



HOLIDAY HOMEWORK



Vivekanand Public School



Class X



Session 2026 - 2027



Learn.
Explore.
Grow.



GENERAL INSTRUCTIONS FOR STUDENTS

Please read all instructions carefully before starting your holiday homework.

1.	All holiday homework must be submitted on the first day of school after the holidays.
2.	Write your Name, Class, Section, and Roll Number neatly on every assignment/project.
3.	Work must be done neatly using a blue/black pen. Avoid overwriting and cutting.
4.	Projects and charts should be made on A3/A4 sheets as specified in the subject instructions.
5.	Practical files (IT & AI) must include printouts with proper cover page, index, and acknowledgement.
6.	All work must be original and handwritten unless specified otherwise (e.g., printouts for practical files).
7.	Do NOT copy from friends. Copied work will not be accepted and action will be taken.
8.	Mathematics assignment should be done in the Assignment Register only.
9.	Project files must have a cover page, index, introduction, content, and conclusion.
10.	Use rulers for tables, borders, and margins. Keep the work neat and presentable.
11.	For roll-number-specific tasks, ensure you complete the task assigned to your roll number.
12.	Holiday Homework carries marks. Incomplete or late submissions will be penalised.
13.	Parents are requested to supervise and encourage their children to complete the work on time.
14.	In case of any doubt, consult your subject teacher before the commencement of school.
15.	Mobile phones/internet should only be used for reference; do not copy content directly.

We wish all our students a Happy, Productive & Safe Holiday! ❁

ENGLISH

1. Theme-Based Project File

Choose any ONE of the following themes:

- Human Values
- Self-Discovery
- Social Issues
- Science Fiction

Project Requirements:

1. Select a lesson from the NCERT book "First Flight" or "Footprints Without Feet" related to your theme.
2. Create a project file that includes:
 - A cover page with the theme and lesson title
 - An introduction to the theme and its significance
 - A summary of the chosen lesson
 - Analysis of the theme in the context of the lesson
 - Examples or illustrations that support the theme
 - Conclusion and reflection on the theme's relevance
3. Include visual aids like images, diagrams, or charts to enhance the project.
4. Ensure the project file is well-organized and neatly presented.

Suggested Lesson Options:

Human Values: "A Letter to God" | "The Sermon at Benares" (First Flight)

Self-Discovery: "Two Stories about Flying" | "From the Diary of Anne Frank" (First Flight)

Social Issues: "Nelson Mandela: Long Walk to Freedom" | "The Proposal" (First Flight)

Science Fiction: "A Triumph of Surgery" | "The Book that Saved the Earth" (Footprints Without Feet)

2. Chart Paper Activity

Roll No. 1–11 | Theme: Power of Words

Write at least 3 famous quotes about the English language, reading, or writing, each on a separate chart paper sheet.

Each sheet must include:

- The quote in big, clear handwriting
- The author's name below it
- Decorations with pens, books, alphabets, or quotation marks using colorful markers

Goal: Show why language matters.

Roll No. 12–23 | Theme: Literary Greats

Choose 3 famous quotes from well-known English authors or poets like Shakespeare, Jane Austen, or R.K. Narayan. Put each on a separate sheet.

Requirements:

- Highlight key words in the quote with a different color
- Add a small drawing related to the author's work/era
- Write author's name + book/play name if taken from one

Keep handwriting neat and bold so it's readable from afar.

Roll No. 23 Onwards | Theme: Grammar & Expression

Select 3 inspiring quotes about communication, grammar, or storytelling. Each quote goes on its own chart paper.

For each sheet:

- Write the quote neatly
- Mention the author
- Border the page with doodles of speech bubbles, commas, pencils, or open books

3. Grammar Assignment

Complete the grammar assignment available at the link provided by your teacher in the assignment register.

<https://drive.google.com/file/d/1La414HC6C1NKR6N6aPCj6NIibQeTzsDS>

MATHEMATICS

1. Project Work

Roll No. 1–10 | Theme: Real Numbers & Linear Equations

Task: Choose 5 daily essential items (e.g., Milk, Bread, Sugar). Find their prices today and what they cost 5 years ago.

- Mathematics: Calculate the total price difference using Real Number subtraction. Write a simple Linear Equation ($y = mx$) to show how the price of one item increases over time.
- 3D Chart: Create a "3D Shopping Basket." Use small empty boxes or clay models of the items and place them on a bar graph made of cardboard strips to show price growth.
- Analysis: Why do prices go up? How does this affect a family's monthly budget?

Roll No. 11–20 | Theme: Polynomials (Parabolas)

Task: Observe the path of a ball thrown into a hoop or a stone thrown into a pond.

- Mathematics: Explain why this curve is a Parabola. Use the standard Quadratic Equation $y = ax^2 + bx + c$ to label the "Starting Point," the "Highest Point" (Vertex), and the "Landing Point."
- 3D Chart: Use a piece of thick wire or pipe cleaner to create a 3D arc on chart paper. Decorate it to look like a basketball court or fountain.
- Analysis: Mention 3 other places in real life where we see this U-shape (e.g., satellite dishes, arches, rollercoasters).

Roll No. 21 Onwards | Theme: Polynomials (Area & Volume)

Task: Imagine you are designing a rectangular garden.

- Mathematics: If the length is $(x + 5)$ and the width is $(x + 2)$, find the Polynomial that represents the Area. Calculate the area if $x = 10$ metres.
- 3D Chart: Create a 3D "Mini Garden" on chart paper. Use green felt or paper for grass and small Popsicle sticks to create a 3D fence around your calculated area.
- Analysis: How does changing the value of x change the size of the garden?

ASSIGNMENT LINK

https://drive.google.com/file/d/1ODWt_WKmRwH0UoM1I9ec6jqErFFhZb0g

SCIENCE

Topic: Non-Conventional Sources of Energy

Project Guidelines:

Prepare a detailed project based on the following points:

- Describe Conventional and Non-Conventional sources of energy along with examples.
- How AI can be useful in energy conservation.
- Describe extensive use of solar energy services like solar cells and solar panels for generating electricity.
- Draw a diagram for the fabrication of solar panels.
- Extensive use of wind turbines / Wind Energy Farms.
- Make a model of a wind turbine.
- Mention Advantages and Limitations of both energy resources discussed.

Model (Choose Any One)

- Any AI-based model
- 3D model of a cell with LED
- Wireless power transfer model

Assignments & Practical File

Complete the two assignments (Objective and Subjective) via the links provided by your Science teacher.

Assignment Link 1

Objective

<https://drive.google.com/file/d/14-IRFK1QZbtSIEd0Y-QBf0by4z9zQNZW/view?usp=drivesdk>

Assignment link 2

Subjective

<https://drive.google.com/file/d/14-IRFK1QZbtSIEd0Y-QBf0by4z9zQNZW/view?usp=drivesdk>

SOCIAL SCIENCE

1. Project Work

Every student must compulsorily undertake any ONE project on the following topics:

- Consumer Awareness
- Social Issues
- Sustainable Development

Project Guidelines

(I) Consumer Awareness

Your project should reflect the following points:

- Origin of Consumer Rights in India
- Ways in which consumers are exploited
- Poor enforcement of rules and regulations in the market
- Ways in which legal institutions help consumers in getting compensated and in upholding their rights
- Importance of well-informed consumers and active participation of people
- Mention a few organisations helping consumers in different ways
- Make a poster along with a slogan on a well-informed consumer

(II) Social Issues — Poverty or Unemployment

Your project should reflect the following points:

- What is a Social Issue?
- Meaning of Poverty or Unemployment
- Causes of Poverty or Unemployment
- Map of India showing 5 most affected states
- Types of Poverty or Unemployment
- Impact on society and country's economy (supplemented with facts and figures)
- Indian Government's policy towards mitigating this social issue
- Make a cartoon along with proper conversation on the selected social issue

(III) Sustainable Development

Your project should reflect the following points:

- Is Sustainable Development just about saving the environment, or do other factors like human welfare, construction, politics, or economics play a role?
- Different types of activities that fall under sustainable development
- Any three national sustainable developmental projects
- Any three international sustainable developmental projects
- Problems and challenges associated with sustainable development
- Benefits of sustainable development
- Some organisations involved in sustainable development

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- Three colourful pamphlets with catchy messages on sustainable development

2. Activity (PPT WORK)

Prepare a PowerPoint Presentation from History Chapter 4: Age of Industrialisation.
Complete the given Assignments and Worksheets on A4 colour-ruled sheets.

Roll No. 1–10

Prepare one 3D chart on any ONE of the following topics:

- Gender Equality
- Political Parties in India
- Rights and Laws

Roll No. 11–20

Prepare a working model on the political map of India showing any ONE of the following:

- Ports
- Airports
- Dams
- Any topic related to the class syllabus

Roll No. 21 Onwards (Group of 5 Students)

Prepare a model of any ONE of the following:

- Supreme Court of India
- Rashtrapati Bhawan
- Parliament of India

ASSIGNMENT LINK

https://drive.google.com/file/d/1jJn_oHn86nbLm5aXkHb1m_Q2dJ3Vg2PS/view?usp=drivesdk

INFORMATION TECHNOLOGY (IT)

Instructions:

- Create a cover page for the Practical File
- Prepare an Index containing all questions listed below
- This Practical File carries 10 marks
- Do these questions practically, save all documents, and take printouts

Unit 1: Digital Documentation (Advanced)

Q1. Create a well-formatted document on the topic "Importance of Digital Literacy". Include: suitable title, proper headings and subheadings, text formatting (bold, italic, underline, font size, color), bullets and numbering, page border and page number, an image related to digital literacy, and a conclusion paragraph.

Q2. Design a brochure on "Healthy Internet Practices". Include: suitable title, attractive layout, safety tips for internet usage, relevant images or icons, bullets, text formatting, and contact information or slogan related to cyber safety. Also prepare a tri-fold version covering safe browsing, strong passwords, cyberbullying prevention, and responsible social media use.

Q3. Create a document on any topic and insert a Table of Contents using appropriate heading styles. Include: title page, minimum three headings and subheadings, page numbers, proper formatting and alignment, and an automatically generated Table of Contents.

Q4. Create a document on "First Aid for Electrical Emergencies & Electrical Rescue Techniques". Add features: Watermark, Insertion of Images, Word Wrapping, etc. (at least 3–4 pages).

Unit 3: Electronic Spreadsheet (Advanced)

Q1. Create a spreadsheet workbook for a company having four branches. Prepare separate worksheets for each branch with monthly sales details. Use the Data Consolidation feature to combine sales data into a single consolidated report. Apply formatting, formulas, and insert a chart.

Q2. Create a spreadsheet for examination results of a student for five subjects. Calculate Total Marks and Percentage. Use the Goal Seek feature to find marks required to achieve 85% overall. Apply formatting and insert a chart.

Q3. Create a monthly family budget spreadsheet showing Income, Food Expenses, Electricity Bill, Transportation, Education, Entertainment, and Savings. Use the Scenario Manager feature to compare "Low Expense", "Medium Expense", and "High Expense" scenarios. Create a chart.

Q4. Create a spreadsheet with sales records of different products in various regions. Use the Pivot Table feature to prepare a region-wise and product-wise sales summary. Apply formatting and insert a chart.

Q5. Create a workbook with two worksheets "Sales" and "Summary". Enter product-wise sales data in Sales. Link data between worksheets so changes are automatically updated in Summary. Apply formulas, formatting, and create a chart.

ASSIGNMENT LINK

https://drive.google.com/file/d/1cYAxCMc9O4xvqJs-9BW3h_899g9FUhxR/view?usp=drive_link

ARTIFICIAL INTELLIGENCE (AI)

Instructions:

- Create and run all programs, then take printouts along with output screenshots.
- Compile them in a stick file. Order: Program Question → Code → Output Screenshot.
- One program per page.

Practical File — Python Programs

- Q1.** Write a program to calculate the sum of natural numbers.
- Q2.** Write a program to create a table of any number.
- Q3.** Write a program to find the largest of three numbers.
- Q4.** Write a program to find the sum of even and odd numbers.
- Q5.** Write a program to check whether a given number is prime or not.
- Q6.** Write a program to find the sum of all elements in a list.
- Q7.** Write a program to find the elements divisible by 5.
- Q8.** Write a program to count even and odd numbers in a list.
- Q9.** Write a program to search an element in a list.
- Q10.** Write a program to add the elements of two lists.
- Q11.** Write a program to calculate mean, median, and mode using NumPy.
- Q12.** Write a program to display a line chart from (2,5) to (9,10).
- Q13.** Write a program to display a scatter chart for the points: (2,5), (9,10), (8,3), (5,7), (6,18).
- Q14.** Read a CSV file saved in your system and display 10 rows.
- Q15.** Read a CSV file saved in your system and display its information.
- Q16.** Write a program to read an image and display it using Python.
- Q17.** Write a program to read an image and identify its shape using Python.
- Q18.** Write a program to find numbers divisible by 7 and multiples of 5 between 1200 and 2200.
- Q19.** Write a program that accepts temperature in Celsius from the user and converts it into Fahrenheit.
- Q20.** Write a program to accept the name and marks of students in five subjects and find their percentage.

Chatbot Project (Choose Any One)

Design and create a simple chatbot using any programming language or AI chatbot platform. Your chatbot must be able to:

- Greet the user

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- Answer at least five common questions related to school activities (school timings, holiday homework, examination dates, library timings, computer lab rules)
 - Respond politely to user inputs
 - End the conversation with a thank-you message

OR choose any one of the following chatbot themes:

- Tourist Guide Chatbot — information about famous places, food, weather, and transport
- Healthcare Assistant Chatbot — basic health tips, water reminders, exercise, healthy eating
- Library Management Chatbot — help students find books, know timings, understand rules
- Career Guidance Chatbot — suggest career options based on interests
- Eco-Friendly Awareness Chatbot — saving water, reducing plastic, protecting the environment
- Food Ordering Chatbot — display menu, take orders, calculate bill
- Quiz Chatbot — ask quiz questions and show final score

AI Project Work (Relate to Sustainable Development Goals)

Choose any one of the following sample project types:

- Statistical Data for AI: Prediction of Palmer Penguin Species
- Computer Vision: Early Detection of Coral Bleaching
- Natural Language Processing: Sentiment Analysis

For Sentiment Analysis project:

- Collect 15–20 comments or reviews from newspapers, websites, or surveys
- Categorise them as: Positive, Negative, or Neutral
- Prepare a sentiment analysis table
- Create a graph showing the results
- Explain how companies and organisations use sentiment analysis
- Creative Task: Design a simple chatbot that replies positively to users

ASSIGNMENT LINK

<https://drive.google.com/file/d/1TqtRDDS-F6k4n51fw1JPe52gE961lJn6>

हिन्दी (HINDI)

हिन्दी गृहकार्य

Qs1. 'बड़े भाई साहब' पाठ में दिए गए 10 मुहावरों को चित्रांकित करते हुए A3 साइज शीट पर दर्शाते हुए उनका अर्थ एवं वाक्य भी बनाइए।

Qs2. A3 साइज शीट पर कबीर का चित्र लगाकर पुस्तक की तरह फोल्डर बनाकर अंदर उनका जीवन परिचय एवं रचनाएं सुंदर अक्षरों में तैयार करें।

Qs3. 'हरिहर काका' कहानी में वृद्धों के साथ होने वाले दुर्व्यवहार और संपत्ति के लालच को दिखाया गया है। इस विषय पर 3 मिनट तक एक रेडियो शो या पांडकास्ट रिकॉर्ड कीजिए।

Qs4. एक फाइल या स्क्रेपबुक में एक काल्पनिक सोशल मीडिया फीड/लेआउट तैयार करें। एक तरफ 1931 की तस्वीर और तत्कालीन कठिन परिस्थितियों का कैप्शन (हिंदी) में लिखें। दूसरी तरफ आज के स्वतंत्र भारत के जश्र की तस्वीर और देशभक्ति के आधुनिक संदेशों को आकर्षक स्लोगन के साथ लिखें।

Qs5. PA1 का पाठ्यक्रम याद करें व व्याकरण का अभ्यास करें।

ASSIGNMENT LINK

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संस्कृत (SANSKRIT)

खण्ड (क)

प्रश्न 1.- संस्कृत

खण्ड (क) शुचिपर्यावरणम् (पर्यावरण संरक्षण) (3D MODEL)

प्रश्न 2. विद्या कि महिमा पर कोई दो श्लोक हिंदी व इंग्लिश में अनुवाद करें।

खण्ड (ख)

ASSIGNMENT LINK

https://drive.google.com/file/d/1knQW_ibDp19CzMRKQKAY8KraOdjwrbFX/view?usp=drivesdk

SEWA PROJECT

Swachha Vidyalaya, Swachha Bharat

"Clean School. Clean Nation. Proud Citizen."

Project Overview

India's Swachha Bharat Mission reminds us that cleanliness is not just a duty — it is a form of patriotism. This SEWA project challenges Class X students to be active agents of change, starting right within their school premises. Through hands-on activities, students will explore hygiene, waste management, and environmental responsibility, bringing the spirit of 'Swachha Vidyalaya' alive in creative and meaningful ways.

Project Guidelines for All Groups

- ◆ Work on the activity assigned to your roll number group.
 - ◆ Projects must be neat, presentable, and include a written or oral explanation of the concept.
 - ◆ Use only recycled, reused, or eco-friendly materials — do NOT purchase new items.
 - ◆ Every submission must carry a short reflection on what 'Swachha Bharat' means to you personally.
 - ◆ Creativity, teamwork, and clarity of message will be evaluated.
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Group I (Roll No. 1–12): Cleanliness Awareness Poster Campaign

Project Requirement:

- ◆ Old newspapers, magazines, or chart paper
- ◆ Sketch pens, watercolours, or poster colours
- ◆ Scissors, glue, and cardboard for backing
- ◆ Optional: photographs of clean vs. dirty places

Project Content:

- ◆ Design a bold awareness poster on the theme "My School, My Pride — Keep It Clean".
 - ◆ Include at least THREE of these elements: a slogan, a before/after scenario, a pledge statement, a hand-drawn illustration of a clean school.
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- ◆ Incorporate Hindi slogans such as 'Swachhata hi Seva hai' alongside English text.
 - ◆ Add a short paragraph (5–6 lines) explaining HOW students can maintain cleanliness daily.

Submission Report Must Include:

- ☑ Student name & roll number
- ☑ Title of the poster
- ☑ 4–5 lines on what inspired your design and what change it hopes to bring

 **Group II (Roll No. 13–24): Waste Segregation Model & Guide**

Project Requirement:


- ◆ Cardboard boxes or old containers (3 minimum — for dry, wet, hazardous waste)
- ◆ Paint or coloured paper to colour-code the bins (Green / Blue / Red)
- ◆ Markers, labels, and craft supplies
- ◆ Printed or hand-drawn waste category charts

Project Content:

- ◆ Build a mini Waste Segregation Station model using recycled containers.
- ◆ Colour-code each bin: Green = Wet/Biodegradable, Blue = Dry/Recyclable, Red = Hazardous.
- ◆ Attach labels listing at least 5 items that belong in each bin.
- ◆ Write a 'User Guide' (handwritten or typed) explaining how the station works and why segregation helps Swachha Bharat.

Submission Report Must Include:

- ☑ Student name & roll number
- ☑ Labelled diagram / photo of the model
- ☑ 5–6 sentences on how waste segregation connects to a cleaner India

 **Group III (Roll No. 25–36): Eco-Cleanliness Corner Setup**

Project Requirement:

- ◆ Waste plastic bottles, tin cans, or old buckets
- ◆ Soil, seeds, or small plants (optional)
- ◆ Paint, eco-friendly slogans on strips of paper/cardboard
- ◆ Craft supplies: twine, glue, scissors

Project Content:

- ◆ Transform waste materials into a functional 'Eco-Cleanliness Corner' display piece (e.g., a mini garden planter, a hygiene supply organiser, a decorative dustbin).
- ◆ Label each item with an environmental message or pledge.
- ◆ Include a small 'Green Pledge Board' listing 5 daily habits for a cleaner school.
- ◆ Encourage functionality, neatness, and a clear sustainability message.

Submission Report Must Include:

- ☑ Student name & roll number
- ☑ Materials used (list)
- ☑ 4–5 sentences on the inspiration behind your creation and how it promotes cleanliness

— End of Holiday Homework —

Best wishes for a wonderful vacation! 🌟