

# SYLLABUS 2021-22

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

## CLASS - XII

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Applied Arts	12-13
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### 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 – 301**

## **Literature**

### **1. Flamingo**

- i) The Last Lesson
- ii) Lost Spring
- iii) Deep Water
- iv) The Rattrap
- v) Indigo

### **Poems**

- vi) My Mother at Sixty Six
- vii) An Elementary School Classroom in a slum
- viii) Keeping Quiet
- ix) A Thing of Beauty
- x) Aunt Jennifer's Tigers

### **2. Vistas**

- i) The Third level
- ii) Should Wizard Hit Mommy?
- iii) The Enemy
- iv) On the face of It
- v) Evans Tries an O Level

## **Writing Skills**

- i) Notice Writing
- ii) Advertisement
- iii) Invitation (Replies)
- iv) Business Letters
- v) Job Application
- vi) Article Writing
- vii) Report Writing

## **Reading Skills - Two Unseen Passages**

## **MATHEMATICS - 041**

1. Determinants
2. Matrices
3. Relations and Functions
4. Inverse Trigonometric Functions
5. Continuity and Differentiability
6. Application of Derivatives
7. Integrals
8. Application of Integrals
9. Differential Equations
10. Vectors
11. Three-dimensional Geometry
12. Probability
13. Linear Programming

## **PHYSICS - 042**

1. Electric Charges and Fields
2. Electrostatic Potential and Capacitance
3. Current Electricity
4. Moving Charges and Magnetism
5. Magnetism and Matter
6. Electromagnetic Induction
7. Alternating Current
8. Electromagnetic Waves
9. Ray Optics and Optical Instruments
10. Wave Optics
11. Atoms
12. Nuclei
13. Dual Nature of Radiation and Matter
14. Electronic Devices

## **CHEMISTRY- 043**

1. The Solid State
2. Solutions
3. Electrochemistry
4. Chemical Kinetics
5. Surface Chemistry
6. Biomolecules
7. Polymers
8. Chemistry in Everyday Life
9. Haloalkanes and Haloarenes
10. Alcohols, Phenols and Ethers
11. Aldehydes, Ketones and Carboxylic acids
12. Amines
13. The p-Block elements
14. The d – and f – Block Elements
15. Coordination Compounds
16. General Principles of Extraction and Isolation of Elements

## **BIOLOGY – 044**

1. **Unit I** : Reproduction
  - i. Reproduction in Organisms
  - ii. Sexual Reproduction in Flowering Plants
  - iii. Human Reproduction
  - iv. Reproductive Health
2. **Unit II** : Genetics and Evolution
  - i. Principles of Inheritance and Variation
  - ii. Molecular basis of Inheritance
  - iii. Evolution
3. **Unit III** : Biology in Human Welfare
  - i. Human Health and Diseases
  - ii. Strategies for Enhancement in Food Production
  - iii. Microbes in Human Welfare
4. **Unit IV** : Biotechnology
  - i. Biotechnology; Principles and Processes
  - ii. Biotechnology and its applications

5. **Unit V** : Ecology
  - i. Organisms and Population
  - ii. Ecosystem
  - iii. Biodiversity and Conservation
  - iv. Environmental Issues

## **BUSINESS STUDIES – 054**

1. Nature and Significance of Management
2. Principles of Management
3. Business Environment
4. Planning
5. Organizing
6. Staffing
7. Directing
8. Controlling
9. Financial Management
10. Financial Market
11. Marketing
12. Consumer Protection

## **ACCOUNTANCY -055**

1. Not-For-Profit Organisations
2. Accounting for Partnership Firm
3. Reconstitution of Partnership
4. Accounting of Share Capital
5. Accounting of Debentures
6. Analysis of Financial Statements
7. Cash Flow Statement
8. Project Work

# **ECONOMICS - 030**

## **Indian Economy**

1. Indian Economy on the Eve of Independence
2. Indian Economy (1950 - 1990 )
3. Liberalisation , Privatisation and Globalisation
4. Poverty
5. Human Capital Formation
6. Rural Development
7. Employment
8. Comparative Experiences of India, Pakistan & China
9. Infrastructure
10. Environment and Sustainable Development

## **Macro Economics**

1. National Income & Related Aggregates
2. Money & Banking
3. Determination of National Income & Employment
4. Government Budget & the Economy
5. Balance of Payment and Foreign Exchange

# **HISTORY - 027**

## **Part- I**

1. Bricks, Beads and Bones
2. Kings , Farmers and Towns
3. Kinship, Caste and Class
4. Thinkers, Beliefs and Buildings

## **Part- II**

5. Through the Eyes of Travellers
6. Bhakti-Sufi Traditions
7. An imperial capital : Vijayanagara
8. Peasants, Zamindars and The Estate
9. Kings and Chronicles

### **Part - III**

10. Colonialism and the Countryside
11. Rebels and the Raj
12. Colonial Cities
13. Mahatma Gandhi and Nationalist Movement
14. Understanding Partition
15. Framing the Constitution

### **PSYCHOLOGY - 037**

1. Variations in Psychological Attributes
2. Self and Personality
3. Meeting Life Challenges
4. Psychological Disorders
5. Therapeutic Approaches
6. Attitude and Social Cognition
7. Social Influences and Group Processes
8. Psychology and Life
9. Developing Psychological Skills

### **POLITICAL SCIENCE- 028**

#### **Paper I – Contemporary World Politics**

1. The Cold War Era
2. The End of Bipolarity
3. New Centres of Power
4. South Asia and the Contemporary World
5. United Nations and its organs
6. Security in Contemporary World
7. Environment and Natural Resources
8. Globalization

## **Paper II – Politics in India since Independence**

1. Challenges of Nation Building
2. Party System in India
3. Politics of Planned Development
4. Foreign Policy in India
5. Resurgence of the Democratic Order
6. Rise of Popular Movements
7. Regional Aspirations
8. New Trends and Development in Politics

# **Optional Subjects**

## **PHYSICAL EDUCATION – 048**

- Unit-1** Planning in Sports
- Unit-2** Sports & Nutrition
- Unit-3** Yoga & Lifestyle
- Unit-4** Physical Education & Sports for CWSN  
(Children With Special Needs - Divyang)
- Unit-5** Children & Women in Sports
- Unit-6** Test & Measurement in Sports
- Unit-7** Physiology & Injuries in Sports
- Unit-8** Biomechanics & Sports
- Unit-9** Psychology & Sports
- Unit-10** Training in Sports



# **APPLIED MATHEMATICS -803**

**Unit-1** Numbers, Quantification and Numerical Applications

**Unit-2** Algebra

**Unit-3** Calculus

**Unit-4** Probability Distributions

**Unit-5** Inferential Statistics

**Unit-6** Index Numbers and Time-based data

**Unit-7** Financial Mathematics

**Unit-8** Linear Programming

## **WEB APPLICATION -803**

### **Unit 1: Movie Editing Tools**

Movie Editing Tools, Familiarization of Interface Components, Importing Pictures, Audio and Video Clips Pictures into Windows Movie Maker, Splitting, Joining and Trimming Movie Clips, Adding Titles in Windows Movie Maker, Publishing Movie in Windows Movie Maker

### **Unit 2: Customizing and Embedding Multimedia Components in Web Pages**

Customizing and Embedding Multimedia Components in Web Pages, Compatible Multimedia File Formats for Web Pages , Embedding Audio in Web Pages, Embedding Video in Web Pages, Embedding Flash Files in Web Pages

### **Unit 3: Web Scripting-Java Script**

Java Script Review, Functions, Objects, String Objects, Math Object, Array Object, Events, Case Studies

#### **Unit 4: Advanced Features of Web Design**

-Code View, Add-ins, Snippets and Page Transitions, Dynamic Web Templates, SEO- Search Engine Optimization, Forms-Advanced, Publishing Webpages or Websites I, Publishing Webpages or Websites - II, Authoring Tools, CSS Templates

#### **Unit 5: Employability Skills**

Communication Skills, Self Management Skills, Basic ICT Skills, Entrepreneurial Skills, Green Skills

## **COMPUTER SCIENCE - 083**

#### **Unit I: Computational Thinking and Programming - 2**

- Revision of the basics of Python covered in Class XI.
- Functions:
- File handling:
- Text File:
- Binary File:
- CSV File:
- Using Python libraries:
- Recursion:
- Idea of efficiency:
- Data-structures:

#### **Unit II: Computer Networks**

- Evolution of Networking:
- Data Communication terminologies:
- Transmission media:
- Network devices:
- Network Topologies and types:
- Network Protocol:
- Mobile Telecommunication Technologies:
- Network Security Concepts:
- Introduction To Web services:
- E-commerce payment

### **Unit III: Database Management**

- Database Concepts:
- Relational data model:
- Structured Query Language:
- Data Types:
- SQL commands:
- SQL functions:
- Joins:
- Interface of Python with an SQL database

## **LEGAL STUDIES – 074**

### **1. Judiciary**

- Constitution,
- Roles and Impartiality
- Structure, Hierarchy of Courts, and Legal Offices in India
- Appointments, Trainings, Retirement and Removal of Judges
- Judicial Review

### **2. Topics in Law**

- Property
- Contracts
- Torts
- Crimes
- Administrative Law

### **3. Arbitration, Tribunal Adjudication & Alternate Dispute Resolution**

- Adversarial and Inquisitorial System
- Arbitration
- Administrative Tribunals
- Ombudsman
- Mediation and Conciliation
- Lok Adalats
- Lokpal and Lokayukt

#### **4. Human Rights in India**

- Human Rights Laws – Constitution, Statutes
- Complaint Mechanisms and Human Rights Commissions

#### **5. Legal Profession in India**

- History of Legal profession in India
- Role and types of functions of judges and lawyers
- Barristers, Solicitors and Advocates
- Changes Affected by Indian Advocates Act, 1961

#### **6. Legal Services**

- Legal Services
- Boards
- Funding

#### **7. International Context**

- Introduction to International Law
- Sources of International Law
- International Institutions
- International Human Rights

## **APPLIED ARTS -052**

### **Unit- I**

1. The Rajasthani School (16<sup>th</sup> Century A.D. to 19<sup>th</sup> Century A.D.)
  - a. Origin and Development
  - b. Sub-Schools, Mewar, Bundi, Jodhpur, Bikaner, Kishangarh and Jaipur
  - c. Main features of the Rajasthani School
  - d. Study of the Rajasthani Paintings
2. The Pahari School (16<sup>th</sup> Century A.D. to 19<sup>th</sup> Century A.D.)
  - a. Origin and Development
  - b. Sub-Schools – Basohli and Kangra
  - c. Main features of the Pahari School
  - d. Study of the Pahari Paintings

## **Unit –II**

1. The Mughal School (16<sup>th</sup> Century A.D. to 19<sup>th</sup> Century A.D.)
  - a. Origin and Development
  - b. Main features of Mughal School
  - c. Study of the Mughal Paintings
2. The Deccan School (16<sup>th</sup> Century A.D. to 19<sup>th</sup> Century A.D.)
  - a. Origin and Development
  - b. Main features of the Deccan School
  - c. Study of the Deccan Paintings

## **Unit –III**

1. The Bengal School Painting (Above mid of 19<sup>th</sup> Century)
  - a. New Era in Indian Art – An Introduction
  - b. Study of the following paintings-Rama Vanquishing the pride of the ocean – Raja Ravi Verma
2. Evolution of the Indian National Flag (First – 1906 Middle – 1921 and final 1947 stages) : Study of the form and colour scheme.
3. Introduction to the Bengal School of Painting
  - a. Origin and Development of the Bengal School of Painting
  - b. Main features of the Bengal School of Painting
4. Contribution of Indian Artists in the struggle for National Freedom Movement
5. Study of the Paintings of the Bengal School

## **Unit -IV:**

The Modern trends in Indian Art

1. Introduction
2. Study of Paintings
3. Study of the pieces of sculpture
4. Study of contemporary(modern) work Indian Art
  - a. Paintings
  - b. Graphic – Prints
  - c. Sculptures

## **KATHAK DANCE - 056**

१. भारतीय शास्त्रीय नृत्य का विवरण एवं नाट्य शास्त्र का इतिहास।
२. अभिनय दर्पण का पूर्ण परिचय।
३. प्राचीन नृत्याचार्यों का जीवन परिचय।
४. विभिन्न तालों का वर्णन तथा लयकारि।  
(तीनताल, दादरा, कहरवा, रूपक)
५. पारिभाषिक शब्द -अंग, उपांग, प्रत्यंग, स्थान, चारी, गति, मंडला, करण, भ्रमरी, उत्स्लावना, लोकधर्मी, नाट्यधर्मी।
६. अभिनय का सम्पूर्ण परिचय (आंगिक, वाचीक, आहार्य, सात्विक)
७. कथक नृत्य के घराने
८. रस-भाव का पूर्ण विवरण।
९. नवीन नृत्याचार्यों का जीवन परिचय।
१०. संगीत, ताल एवं लय का पूर्ण विवरण।
११. विभिन्न तालों का वर्णन एवं लयकारि. झपताल एवं एकताल
१२. पारिभाषिक शब्द - वंदना  
तिहाई  
आमद  
तोड़ा, टुकड़ा  
चक्करदार तोड़ा, परन  
गत निकास  
गत भाव  
कवित्त  
ठुमरि
१३. कथक नृत्य की वेशभूषा एवं रुपसज्जायों का ज्ञान

## **BHARATNATYAM - 057**

### **लिखित/प्रायोगिक**

१. भारतीय शास्त्रीय नृत्य एवं लोक नृत्य विवरण
२. अभिनय दर्पण पूर्ण परिचय
३. नृत्याचार्यों का जीवन परिचय
४. अष्टनायिका
५. अभिनय का सम्पूर्ण वर्णन- आंगिक, वाचिक, आहार्य, सात्विक, हस्ताभिनय, नेत्राभिनय, मुखजअभिनय
६. सप्त ताल विवरण - रूपक, आदि ताल

७. संगीत, लय, भाव रस - पूर्ण विवरण, स्थायी भाव, संचारी भाव  
 ८. पारिभाषिक शब्द:- अंग, उपांग, प्रत्यांग, स्थान, चारी, गति, मण्डल, करण,  
 भ्रमरी, उल्लवन, नाट्य, नृत्त, नृत्य, लोकधर्मी, नाट्यधर्मी, तांडव, लास्य,  
 अरामण्डी, अडवु तिर्मानम गति, जाति, यति, तट्टुझी नटुवांगम  
 अरंगेस्ट्रम  
 ९. भरतनाट्यम नृत्य की रूपसज्जा एवं वेशभूषा का ज्ञान  
 १०. जतिस्वरम (रूपक ताल)  
 शब्दम (कृष्णा)  
 पद्म (कृष्ण, गणेश, शिव, राम)  
 तिल्लाना (आदि ताल)  
 ११. कर्नाटक संगीत का ज्ञान  
 १२. मुद्रा - (असंयुक्त/संयुक्त) हस्त विनियोग

## VOCAL MUSIC - 034

### लिखित/प्रायोगिक

#### टिप्पणी-

१. वर्ण
२. अलंकार
३. खटका
४. मुर्की
५. कण स्वर
६. आलाप
७. तान
८. गमक
९. रागो का समय सिद्धांत
१०. ग्राम
११. मूर्च्छना
१२. मीड़

#### जीवन परिचय-

१. उस्ताद फैयाज़ खाँ
२. उस्ताद अब्दुल करीम खाँ
३. पंडित कृष्ण राव शंकर
४. बड़े गुलाम अली खाँ

ताल परिचय— एवं प्रायोगिक	१. ताल तीलवाड़ा २. झपताल ३. रूपकताल ४. धमार ताल
राग परिचय— एवं प्रायोगिक	१. राग भैरव २. बागेश्री ३. शुद्धसारंग ४. मालकौंस
विस्तृत टिप्पणी—	१. संगीत पारिजात का योगदान २. राग वर्गीकरण का विस्तृत विवरण ३. 'संगीत रत्नाकर' का महत्व एवं योगदान ४. रागों का समय सिद्धान्त

## **MUSIC HINDUSTANI** **(INSTRUMENT-MELODIC) - 035**

### **Hawain Guitar**

#### **लिखित / प्रायोगिक**

1. (a) टिप्पणी/परिभाषाएं:-

अलंकार, वर्ण, कण, मीड़, खटका, मुर्की, गमक, कृन्तन, ज़मजमा, ग्राम, मूर्च्छना, आलाप, तान

2. (a) राग वर्गीकरण

(b) रागों का समय सिद्धान्त

3. ग्रन्थ अध्ययन:- (a) संगीत रत्नाकर

(b) संगीत पारिजात

4. उपरोक्त रागों के अतिरिक्त निम्न रागों का शास्त्रीय परिचय एवं उनमें रजाखानी गत एवं सरल तानें तथा झाला/प्रकार:-

(a) बागेश्री (b) भैरव (c) मालकौंस (d) भीमपलासी



5. कॉलम (4) के रागों में से किसी एक राग में मसीतखानी गत
6. कॉलम (4) में वर्णित रागों में से किसी एक राग में एकताल अथवा झपताल में निबद्ध रचना।
7. धुन
8. निम्नलिखित तालों का परिचय एवं ठाह-दुगुन-  
(a) झपताल (b) रूपक (c) तिलवाड़ा (d) धमार
9. निम्नलिखित कलाकारों का जीवन परिचय:-  
(a) तानसेन  
(b) उस्ताद इनायत खान  
(c) उस्ताद मुस्ताक अली खाँ  
(d) उस्ताद अलाउद्दीन खान

## **MUSIC HINDUSTANI**

### **INSTRUMENT PERCUSSION - 036**

#### **Tabla**

#### **लिखित (Theory)**

1. (a) पारिभाषिक शब्द - Definition of the following terms:  
उठान, पेशकार, चक्करदार, बाँट, फर्द
- (b) तुलनात्मक अध्ययन – Comparative study of the following:
  1. चारताल - एकताल (Chautala – Ektala)
  2. झपताल - सूलताल (Jhaptala - Sooltala)
  3. तिलवाड़ा- तीनताल (Tilwada - Teentala)
- (c) लयकारी का वर्गीकरण (Classification of Layakari)
- (d) तबला एवं पखावज के घरानों का संक्षिप्त वर्णन  
(Brief description of Gharanas of Tabla and Pakhawaj)
2. तबला एवं पखावज का इतिहास (History of Tabla & Pakhawaj)

3. निम्नलिखित तालों का परिचय एवं सरल प्रकार (Description of Talas) झपताल एवं रुपक या सूलताल एवं चारताल (as prescribed for Class XII Practical)
4. (Writing notation of the prescribed Talas and Compositions)  
बंदिश/तालों को लिपिबद्ध करना।
5. Brief History of Medieval and Modern period of Hindustani Music specially in the field of Percussion Instruments
5. ताल पहचान (Recognition of Talas from given portion of the Thekas)
6. जीवन परिचय- Biographies of the following legends:  
पं. किशन महाराज, उस्ताद लतीफ अहमद खान, राजा छत्रपति सिंह,  
गुरु पुरुषोत्तम दास, गुरु पागल दास ,पं. ज्ञान प्रकाश घोष

### **प्रायोगिक (Practical)**

1. Playing of the Thekas of Jhaptala, Sultala, Chautala, Rupak, Teevra and Dhamar on Tabla/Pakhawaj with simple elaborations.
2. Uthan, Peshkar, Six Kaydas, Two Relas, Two Chakradars, One Farmaichi Chakradar, two Tukras, two Gat, one Fard in Teentala.
3. Ability to play Two Advance Kayada, One Rela with four Paltas and Tihai, Four simple Tukras, Two Chakradar, Two Damdar Tihai and one Paran in Ektala, Jhaptala and Rupak or Elaboration of Theka, Stuti Paran, Rela, Chakradar Paran & Farmiushi in Sultala, Chautala & Dhamar.
4. Recitation of the prescribed Talas and composition with Thah, Dugun and Chaugun Laya keeping Tala with hand beats.
5. A few simple laggis in Dadra and keharwa tala or Thapia on Pakhawaj.
6. Knowledge of tuning of instrument opted for.
7. Solo performance of any one Tala of choice from the prescribed syllabus for 10-15.
8. Ability to play Ektala/Chautala in accompanied with vilauit and Drut Laya.

# **ODISSI DANCE – 059**

## **Theory**

1. Elementary knowledge about the three styles of Chhau: Mayurbhanj, Seraikella and Purulia.
2. Brief notes on the lives and contribution of the three Gurus: Guru Pankaj Charan Das, Guru Kelucharan Mohapatra and Guru Deba Prasad Das.
3. Elementary introduction to the texts; Natya Shastra, Abhinaya Darpana, and Abhinaya Chandrika:
  - a) Identification of the author (approximate date)
  - b) Basic overview of the broad areas covered in the context of each text.
  - c) Myths regarding the origin of dance according to each text.
4. Basic understanding of the term ABHINAYA and definition of its four aspects: angika, vachika, aharya and sattvik.
5. Rasa: Definition and short explanation of the nine rasas.
6. Short notes on:
  - a) The Aharya of Odissi.
  - b) The music accompaniment of Odissi.
  - c) Past and present exponents of Odissi: their short biography and contribution.
  - d) Bandha Nritya
7. Brief explanation of the following terms: (Unit IV Class XI)
  - a) Nritya, Nritya and Natya

- b) Matra, Laya, Taal, Avartana, Vibhaga (Anga)
- c) Tandava and Lasya
- d) Natyadharmi and Lokdharmi

8. Ability to write the notation of the learnt items of Batu/Sthayi and Moksha.

9. Write some names of Folk Dances of Odisha

### **Practical**

1. Learning and practice of one Pallavi:

- a) Definition of the term Pallavi.
- b) Demonstration of the item.
- c) Recitation of the ukutas of the item with hands.
- d) Identification of the Raga, Taal and the Choreographer of the item.
- e) Identification of the hastas and the bhangis used in the item.

2. Ability to show different Paad bhedas and bramaris.

3. One Oriya song:

- a) Demonstration of the item.
- b) Name of the poet.
- c) Naming the Raga and Taal of the item
- d) Meaning of the verses used.
- e) Identification of the hastas used.

4. Practice of Patak Hasta Mudra Viniyog acc to Abhinaya Darpan.

5. Ability to demonstrate the following Bhangis: Samabhanga, Abhanga, Tribhanga, Atibhanga, Alasaa, Darpani, Abhimana, Mardala, Parshva Mardala and Biraja. Akuchana, Kumbhaka, Architkar or Nibedana, Daalmalika, Shukasarika

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भास्वती - द्वितीयो भागः	
पाठसङ्ख्या	पाठनाम
प्रथमः पाठः	अनुशासनम्
द्वितीयः पाठः	न त्वं शोचितुमर्हसि
तृतीयः पाठः	मातुराज्ञा गरीयसी
चतुर्थः पाठः	प्रजानुरञ्जको नृपः
पञ्चमः पाठः	दौवारिकस्य निष्ठा
षष्ठः पाठः	सूक्ति-सौरभम्
सप्तमः पाठः	नैकेनापि समं गता वसुमती
अष्टमः पाठः	हल्दीघाटी
नवमः पाठः	मदालसा
एकादशः पाठः	कार्याकार्यव्यवस्थितिः



