

**ENGLISH CORE**

**★ PROJECT WORK**

**Project work is to be prepared as per the instructions listed below.**

1. The entire project should be in file format.
2. The project should be handwritten in blue/black ink. (Highlighters may be used.)
3. The project report should be developed in the following sequence—
  - Cover Page: School Name, Logo, Title of the Project, Name of the Student and Session
  - Index (List of Contents)
  - Acknowledgement and Preface
  - Certificate
  - Introduction (Purpose of the Project)
  - Detailed Project
  - Learning Outcomes/Experiences
    - The project should include illustrations/photos/sketches as per the need and suitability of the presentation.

**With reference to the chapter “The Last Lesson”, express your views on:**

***“Language and Identity — A Heritage That Must Be Preserved.”***

Refer to the importance of mother tongue, linguistic identity and cultural heritage in modern society. Highlight how language preserves traditions, emotional belonging and national identity.

(You may include relevant statistics, survey findings, newspaper reports, quotations, slogans, charts or graphs related to endangered languages, linguistic diversity and preservation of regional languages in India and other parts of the world.)

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**General Instructions :**

- ✓ Use original ideas.
- ✓ Avoid copying directly from sources available on the Internet.

## **STANDARD MATHEMATICS**

### **PROJECT WORK(use shoelace file)**

1. To verify that the relation R in the set L of all lines in a plane, defined by  $R = \{(l, m): l \perp m\}$  is symmetric but neither reflexive nor transitive.
2. To draw the graph of  $\sin^{-1}x$ , using the graph of  $\sin x$  and demonstrate the concept of mirror reflection (about the line  $y = x$ ). (Use mm graph)
3. To sketch the graphs of  $a^x$  and  $\log_a x$ ,  $a > 0$ ,  $a \neq 1$  and to examine that they are mirror images of each other.
4. To understand the concept of decreasing and increasing functions.
5. To understand the concepts of local maxima, local minima and point of inflection.

### **FORMAT TO BE FOLLOWED:-**

**a)1st Page**-Name of the school, Investigatory Project, name, class, section, roll number, subject, Guide teachers' name

**b)2nd Page**-Certificate

**c)3rd Page**-Acknowledgement

**d)4th Page**-Index

## **PHYSICS**

Write the following given activities in the shoe lace file given from school;

Activities

1. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
2. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
3. To assemble the components of a given electrical circuit.
4. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.
5. To observe diffraction of light due to a thin slit.
6. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.

## **CHEMISTRY**

Activity/Practical :

AISSCE INVESTIGATORY PROJECT 2026-27

Investigatory project topics for class XII

1. Sterilization of water using bleaching powder
2. To determine the amount of acetic acid in different type of vinegar.
3. Determination of caffeine in a tea sample.
4. Presence of Casein in different milk sample.

5. Determine the hardness of water from different sources.
6. Neutralization ability of different antacids.
7. OR any relevant chemistry related project

**FORMAT TO BE FOLLOWED:-**

- a) 1st Page-Name of the school, Name of Investigatory Project, Student name, class, section, roll number, subject.
- b) 2nd Page-Certificate
- c) 3rd Page-Acknowledgement
- d) 4th Page-Index
- e) Project main content ( including diagrams, images, graph etc.)
- f) Bibliography.

NOTE : A. To prepare the INVESTIGATORY PROJECT (any one) use shoelace file of DAVCAE .  
 B. PROJECT MUST BE HAND WRITTEN & FIRST 3 PAGES MUST BE PRINTED.

**BIOLOGY**

**A. Write the following practicals in your practical copy.**

1. Prepare a temporary mount to observe pollen germination
2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides.
4. T.S. of blastula through permanent slides (Mammalian),
5. Study the plant population density by quadrat method.
6. Study the plant population frequency by quadrat method.
7. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc
8. Mendelian inheritance using seeds of different sizes of any plant.
9. Meiosis in onion bud cell through permanent slides
10. Prepare pedigree chart of one of the genetic traits such as blood groups.
11. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.
12. Prepare a temporary mount of onion root tip to study mitosis.
13. Models specimen showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens.
14. Flash cards models showing examples of homologous and analogous organs.
15. Controlled pollination - emasculation, tagging and bagging.

**B. TO PREPARE AN INVESTIGATORY PROJECT ON ANY TOPIC OF YOUR CHOICE  
 SUGGESTED TOPICS FOR THE INVESTIGATORY PROJECT**

1. Diabetes and health
2. HIV and AIDS
3. Drug addiction
4. Sickle Cell Anaemia: Molecular basis
5. Covid-19: the pandemic
6. Ozone depletion and its effect on mankind
7. Effects of Parthenium on humans
8. Cancer and cell division
9. Biological Nitrogen Fixation
10. Blood grouping: Bombay phenotype
11. Cloning in organism.
12. Alzheimer's and Dementia
13. Possible effects of maternal behaviour on foetal development
14. Biological Oxygen Demand (BOD) as pollution indicator in water body
15. Agrochemicals and their effects
16. Impact of local industry on environment

17. Drug resistance in bacteria
18. Coral reef: existence and depletion

**FORMAT TO BE FOLLOWED:-**

- a)1st Page-Name of the school, Investigatory Project, name, class, section, Board roll no., subject, Guide teachers' name
- b)2nd Page-Certificate
- c)3rd Page-Acknowledgement
- d)4thPage-Index e)5thPage-Aim/Objective
- f)6th Page onwards-Project Report
- g)Conclusion
- h)Bibliography

# Maximum no.of page should not exceed 20

# Project is to be written in shoelace file

#Project should be handwritten

# Pictures/diagrams(coloured) may be pasted

## **ECONOMICS**

**Prepare a Project Report on any one topic from the following:**

1. Any topic from Macroeconomics and Indian Economy
2. Any current Economic issue or any other chapter from the syllabus can also be selected.

**Note:**

Use Interleaf page to write your project .

Paste and Draw relevant picture (Use White sheet or page)

Project should be completely handwritten .

**Project should have the following:**

1. Index
2. Acknowledgement
3. Introduction to the topic
3. Content of the project
- 4.Research work.
5. Conclusion
6. Bibliography

Follow all the instructions given in class related to the project work.

## **COMPUTER SCIENCE**

1. Write a program to show entered string is a palindrome or not.
2. Write a program to show statistics of characters in the given line (to counts the number of alphabets, digits, uppercase, lowercase, spaces and other characters).
3. Write a program to show GCD of two positive numbers using function
4. Write a program to input total number of sections and stream name in 11<sup>th</sup> class and display all information on the output screen.
5. Write a program to swap the content with next value, if it is divisible by 7 so that the resultant array will look like: 3,5,21,6,8,14,3,14.
6. Write a program to show and count the number of words in a text file 'DATA.TXT' which is starting/ended with word 'the'.
7. Write a program to read data from a text file DATA.TXT, and display each words with number of vowels and consonants.
8. Write a program to write a string in the binary file "comp.dat" and count the number of times a character appears in the given string using a dictionary.
9. Write a program that will write a string in binary file "school.dat" and display the words of the string in reverse order.
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## PHYSICAL EDUCATION

### 1. PRACTICAL – 1 (Procedure, Benefits and Contraindications of Asanas for Lifestyle Diseases)

**Objective:** To understand the correct techniques, therapeutic benefits, and safety precautions of selected yogic asanas used in the prevention and management of common lifestyle diseases.

#### Lifestyle Diseases and Related Asanas:

- **Obesity** – Tadasana, Halasana
- **Diabetes** – Paschimottanasana, Ardha Matsyendrasana
- **Asthma** – Gomukhasana, Bhujangasana
- **Hypertension** – Katichakrasana, Makarasana
- **Back Pain / Arthritis** – Ardha Chakrasana, Ushtrasana

#### For Each Disease and Asana, Include:

- Definition of the Disease
- Step-wise Procedure of the Asanas
- Posture Sketch / picture of Asanas
- Benefits of the Asanas
- Contraindications of Asanas

### 2. PRACTICAL – 2 (IOA-Recognized Sports / Games)

**Select Any One Sport / Game:** Volleyball / Kho-Kho / Badminton / Football / Handball

#### Include the Following Details:

- Introduction of the Game
- Labelled Diagram of Court / Field with Dimensions
- Equipment Used
- Basic Rules and Regulations
- Important Terminologies
- Fundamental Skills / Techniques
- Names of Important National or International Tournaments

#### Instructions:

- Maintain neatness and proper presentation.
- Draw diagrams using pencil and scale.
- Submit the practical file after the vacation as instructed by the subject teacher.

## PAINTING

1. Still life 3 or 4 sheets (pencil shade and colour)
2. composition 2 or 3 sheets (use any colour)
3. Folk art 1 or 2 sheets (use any colour)

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