

PRESTIGIOUS ENGLISH MEDIUM RESIDENTIAL SCHOOL (FOR BOYS)
Ranked Amongst Top 10 Boarding Schools For Boys in India

# **Mathematics Winter Holiday (Project work) 2025-26**

#### **Project Structure**

To meet CBSE standards, your project report should follow this sequence:

- 1. Cover Page: Title, Student Name, Roll No., and Session (2025-26).
- 2. **Certificate & Acknowledgement:** Signed by the subject teacher.
- 3. Index: Table of contents with page numbers.
- 4. Introduction: Brief history and objective of the chosen topic.
- 5. **Core Content:** Mathematical definitions, diagrams, proofs, or experimental procedures.
- 6. Real-life Applications: How the concept is used in fields like architecture or technology.
- 7. **Conclusion:** Summary of findings.
- 8. **Bibliography:** List of resources (e.g., NCERT textbooks, websites).

#### **Assessment Criteria**

Projects are generally evaluated based on:

- Identification and Statement: Clear objective (2 marks).
- **Procedure/Process:** Accuracy of the mathematical steps (2 marks).
- Write-up/Presentation: Quality of the report and diagrams (2 marks).
- Interpretation & Viva: Ability to explain the project during the oral exam (2 marks)

# Applied Mathematics (Code 241) Class 11th

#### 1-Weather Data Analysis

Collect daily maximum and minimum temperature data for your city over a period of 10 days using a local newspaper or online sources. Calculate the mean, range, and variance of the temperatures. Compare this data with that of the same period from the previous year to identify trends and draw inferences about weather patterns.

#### 2-Taxation and GST Case Study

- **Objective:** Practice the steps involved in calculating Income Tax and GST.
- Activities: Take a list of common household items and apply different GST old slabs (5%, 12%, 18%, and 28%) to calculate the final price. For income tax, use current tax slabs to calculate the tax liability of a hypothetical individual with specific deductions.
- **Outcome:** A summary of how different tax rates impact consumer spending and individual take-home pay.

# Pure Mathematics (Code 041) Class 11th

- **1-Conic Sections:** Construct an ellipse or hyperbola using their focal properties (e.g., the string-and-pin method) and identify their real-life applications.
- 2- **Complex Numbers:** Provide a geometric interpretation of  $i = \sqrt{-1}$  and its integral powers using an Argand Plane diagram.

### CLASS XI – CHEMISTRY

**Theme:** From Atoms to Life – How Chemical Principles Shape Our World

#### **Chapters Covered:**

- 1. Chemical Bonding & Molecular Structure
- 2. Classification of Elements & Periodicity
- 3. Basic Organic Chemistry

#### **Project Instructions:**

- 1. Students must choose any ONE module from the given three modules.
- 2. Projects must be neat, creative, and conceptually accurate.
- 3. Handwritten / Printed / Digital formats are acceptable.
- 4. Cover page, index, and student reflection are compulsory.

#### **Modules:**

- 1. Module 1: Chemical Bonding 3D molecular models or creative writing on types of bonds.
- 2. Module 2: Periodic Classification Periodic table newspaper or element biography.
- 3. Module 3: Organic Chemistry Scrapbook or organic chemistry in daily life report.

**Assessment:** Total Marks – 25 (Concept, Creativity, Presentation, Application, Viva)

Note: Originality and understanding will be given priority.

**English Core** 

Academic Session: 2025-26

Dear Students,

It is essential to continue nurturing your language skills through meaningful and experiential learning. In alignment with the CBSE English Core curriculum and its emphasis on reading, writing, critical thinking, communication skills, and real life learning experiences, this Winter Homework has been designed to help you engage with the world around you in thoughtful, compassionate, and reflective ways.

1. Experiential Writing Task – Visit to an Old Age Home/Orphanage/Under Privileged Children/Children With Special Needs/Less Gifted Children Home.

During the winter break, visit any **ONE** of the above mentioned venue in your locality (with your parents/guardians). Observing respectfully and engaging meaningfully will help you complete the following tasks:

Question 1 – Descriptive Account (150–180 words)

Write a descriptive piece narrating your experience at the place. Include:

- The environment and atmosphere of the place
- The people you interacted with
- A meaningful conversation or moment
- Your emotional response during and after the visit

Question 2 – Reflective Writing (200–220 words)

Reflect on how the visit influenced your understanding of empathy, aging, loneliness, care, and human connection. Discuss how such interactions help promote the values contained in:

- SDG 3: Good Health & Well Being ensuring emotional and mental well being for the elderly;
- SDG 10: Reduced Inequalities acknowledging and addressing the social neglect often faced by senior citizens.

Explain how youth can contribute towards building an inclusive and compassionate society.

#### **Submission Guidelines**

- Submit all work on the first day after school reopens in your English copy.
- Maintain neatness, originality, and proper format.
- Where required, attach photographs of your visit (optional but encouraged)

# **Economics**

Prepare a project in any one of the following (as per CBSE Guidelines)

- Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources
- Bumper Production- Boon or Bane for the Farmer

# हिंदी शीतकालीन अवकाश गृहकार्य

- पुस्तक में दी गई कविताओं में से किसी दो पर रेखांकन करते हुए चार्ट बनाइए।
- पुस्तक में दिए गए गद्य पाठों में से किसी एक पर चार्ट बनाइए।

# **CLASS XI – HISTORY**

#### WINTER ASSIGNMENT

01- Make a power point Presentation on the contribution of Mesopotamia, Roman empire, Egypt civilization and Indus valley Civilization to the World in 2025. There should be minimum 50 slides including pics of all civilization.

(Please keep the following points)

- 1-Intro
- 2-Sources
- 3-Explanation with pics
- 4-Comprative study
- 5-Relevance in 2025
- 6-Conclusion
- **7-BIBLIOGRAPHY**

# **CLASS XI – PHYSICAL EDUCATION**

#### \*Topics:\*

- 1. \*Olympics\*: History, symbols, and recent updates
- 2. \*Yoga Asanas\*: List and describe 10 asanas with benefits
- 3. \*BMI (Body Mass Index)\*: Calculate BMI for 10 family and friends
- 4. \*Athletic A chart is to be prepared
- 5. Diagram of a standard track 400 meters

Events\*: Cover Track events, Jumps, and Throws

#### **Athletic Events:**

**Event Type** Examples

Track Events 100m, 200m, 400m, 800m, 1500m, Relay, Hurdles

Jumps Long Jump, High Jump, Triple Jump

Throws Shot Put, Discus Throw, Javelin Throw

**Holiday Assignment** 

# **CLASS XI – BIOLOGY**

- 1. To prepare a project on the following topics (any one)
- A. Pulmonary diseases, causes and prevention.
- B. OR
- C. Cardiovascular diseases, causes and prevention.
- D. OR
- E. Obesity is one of the major cause of different diseases.
- F.
- G. 2. To Prepare a project report on any 10 medicinal herbal plants with their images, botanical discription and uses. (Compulsory for all)

## CLASS XI – HINDUSTANI MUSIC

1. उस्ताद अहमदजान थिरकेवा का जीवन परिचय एवम आत्मकथा संगीत के क्षेत्र में(Auto Biography of Ustaad Ahmed JaanThirakawa in the field of Tabla vadan) with colour photo in chart paper

or

- 2. महाराज कृदउ सिंह का जीवन परिचय एवम् आत्मकथा संगीत के क्षेत्र में (Auto Bio graphy of Maharaja Kudau singh towards Hindustani Music in the field of Pakhawaj Vadan) with colour picture in Chart **Paper**
- 3. बनारस घराना का विस्तृत परिचय (Brief note on Banaras Gharana with his Playing style) with photo in chart paper
- 4. Practice Taal Notation (written) all Kayada, Compositions, and all prescribed taal.

### **CLASS XI – BUSINESS STUDIES**

★ General Instructions

Project work is compulsory and forms part of internal assessment.

Students must attempt ANY ONE project from the given options.

The project should be handwritten on A4 size ruled sheets.

Proper headings, tables, charts, and real-life examples must be included.

Original work is encouraged; copying is discouraged.

Submission date will be informed after winter vacation.

PROJECT OPTIONS

#### \*PROJECT 1: CASE STUDY OF A BUSINESS ORGANISATION\*

#### Objectives:

To understand the working of a business organisation.

To study management functions and business activities.

Content to be Included:

**Cover Page** 

Acknowledgement

Index

Introduction to Business

Profile of the Organisation

Name

Type of organisation

Nature of business

Size and ownership

Objectives of the business

Major business activities
Departments and their functions
Role of management
Conclusion
Bibliography

#### \*PROJECT 2: STUDY OF FORMS OF BUSINESS ORGANISATION\*

Objectives:

To understand different forms of business organisation.

Content to be Included:

Introduction

Meaning of Business Organisation

Types of Business Organisation:

Sole Proprietorship

Partnership

**Joint Stock Company** 

**Cooperative Society** 

Features, merits, and limitations of each

Comparative chart

Conclusion

#### \*PROJECT 3: STUDY OF SOCIAL RESPONSIBILITY OF BUSINESS\*

Objectives:

To understand the social responsibility of business.

Content to be Included:

Meaning of Social Responsibility

Need for social responsibility

Responsibility towards:

Owners

**Employees** 

Consumers

Government

Society

Environment

Case study of a socially responsible company

Conclusion

SUGGESTED MARKING SCHEME (20 Marks)

Content & Conceptual Clarity – 8 Marks
Presentation & Neatness – 4 Marks
Application / Case Study – 4 Marks
Viva / Explanation – 4 Marks
With warm regards

# **CLASS XI – GEOGRAPHY**

- 1. Make a Project Report on the Latest Decision of The Supreme Court on The Aravalis stating it's Importance on A4 size sheets.
- 2. State the Role of Rivers in the Indian Economy by Giving any 2 Examples.

# **CLASS XI – PAINTING**

#### Index

- 1. Still Life Paintings (3)
- 2. Composition Paintings (3)
- 3. Landscape Paintings (5)
- 4. Black Pen Drawings (2)

Still Life Paintings
Three (3) still life paintings
Medium: Water Colour
Surface: Canson paper

Size: A2

- 1. Description: [Paste Image Here]
- 2. Description:[Paste Image Here]
- 3. Description: [Paste Image Here]

**Composition Paintings** 

Three (3) composition paintings

Medium: Water Colour / Acrylic Colour

Surface: Paper Size: A2 / A3

Subjects: Milkman with his vehicle, Indian auto-rickshaw with passengers, My music room with musical

instruments

- 1. Description: [Paste Image Here]
- 2. Description:[Paste Image Here]
- 3. Description: [Paste Image Here]

Landscape Paintings
Five (5) landscape paintings

Medium: Water Colour / Acrylic Colour

Surface: Canson paper

Size: A2

Description:
 [Paste Image Here]

2. Description:[Paste Image Here]

3. Description: [Paste Image Here]

4. Description: [Paste Image Here]

5. Description:[Paste Image Here]

Black Pen Drawings Two (2) drawings using black pen Subjects: Nature, Architecture, Human Figure Surface: Canson Paper

Description:
 [Paste Image Here]

2. Description:[Paste Image Here]