vii) Project Work

## **ACCOUNTANCY**

### **Semester I**

- i) Introduction to Accountancy
- ii) Theory base of Accounting
- iii) Recording of Business Transactions
- iv) Trial Balance & Rectification of errors
- v) Depreciation, Provision & Reserves

## **Semester II**

- i) Bills of Exchange
- ii) Financial Statements
- iii) Incomplete Records

## **ECONOMICS**

### **Semester I**

#### **Microeconomics**

- i) Introduction
- ii) Consumer's Equilibrium-Utility Analysis
- iii) Consumer's Equilibrium-Indifference Curve Analysis
- iv) Theory of Demand
- v) Price Elasticity of Demand

#### **Statistics**

- i) Introduction
- ii) Collection Of Data
- iii) Organization of Data
- iv) Tabular Presentation
- v) Diagrammatic Presentation
- vi) Graphic Presentation
- vii) Measures of Central Tendency**

### **Semester II**

#### **Microeconomics**

- i) Production Function
- ii) Concepts of Cost and Revenue
- iii) Producers Equilibrium
- iv) Theory of Supply
- v) Forms of Market
- vi) Price Determination under Perfect Competition with Simple applications

#### **Statistics**

- i) Measures of Dispersion
- ii) Correlation
- iii) Index Numbers

# **HISTORY**

## **Semester I**

### **EARLY SOCIETIES**

- i) Introduction
- ii) Timeline I (6 MYA to 1 BCE)
- iii) Theme 1: From the Beginning of Time
- iv) Theme 2: Writing and City Life

### **EMPIRES**

- v) Introduction
- vi) Timeline II(c.100 BCE to 1300 CE)
- vii) Theme 3: An Empire Across Three Continents
- viii) Theme 4: The Central Islamic Lands
- ix) Theme 5: Nomadic Empires

## **Semester II**

### **CHANGING TRADITIONS**

- i) Introduction
- ii) Timeline III(c.1300 to 1700)
- iii) Theme 6:The Three Orders
- iv) Theme 7: Changing Cultural Traditions
- v) Theme 8: Confrontation of Cultures

### **TOWARDS MODERNISATION**

- vi) Introduction
- vii) Timeline IV (c.1700 to 2000)
- viii) Theme 9: The Industrial Revolution
- ix) Theme 10: Displacing Indigenous Peoples
- x) Theme 11: Paths to Modernisation



# **PSYCHOLOGY**

## **Semester I**

- i) Introduction to Psychology
- ii) Methods of Enquiry in Psychology
- iii) The Bases of Human Behavior
- iv) Human Development
- v) Sensory, Attentional and Perceptual Processes

## **Semester II**

- i) Learning
- ii) Human Memory
- iii) Thinking
- iv) Motivation and Emotion

# **POLITICAL SCIENCE**

## **Semester I**

### **Paper I – Political Theory**

- i) Political Theory : An Introduction
- ii) Freedom
- iii) Equality
- iv) Social Justice

### **Paper II – Indian Constitution at Work**

- i) Constitution – Why and How?
- ii) Constitution as a Living Document
- iii) The philosophy of Constitution
- iv) Election and Representation
- v) Executive
- vi) Legislature

## **Semester II**

### **Paper I – Political Theory**

- i) Rights
- ii) Citizenship
- iii) Nationalism
- iv) Secularism
- v) Development

## **Paper II – Indian Constitution at Work**

- i) Judiciary
- ii) Federalism
- iii) Local Governments

# **Optional Subjects**

## **PHYSICAL EDUCATION**

### **Semester I**

- i) Changing Trends and Career in Physical Education
- ii) Olympic Movement
- iii) Physical Fitness, Wellness and Lifestyle
- iv) Physical Education and Sports for Differently Abled
- v) Yoga, Physical Activity & Leadership Training

### **Semester II**

- vi) Test and Measurement in Sports
- vii) Fundamentals of Anatomy and Physiology
- viii) Kinesiology , Biomechanics in Sports
- ix) Psychology and Sports
- x) Training in Sports

# **WEB APPLICATION**

**Unit 1: Multimedia Authoring** – Animation Tools  
Animation Concept, Layers and Frames, Motion and  
Shape Tweening, Importing AV Files, Multimedia  
Publishing

**Unit 2: Digital Content Creation** – Adding Styles to Web Pages  
(CSS), Basics about HTML, Basics about CSS,  
CSS Properties – border, box font, margin, padding CSS  
classes, Publishing Your Website or Webpages

**Unit 3: Web Scripting-** Java Script, Creating interactive Web  
Pages with Scripts ,Variables and Operators, Decision  
making using if and switch , Iterations: Loops ,Window  
Object, Pop Up Boxes, Arrays,Functions

**Unit 4: Work Integrated Learning IT**

# **COMPUTER SCIENCE**

## **Unit I: Computer Systems and Organisation**

- Basic Computer Organisation:
- Types of software
- Operating system (OS)
- Boolean logic
- Number system
- Encoding schemes
- Emerging trends: Cloud computing, cloud services (SaaS, IaaS, PaaS), blockchains, Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT)

## **Unit II: Computational Thinking and Programming – 1**

- Introduction to problem solving
- Familiarization with the basics of Python programming:
- Knowledge of data types
- Operators
- Expressions, statement, type conversion & input/output
- Errors
- Flow of control
- Conditional statements
- Iterative statements
- Strings
- Lists
- Tuples
- Dictionary
- Sorting techniques
- Introduction to Python modules

## **Unit III: Society, Law and Ethics**

- Digital Footprints
- Digital society and Netizen
- Data protection
- Cyber-crime
- Cyber safety
- Safely accessing web sites
- E-waste management
- Indian Information Technology Act (IT Act)
- Technology & Society

# **APPLIED ARTS**

## **Semester I**

### **Unit I: Arts of Indus Valley (2500 B.C.- 1500 B.C.)**

#### **Introduction**

- a. Architecture
- b. Arts of Indus Valley Civilization
  - i. Terra Cota Figures
  - ii. Seals
  - iii. Pottery

### **Unit II: Buddhist & Jain Art (3<sup>rd</sup> century B.C to 8<sup>th</sup> century A.D.)**

- a. General Introduction of Art during Mouryan, Sunga, Kushana, (Gandhar & Mathura Style) & Gupta Period
- b. Study of Sculptures

## **Semester II**

### **Unit III: Temple Sculpture, Bronze & Artistic aspects of Indo– Islamic Architecture**

- i) Aesthetic aspects of Indian temple Sculpture (6<sup>th</sup> century A.D.to 13<sup>th</sup> century A.D.)
  - a. Introduction of temple sculpture (6<sup>th</sup> century A.D. to 13<sup>th</sup> century A.D.)
  - b. Study of temple sculpture

### **Unit IV:**

#### **ii) Bronzes**

- a. Introduction of Indian Bronze sculpture
- b. Method of Casting (Solid & Hollow)
- c. Study of South Indian Bronze sculptures

#### **iii) Artistic Aspects of Indo – Islamic Architectures**

- a. Introduction
- b. Study of Architecture

# **LEGAL STUDIES**

## **Semester I**

### **Unit I: Theory and Nature of Political Institutions**

- Concept of State/Nation
- Organs of Government – Legislative, Executive and Judiciary
- Separation of Powers- Parliamentary Sovereignty and Judicial Independence
- Constitutional Framework of India

### **Unit II: Nature and Sources of law**

- Legislation– process, delegated and subordinate legislation
- Case Law-Stare decisis, precedents within the hierarchy of courts
- Authoritative Sources
- Custom
- Law Reform

### **Unit III: Historical Evolution of Indian Legal System**

- Ancient Indian Law
- English Law in India
- Administration of justice in British India
- Charter of 1861 and subsequent Charters
- Establishment of High Courts and the Federal Court
- Drafting of the Indian Constitution
- Ancient Indian Law in Modern Legal Framework

## **Semester II**

### **Unit IV: Civil and Criminal Courts and Process**

- The Civil Court Structure
- The Criminal Court Structure
- The Civil Process
- The Criminal Process – investigation and prosecution

### **Unit V: Family Justice System**

- Institutional Framework
- Marriage and Divorce
- Children
- Domestic Violence

# **KATHAK DANCE**

## **Semester I**

- 1- Hkkjrh; u`R; dyk dk laf{klr bfrgkIA
- 2- egkHkkjr] jkek;.k] iapra= ds dFkkudks ds fo"k; esa lkekU; KkuA
- 3- dFkd u`R; dk bfrgkIA
- 4- fofHkUu rkyksa dk o.kZu rFkk y;dkjhA  
¼nknjk] dgjok] rhurky½
- 5- ikfjHkkf"kd 'kCnksa dk Kku&
  - lykeh
  - vken
  - BkV
  - rRdkj
  - rksM+k
  - VqdM+k
  - mBku
  - iju

## **Semester II**

- 1- dRFkd u`R; dh os'kHkw"kk ,oa ?kqa?k#;ksa ds fo"k; esa tkudkjA
- 2- ^^>irky\*\* ,oa rhu rky dh nqxqu rFkk pkSxqu dh u`R;fyfi dh tkudkjA
- 3- ukV~; ,oa vfHku; ds fo"k; esa tkudkjA
- 4- fVli.kh& u`R;] u`Ùk] ukV~;] rk.Mo rFkk ykL;] vax] mikax izR;axA
- 5- ikfjHkkf"kd 'kCn  
frgkbZ] pDdjnkj rksM+k] VqdM+k  
pDdjnkj iju] xr fudkl  
xr Hkko] fizeyq

# **BHARAT NATYAM**

## **Semester I**

- 1- Hkkjrh; 'kkL=h; u`R; dk bfrgkIA
- 2- Hkkjrh; u`R; dyk dk laf{klr bfrgkIA

- 3- HkjrukV~;e u`R; dk bfrgkl] ok | ;a=A
- 4- egkHkkjr] jkek;.k] iapra=] Hkkxor iqjk.k] xhrxksfoUn ds dFkkudksa ds fo"k; esa lkekU; KkuA
- 5- HkjrukV~;e ds lkr vax
- 6- ikfjHkkf"kd 'kCnksa dk Kku&uVqokaxe] y;] rky] laxhr vjaxsLV<sup>a</sup>e] vV~Veh] dksjos] frekZue ukV~;] u`RRk]

u`R;

## **Semester II**

- 1- nf{k.k Hkkjrh; rky i]fr
- 2- HkjrukV~;e u`R; dh os'kHkw"kk&:ilTtk
- 3- vfHku;
- 4- gLreqnzk @ la;qDr @ vla;qDr
- 5- lrrk.Mo @ ykL;
- 6- ikfjHkkf"kd 'kCn& vax] izR;ax] mikax] vjke.Mh] vkorZue rV~Vqd>h] ;fr] xfr] tfr

## **ODISSI**

1. A brief history of Indian dance.
2. Short notes on myths related to: Kaliya Daman, Dashavatar, A Vastra haran, the concept of Nataraja, Draupadi Cheer haran, Neuni Chura (Makhan Chor).
3. A brief history of the Odissi dance tradition and development of the style:
  - a) from the 1st /2 nd Century BC to the 1950s ( including the Mahari and Gotipua tradition)
  - b) the revival phase from the mid twentieth century to the beginning of the 21st century.
4. Definition of the terms:
  - a) Nritya, Nritya and Natya
  - b) Matra, Laya, Taal, Avartana, Vibhaga (Anga)
  - c) Tandava and Lasya



- d) Natyadharmi and Lokdharmi  
 e) Devadasi and Mahari
5. Brief explanation of the five segments of the basic repertoire of Odissi:  
 a) Mangalacharan,  
 b) Batu or Sthayi,  
 c) Pallavi,  
 d) Abhinaya,  
 e) Moksha/ or any Tandav Dance,
6. Ability to write the notation of the Sthayi Ukuta / Dharana of the three following taalas: Ektaali (four matras) and Triputa Taal (seven matras), Rupak Taal (6 beats).

## VOCAL MUSIC

### Semester I

- |                                                                                                                                           |                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• laxhr</li> <li>• Loj</li> <li>• llrd</li> <li>• ukn</li> <li>• Jqfr</li> <li>• Okknh]</li> </ul> | <ul style="list-style-type: none"> <li>• FkkV ¼esy½</li> <li>• Tkfr</li> <li>• /ofu</li> <li>• Loj ekfydk</li> <li>• y;</li> <li>• rky</li> </ul> |
| laoknh                                                                                                                                    |                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• rjkuk</li> </ul>                                                                                 |                                                                                                                                                   |
| jkx ifjp;&                                                                                                                                |                                                                                                                                                   |
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| jkx ifjHkk"kk&                                                                                                                            |                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• /kzqin</li> <li>• [;ky</li> </ul>                                                                |                                                                                                                                                   |
| rky ifjp;&                                                                                                                                |                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• fryokM</li> <li>• k</li> <li>• dgjok</li> </ul>                                                  | <ul style="list-style-type: none"> <li>• rhurky</li> <li>• :id</li> </ul>                                                                         |

thou ifjp;&

- fo".kq ukjk;.k Hkkr[k.Ms
- iaCE fnxEcj iyq"dj
- mCE QS;kt [kkW

## Semester II

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- Loj ekfydk
- jkx

jkx ifjp;&

- HkSjoh
- tkSuiqjh

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rky ifjp;&

- ,drky
- pkSrky
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thou ifjp;&

- rkulsu
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## HAWAIN GUITAR

### **Music Hindustani (Instrumental Melodic)**

#### **Theory & Practical**

1. Definition of the following:  
Sangeet, Dhvani, Nada, Shruti, Swara, Saptak, That, Jati, Raga, Gat
2. Description of the following Raga:
  - a) Alhaiya Bilawal

- b) Bhupali
  - c) Vrindavani Sarang
  - d) Jaunpuri
3. One Razakani Gat with simple elaboration in above Ragas
  4. One Masitkhani Gat in any of the prescribed Ragas
  5. Aroha, Avroha, Pakad, simple Swara-vistars with a few todas in prescribed Raga
  6. Contribution and short life sketch of Ustad Masit Khan, Pt. V.N. Bhatkhande, Pt. V.D. Paluskar
  7. Brief history of Dhrupad, Masitkhani and Razakhani Gat, Gharana
  8. Writing in notation the composition in Ragas prescribed for class XI
  9. Recitation of Thekas – Thah and Dugun keeping tala with hand beats and writing in tala notation of following :  
Dadra, Kehrawa, Teental, Chautaal and Ektaal
  10. Brief study of Musical elements in Natya shastra
  11. Dhun

## **TABLA**

### **Music Hindustani (Instrumental Percussion)**

#### **Theory**

#### **Unit 1**

1. Description of the Talas prescribed for Class XI.
2. Description of Graha, Jati, Kala, Laya, Sangeet, Nada, Swara

#### **Unit 2**

1. Classification of Indian musical instruments.

2. Brief knowledge of Natyashastra with special reference to Awanaddh a Vadya

### **Unit 3**

2. Musical contribution of Ustad Ahmad Jan Thirkwa, Pandit Anokhe Lal Mishra, Ustad Alla
3. Short life sketch of Pandit Kudau Singh, Pandit Nana Panse, Pandit Parwat Singh

### **Unit 4**

1. Brief knowledge of Delhi and Banaras Gharana
2. Salient features of Kudau Singh Gharana and Punjab Gharana of Pakhawaj

### **Unit 5**

1. Ability to write notation of the prescribed Talas and compositions in Thah (Barabar), Duguns Chaugun laya.
2. Ability to do Tala Notation of compositions in prescribed Tala. Prescribed Talas: Teentala or Adi Tala Jhaptala or Sul tala.

### **Practical**

1. Knowledge of Playing Theka of Teentala or Adi Tala, Jhaptala Sultala, Ektala or Chautala with Theka Bharao.
2. Ability to play two Kayada /Rela two Chakradar Tukra or Paran Stuti Paran, Four Sadharan Tukra or Paran in Jhaptala or Sultala
3. Ability to play Four advance Kayada, one Rela, two Chakardar Tukra or Paran, one Farm Chakardar Tukra or Paran in Teentala/Aditala
4. Ability to play one Adalaya Kayada or Rela with Paltas and Tihai in Teentaal or Adi Taal
5. Knowledge of playing Damdar and Bedamdar Tihai in prescribed Talas

6. Accompaniment of Vocal or Instrumental Music with Ektala or Chautala in different layas
7. Solo performance of 10-15 minutes in Teentala/Aditala.

