



BOSTON PUBLIC SCHOOL

SUMMER HOLIDAY HOMEWORK

Session 2026-27

Class-XII

ENGLISH

Prepare file on the following topics

Topic 1-The Third Level (Vistas) Topic 2- Life sketch of - Selma Lagerlof

GENERAL INSTRUCTIONS FOR ENGLISH PROJECT FILE

- File & Presentation
Use A4 size ruled sheets or a thin project file.
- Writing Guidelines
All content must be handwritten in blue pen.
- Content sequence
 1. Cover Page with school logo
 2. Certificate
 3. Acknowledgement
 4. Index with page numbers
 5. Main Content: as per topic given
 6. Learning Outcomes
 7. Bibliography

MATHEMATICS

1. Prepare Mathematics Lab Manual (Activities – 1,2,3,4,5)
2. Revise Ch – 1,2,3,4

PHYSICS

- 1- Prepare an Investigatory project on given topics according to roll no. as discussed in classroom .
- 2- Prepare Physics activity file according to Pdf.
- 3- Write short notes of chapter 1,2,3 and 4 in notebook.

CHEMISTRY

Task:1

Prepare a holiday Homework for class 12 chemistry including making lab manual

General Instructions

Complete all work neatly in a separate Chemistry Holiday Homework notebook/file.

Use blue/black pen and draw diagrams with pencil.

Submit the homework on the reopening day.

Maintain proper headings, index, and date.

Prepare the Lab Manual properly as it carries internal assessment marks.

CHEMISTRY LAB MANUAL

Prepare a complete Chemistry Lab Manual with ruled/interleaved sheets.

Include the following sections:

- Cover Page
Student Name
Class & Section
Roll Number
School Name
Session
- Certificate Page
- Acknowledgement
- Index
- Rules and Precautions in Chemistry Laboratory
Write at least 10 laboratory rules.
- List of Apparatus and Chemicals
- Experiments

Write the following experiments with:

- Aim
- Requirements
- Theory
- Procedure
- Observation Table
- Calculations
- Result
- Precautions

Physical Chemistry Experiments

- Determine the molarity and strength of KMnO_4 solution using standard oxalic acid.
- Determine the concentration of HCl solution using Na_2CO_3 solution.
- Preparation of lyophilic and lyophobic sols.
- Study the effect of concentration on the rate of reaction.
- Organic Chemistry Experiments
- Detection of nitrogen, sulphur and halogens in organic compounds.

Preparation of:

Acetanilide

p-Nitroacetanilide

Crystallization of impure sample of alum.

Inorganic Chemistry Experiments

Salt analysis (one basic radical and one acidic radical).

Test for functional groups:

Alcohol

Aldehyde

Ketone

Carboxylic acid

Task: 2 (Prepare only one investigatory project assigned by your Roll No.)

Investigatory Project (Project should be printed and neatly decorated)

Scientific investigation involving laboratory testing and collecting information from other sources

A few suggested projects:

- Quantitative Assessment of Dissolved Oxygen Levels in Natural Water Bodies and Their Ecological Significance
- Analytical Detection and Estimation of Nitrate and Phosphate Ions in Water Samples
- Investigating the Chemical Impact of Acid Rain on Common Building Materials
- Comparative Analysis of Air Quality through Particulate Matter Collection and Evaluation
- Soil pH Profiling and Its Correlation with Agricultural Crop Suitability
- Identification and Analysis of Microplastic Contaminants in Aquatic Systems
- Evaluation of Natural Absorbents for Efficient Removal of Oil Spills from Water Surfaces
- A Comparative Chemical Analysis of Bottled Water and Tap Water Quality
- Investigating Noise Pollution and Its Indirect Chemical and Environmental Impacts
- Qualitative Detection of Synthetic Food Colorants in Confectionery Products
- Chemical Investigation of Artificial Ripening Agents Used in Fruits
- Quantitative Determination of Protein Content in Selected Pulses
- Comparative Analysis of Antioxidant Capacity in Various Food Samples
- Estimation of Sugar Content in Carbonated Beverages Using Chemical Methods
- Detection of Starch Adulteration in Dairy Products through Chemical Testing

16. Impact of Different Cooking Techniques on Vitamin Retention in Food
17. Study of Emulsifying Agents in Processed Foods and Their Functional Properties
18. Chemical Analysis of Preservatives in Packaged Food Products
19. Determination of Acidity Levels in Commercial Beverages
20. Synthesis and Crystallographic Study of Copper Sulphate Crystals
21. Preparation and Characterization of Hydrogels: A Study of Water Absorption Capacity
22. Investigation of Superabsorbent Polymers in Commercial Diapers and Their Efficiency
23. Preparation and Optical Analysis of Colloidal Systems via the Tyndall Effect

BIOLOGY

- A. Practice PYQ from chapter 1 to 4 in Question Bank.
- B. Draw Mind Map for Chapter 1 and Chapter 2 in notes copy.
- C. Investigatory Project:

-Cover Page	-Certificate	-Acknowledgement,
-Index,	-Diagrams,	-Survey tables, (if needed)
-Conclusion,	-and Bibliography.	

Topics: (Given in the class)

1. "ART and Infertility – Modern Solutions in Reproductive Health"
2. "Hormonal Control of Menstrual Cycle"
3. Double Fertilization – A Unique Feature of Angiosperms
4. Cancer – Causes, Prevention and Modern Treatment
5. AIDS – Causes, Prevention and Awareness
6. Immunity and Vaccination Awareness
7. Mendelian Disorders
8. Chromosomal disorders
9. DNA Replication
10. Transcription
11. Gene therapy
12. Biotechnology
13. Molecular diagnosis
14. DNA Fingerprinting

Diagram Practice:

Draw and label: (Do practice in Question Bank)

1. Human female reproductive system
2. Structure of sperm
3. Human Male Reproductive System
4. Structure of Seminiferous tubule
5. Transverse section of Human ovary
6. Female gametophyte
7. Structure of anatropous ovule

ACCOUNTANCY

Project Work – Two Activities

Activity No. Topic Details

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Accounting Ratios <ul style="list-style-type: none"> • Quick Ratio • Current Ratio • Solvency Ratio • Profitability Ratio | <ol style="list-style-type: none"> 2. Cash Flow Statement <ul style="list-style-type: none"> • Operating Activities • Investing Activities • Financing Activities |
|---|--|

ECONOMICS

Work Details

1. Prepare a project report on given topics for practical.
2. Solve the given assignment on the WhatsApp class group in a separate notebook.

BUSINESS STUDIES

Work Details

1. Prepare a project file on specific given topic for Board Practical.
2. A company facing financial difficulties and weak marketing performance requires a proper strategic plan to improve profitability, customer trust, and market position. Planning helps the company utilize resources efficiently and achieve long-term growth.

Prepare a plan on the above case and explain the importance of planning.

PHYSICAL EDUCATION

Physical Education Games Name:

(Write about any one game)

1. Basket Ball
2. Volleyball
3. Kabaddi
4. Kho-Kho
5. Hockey
6. Football
7. Cricket

Physical Fitness Test

- SAI Khelo India Test
- Brockport Physical Fitness Test (BPFT)

YOGA

(Write any two asanas for each lifestyle disease)

Include:

1. Procedure
2. Benefits
3. Contraindications

Practical File AIP

Book Details

Publication	Writer
Saraswati Publication	Dr. V.K. Sharma

Motor Fitness Test

S.N. Test Name

1. Push Ups
2. Sit Ups
3. Partial Curl Ups
4. 50 mtr. Dash Run
5. 600 m. Run/Walk Test
6. Sit and Reach Test

Senior Citizen Fitness Test

Write any three senior citizen fitness tests.

Benefit of Swiss Ball

Write the benefits of Swiss Ball.

Important Instructions

1. Paste the colour pictures of the topics given above.
2. Practical dress code: Black/Blue colour tracksuit, White T-Shirt and sports shoes.
3. All the students coming to give the practical must come in proper dress with:
 - Proper haircut
 - Nail cut
 - No nail paint

COMPUTER SCIENCE

Prepare Project File

Prepare a Computer Science Project File with a creative and decorative cover page.

Cover Page must Include:

- School Name
- Subject Name – Computer Science
- Project Title
- Student's Name
- Class & Section
- Roll Number
- Session
- School Logo/Picture Decoration

Decoration Ideas:

- Use coloured sheets and borders
- Add Python logos, computer icons, coding symbols, etc.
- Use neat headings and proper formatting

Cover Theory Notebook & Practical File

Cover both:

- Theory Notebook
 - Practical File
- } decorative

Instructions:

- Use neat and clean covers.
- Attach proper labels containing:
 - Name
 - Class & Section
 - Roll Number
 - Subject Name
- Decorate neatly with educational themes related to Computer Science.

Prepare an A3 Size Poster

Make an A3 Size Poster on any Python-related topic.

Suggested Topics:

- Features of Python
- Applications of Python
- Python Data Types
- Artificial Intelligence using Python
- Cyber Security and Python
- Python Programming Basics
- Advantages of Python
- Python in Real Life

Poster Guidelines:

- Use attractive colours and creative designs.
- Include diagrams, logos, flowcharts, or illustrations.
- Write slogans or short informative points.
- Maintain neatness and creativity.

Solve Exercise Problems in Theory Notebook

Solve the following exercise questions neatly in your Theory Notebook:

Topic	Book/Source
Python Revision Tour	Class 11 NCERT
Functions	Sumita Arora
Exception Handling	NCERT

HISTORY

HOLIDAY HOMEWORK

PROJECT WORK

CLASS-XII

HISTORY

INTRODUCTION

History is one of the most important disciplines in school education. It is the study of the past, which helps us to understand our present and shape our future. It promotes the acquisition and understanding of historical knowledge in breadth and in depth across cultures.

The course of history in senior secondary classes is to enable students to know that history is a critical discipline, a process of enquiry, a way of knowing about the past rather than just a collection of facts. The syllabus helps them to understand the process, through which a historian collects, chooses, scrutinizes and assembles different types of evidences to write history.

In class XII the focus shifts to a detailed study of some themes in ancient, medieval and modern Indian history.

CBSE has decided to introduce project work in history for classes XII in 2026-27 as a part of regular studies in classroom, as project work gives students an opportunity to develop higher cognitive skills. It takes students to a life beyond text books and provides them a platform to refer materials, gather information, analyze it further to obtain relevant information and decide what matter to keep and hence understand how history is constructed.

OBJECTIVES

Project work will help students:

- To develop skill to gather data from a variety of sources, investigate diverse viewpoints and arrive at logical deductions.
- To develop skill to comprehend, analyze, interpret, evaluate historical evidence and understand the limitation of historical evidence.
- To develop 21st century managerial skills of co-ordination, self-direction and time management.
- To learn to work on diverse cultures, races, religions and lifestyles.
- To learn through constructivism-a theory based on observation and scientific study.
- To inculcate a spirit of inquiry and research.
- To communicate data in the most appropriate form using a variety of techniques.
- To provide greater opportunity for interaction and exploration.
- To understand contemporary issues in context to our past.
- To develop a global perspective and an international outlook.
- To grow into caring, sensitive individuals capable of making informed, intelligent and independent choices.
- To develop lasting interest in history discipline.

ASSESSMENT

Allocation of Marks (20)

The marks will be allocated under the following heads:

Project Synopsis	- 2 Marks
Data/Statistical analysis/Map work	- 3 Marks
Visual/overall presentation	- 5 Marks
Analysis/explanation and interpretation	- 5 Marks

Bibliography-1 Mark

Viva -4 Marks

Total -20 Marks

FEW SUGGESTIVE TOPICS FOR PROJECTS

1. The mysteries behind the mound of dead-Mohenjo-Daro
2. An In-depth study to understand Spiritual Archaeology in the Sub-Continent
3. Buddha's Path to Enlightenment
4. Insight and Reflection of Bernier's notions of The Mughal Empire
5. An exploratory study to know the women who created history
6. "Mahatma Gandhi" - A legendary soul
7. To reconstruct the History of Vijayanagar through the Archaeology of Hampi
8. The emerald city of Colonial Era-BOMBAY
9. Vision of unity behind the first war of Independence
10. Divine Apostle of Guru Nanak Dev
11. Help, Humanity and Sacrifices during Partition
12. Glimpses inside Mughals Imperials Household
13. The process behind the framing of the Indian Constitution
14. The 'Brahm Nirupam' of Kabir - A journey to Ultimate Reality

SOCIOLOGY

HOLIDAY HOMEWORK

PROJECT WORK

Class 12 SOCIOLOGY

MEANING OF PROJECT

The word project comes from the Latin word 'Projectum' which means "before an action". At school level, a project is a research assignment given to a student which generally requires a larger amount of effort and more independent work that is involved in a normal assignment. It requires students to undertake their own fact finding endeavours, either from library, or from the internet or by means of primary data collection. A project report should be handwritten

have diagrammatic presentation have topics with suitable headings be concise and clear

have a length of 15 to 20 pages end up with conclusion

UTILITIES OF MAKING A PROJECT

Following points state the uses/utility of project work

- (i) To provide information about the development and growth of institutions, business products, and government activities.
- (ii) To provide information to the consumers about the price of commodities, quality and uses, etc of a product as per their interest.
- (iii) It is helpful in estimating the preference of consumers for petrol car or diesel car, telephone or mobile phone, etc.
- (iv) Project report is helpful for the shareholders, who may be interested in knowing the earning of an enterprise and possibility of getting dividend.
- (v) To help in the policy formulation about the economic and social development of any country.
Thus, we can say that project work may help marketers, shareholders, economists, consumers and government in effective and efficient decision-making.

ELEMENTS OF PROJECT REPORT

A good project report should contain the following elements.

Title Page

This should include the project title, name of the company on which you are conducting your research and name of the student. You can also list the name of your school, class and subject teacher.

Acknowledgement

It is usual to thank those individuals, who have provided particularly useful assistance, chnical or otherwise, during your project

Content Page

This should list the main sections and sub-sections of your report. Choose self-explanatory titles with their respective pages and use double spacing for clarity.

Introduction

dear statement of what the project is about, so that the nature and scope of the project can This is one of the most important component of the project report. It should begin with a be understood by a reader. It should summarise everything which you set out to achieve and provide a clear summary of the project's background, relevance and main contributions. The introduction should set the context for the project and should provide the reader with a summary of the key things to look out for in, the remainder of the report.

Background

The background section of the report should set the project into action, it specifies the problem of the company, what remedial actions were taken by the company and what are its effects.

Body of Report

The central part of the report usually consists of three or four sections detailing the technical work undertaken during the project. The structure of these sections is highly project dependent. They can reflect the chronological development of the project. It includes the detailed description regarding the matter of the project.

Evaluation

This might involve quantitative and qualitative evaluation such as expressibility, functionality, ease-of-use, etc of a product. At some point, you should also evaluate the strengths and weaknesses of what you have done. It includes certain questionnaires, sampling test which help in evaluating the result on the basis of truths and facts.

Conclusion

The conclusion should list the things, which have been learnt as a result of the work you have done. It shows the ultimate response of the project undertaken by a student. It should be expressive and impressive so that a reader would clearly evaluate the result and rated you on the basis of your presentation.

Bibliography

In this section, you should mention the details of all the secondary sources, i.e., magazines, newspapers, reports, internet links, etc. used for developing the project.

ART & CRAFT

- XII Girls - Jute shoulder bag with hand painting on choice.
Boys - Canvas painting (tribal art) of Gujarat.
XII – (Commerce, Humanities and Science) Sketch portrait size A3 Frame also.