



# SACRED HEART SCHOOL

Moga, Punjab  
Session: 2025-26



## Holidays Homework for Academic Year 2025-26

STD: X

Subject	Topics
Eng I	<p><b>Composition:</b></p> <ol style="list-style-type: none"> <li>1. You were on a school trip and were on your way back to the hotel late one night when your school bus, full of children, broke down in a lonely area. Describe what you saw and experienced as you looked around. How was the problem solved?</li> <li>2. Write an original story that begins with the words: "He was the funniest boy I had ever met. He would make everyone laugh....."</li> <li>3. Narrate an incident from your own experience when you expected to do very well, but for some reason were unable to do so. Explain what happened and why it happened. What lesson did you learn from it?</li> </ol> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Choose any two of the given topics.</li> <li>• Write well-structured essays (approx. 300-350) that include- A clear introduction, body paragraphs with supporting details and appropriate conclusion.</li> </ul> <p><b>Letter:</b></p> <ol style="list-style-type: none"> <li>1. You want to start a new club in your school. Write a letter to your Principal requesting permission to start the club, explain your role in it and give reasons to prove that the club will be beneficial for the school.</li> <li>2. Your friend has not fared well in the recent examinations. Write a letter to him / her expressing your concern. Give him / her some advice on how to score better marks and offer to help him / her to improve his / her performance.</li> </ol> <p><b>Note:</b> Attempt both of the given options.</p> <p><b>Instructions:</b></p> <ul style="list-style-type: none"> <li>• Students will write the given project on the assignment sheets.</li> <li>• The work should be neat and legible. There must be an introduction and conclusion of the given assignment(s).</li> <li>• The project must have a face sheet (front page) with the name of the school, title, students' details and name of the subject teacher.</li> <li>• It must contain an acknowledgement sheet (just after the front page) and a bibliography sheet (in the last).</li> </ul> <p>Both of the assignments (English I &amp; English II) must be given in separate transparent files.</p>
Eng II	<p>Compare and contrast the character of Brutus and Cassius. (400-500 words)</p>
Punjabi	<ul style="list-style-type: none"> <li>• ਪੰਜਾਬ ਦੀਆਂ ਅਲੋਪ ਹੋ ਰਹੀਆਂ ਕੋਈ ਅੱਠ ਦੇਸੀ ਖੇਡਾਂ ਬਾਰੇ ਤਸਵੀਰਾਂ ਸਹਿਤ ਲਿਖੋ।</li> <li>• ਕਿਸੇ ਇੱਕ ਲੇਖਕ ਜਾਂ ਕਵੀ ਦੀ ਜੀਵਨੀ ਬਾਰੇ ਤਸਵੀਰਾਂ ਸਹਿਤ ਲਿਖੋ।</li> </ul>
Maths	<p><b>Instructions</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Select any two projects out of these mentioned topics.</li> <li><input type="checkbox"/> Each project should be of 12 – 15 pages.</li> <li><input type="checkbox"/> Projects should be self-made and should not be copied directly from any website or another student,</li> </ul>

	<p>otherwise that student have to recreate the project.</p> <p><input type="checkbox"/> Student have to prepare the soft copy of their projects and will send via email to their respective subject teachers.</p> <p><input type="checkbox"/> Students will keep their project safely with them because after vacations, presentation will be done by each student in the class.</p> <p><input type="checkbox"/> Final marks will be assigned by the teacher on the basis of student's presentation in the class.</p> <p><b>Projects</b></p> <ol style="list-style-type: none"> <li>1. Survey of various types of bank accounts, rate of interest offered.</li> <li>2. Planning a home-budget</li> <li>3. Conduct a survey in your locality to study the mode of conveyance / Price of various essential commodities / favourite sports. Represent the data using a bar graph / histogram and estimate the mode</li> <li>4. To use a newspaper to study and report on shares and dividends.</li> <li>5. Various types of "cryptarithm"</li> </ol>																						
<b>Hindi</b>	<ul style="list-style-type: none"> <li>● भारत के किन्हीं पाँच पर्यटन स्थलों का महत्व बताते हुए चित्र सहित वर्णन कीजिए।</li> <li>● पाठ्यक्रम से संबंधित किसी भी कवि या लेखक का साहित्यिक जीवन परिचय वर्णन कीजिए।</li> </ul>																						
<b>Phy</b>	<p><b>Important Guidelines-</b> All the students are instructed to refer this link for lab manual work for the completion of your practical file, 2025-2026. <a href="https://drive.google.com/file/d/1aTiDjd2KL7AtdQ9d65yLyrQG7GEChsFQ/view?usp=drive_link">https://drive.google.com/file/d/1aTiDjd2KL7AtdQ9d65yLyrQG7GEChsFQ/view?usp=drive_link</a></p> <table border="1"> <thead> <tr> <th>Writing part on white page to be done with pencil</th> <th>On ruled page</th> </tr> </thead> <tbody> <tr> <td>Aim</td> <td>Aim</td> </tr> <tr> <td>Apparatus used</td> <td>Apparatus used</td> </tr> <tr> <td>Diagram</td> <td>Procedure</td> </tr> <tr> <td>Observations and calculation</td> <td>Precautions</td> </tr> <tr> <td>Result</td> <td>Result</td> </tr> </tbody> </table> <p><b>Note:</b> 1. Writing part on white page to be done with pencil and on ruled page with pen. 2. Diagrams should be neat and clean and properly labeled.</p>	Writing part on white page to be done with pencil	On ruled page	Aim	Aim	Apparatus used	Apparatus used	Diagram	Procedure	Observations and calculation	Precautions	Result	Result										
Writing part on white page to be done with pencil	On ruled page																						
Aim	Aim																						
Apparatus used	Apparatus used																						
Diagram	Procedure																						
Observations and calculation	Precautions																						
Result	Result																						
<b>Chem</b>	<p><b>Students are required to prepare the following project and submit the project either in lab practical file or separate small notebook.</b></p> <table border="1"> <thead> <tr> <th>ROLL NO</th> <th>PROJECT TITLE</th> </tr> </thead> <tbody> <tr> <td>1, 19,37</td> <td>Types of chemical bonding + Make a chart on pH scale</td> </tr> <tr> <td>2,20,38</td> <td>Green Chemistry and Waste management + Make a chart on Indicators</td> </tr> <tr> <td>3,21,39</td> <td>Insecticides, pesticides and chemical fertilizers</td> </tr> <tr> <td>4,22,40,</td> <td>Use of artificial intelligence in handling chemical waste</td> </tr> <tr> <td>5,23,41,</td> <td>Applications of chemistry in daily life + Make a chart on Periodic Table</td> </tr> <tr> <td>6,24,42</td> <td>Application of solar energy in different fields (lightening, water pumps, cold storage, dryers , boiler, engines).</td> </tr> <tr> <td>7,25,43,</td> <td>How to overcome energy crisis by use of hydrogen is a fuel (hydrogen economy)?</td> </tr> <tr> <td>8,26,44</td> <td>How to transform waste plastic to fuel and petrochemicals.</td> </tr> <tr> <td>9,27,45</td> <td>Preparation of soap, nail polish, boot polish, varnish, nail polish remover, shampoo and perfumes</td> </tr> <tr> <td>10,28,46</td> <td>Classification of Hydrocarbons ,properties and uses</td> </tr> </tbody> </table>	ROLL NO	PROJECT TITLE	1, 19,37	Types of chemical bonding + Make a chart on pH scale	2,20,38	Green Chemistry and Waste management + Make a chart on Indicators	3,21,39	Insecticides, pesticides and chemical fertilizers	4,22,40,	Use of artificial intelligence in handling chemical waste	5,23,41,	Applications of chemistry in daily life + Make a chart on Periodic Table	6,24,42	Application of solar energy in different fields (lightening, water pumps, cold storage, dryers , boiler, engines).	7,25,43,	How to overcome energy crisis by use of hydrogen is a fuel (hydrogen economy)?	8,26,44	How to transform waste plastic to fuel and petrochemicals.	9,27,45	Preparation of soap, nail polish, boot polish, varnish, nail polish remover, shampoo and perfumes	10,28,46	Classification of Hydrocarbons ,properties and uses
ROLL NO	PROJECT TITLE																						
1, 19,37	Types of chemical bonding + Make a chart on pH scale																						
2,20,38	Green Chemistry and Waste management + Make a chart on Indicators																						
3,21,39	Insecticides, pesticides and chemical fertilizers																						
4,22,40,	Use of artificial intelligence in handling chemical waste																						
5,23,41,	Applications of chemistry in daily life + Make a chart on Periodic Table																						
6,24,42	Application of solar energy in different fields (lightening, water pumps, cold storage, dryers , boiler, engines).																						
7,25,43,	How to overcome energy crisis by use of hydrogen is a fuel (hydrogen economy)?																						
8,26,44	How to transform waste plastic to fuel and petrochemicals.																						
9,27,45	Preparation of soap, nail polish, boot polish, varnish, nail polish remover, shampoo and perfumes																						
10,28,46	Classification of Hydrocarbons ,properties and uses																						

	11,29,47	Save Earth by saving water + Make a chart on Periodic Properties and Variations
	12,30,48	Analytical chemistry ; Make a chart on Action of NaOH and NH <sub>4</sub> OH on metal salts solutions
	13,31,49	Metallurgy (classification of ores and minerals, extraction of Aluminum ,copper ,iron )+ Make a chart on Extraction of Aluminum
	14,32,50.	How Plastics have changed the world, both socially and economically
	15,33,51	The Role of Chemistry in Developing Alternative Energy Sources
	16,34,52,	The Role of Chemistry in Climate Change Mitigation
	17,35,53,,	The Role of Chemistry in Sustainable Packaging
	18,36,54	The Role of Chemistry in Food Preservation and food adulteration
<b>Bio</b>	Complete the given practical work for ICSE Internal Assessment marks. You must use HB pencil for writing content, drawing diagrams and labelling. Handwriting, neatness & clarity of diagrams will be counted for awarding marks.	
<b>His-Civ</b>	Present a life sketch and contribution of any one of the following Presidents of India – Dr. Rajendra Prasad / Dr. Sarvapalle Radhakrishnan / Dr. A. P. J. Abdul Kalam or any other. OR Discuss the relevance of any one of the following films to understand the history of 20 <sup>th</sup> century Europe : The Book Thief / The Schindler’s List / Escape to Victory / The Boy in Striped Pyjamas / Life is Beautiful / The Sound of Music / Gandhi (Richard Attenborough) / Sardar (Ketan Mehta) / Netaji Subhas Chandra Bose – The Forgotten Hero (Shyam Benegal).	
<b>Geo</b>	<p><b>Topic:</b> Transport in India: Development of Road, Rail, Water and Air routes.</p> <p>Instructions:</p> <p>Instructions:</p> <ul style="list-style-type: none"> <li>• Must be <b>handwritten</b> and neatly presented in the Geography Project Manual.</li> </ul> <p>Include:</p> <ol style="list-style-type: none"> <li>1. <b>Title Page</b> (Topic name, student name, class, section, Admission number, Submitted to etc.)</li> <li>2. <b>Acknowledgement</b></li> <li>3. <b>Index</b></li> <li>4. <b>Main Content</b> – <i>Minimum 15 pages</i></li> <li>5. <b>Bibliography</b></li> </ol> <ul style="list-style-type: none"> <li>• Use <b>own words; no plagiarism.</b></li> <li>• Add <b>10+ relevant pictures</b> with captions.</li> <li>• Be ready for <b>viva questions.</b></li> <li>• Maintain <b>clean handwriting and layout.</b></li> </ul>	
<b>Comp (Robotics &amp; AI)</b>	<p> <b>Instructions for Students</b></p> <p>Dear Students,</p> <p>You are required to complete one Robotics Project during your summer holidays. This is an exciting opportunity to apply your knowledge creatively and practically. Please follow the instructions carefully.</p> <p> <b>Steps to Prepare the Project</b></p> <ol style="list-style-type: none"> <li>1. Understand the Objective Know what your project is solving or demonstrating (e.g., obstacle detection, automation, IoT, etc.).</li> <li>2. Collect Required Components (as per project requirement) Example: <ul style="list-style-type: none"> <li>• Microcontroller (Arduino)</li> <li>• Sensors (Ultrasonic, LDR, IR, etc.)</li> <li>• Output devices (Motors, LEDs, buzzer, LCD, etc.)</li> <li>• Breadboard, jumper wires, batteries, etc.</li> </ul> </li> <li>3. Build the Project <ul style="list-style-type: none"> <li>• Set up the hardware</li> <li>• Write and upload the code</li> <li>• Test the circuit</li> <li>• Improve if needed</li> </ul> </li> </ol> <p>Note: Safety first! Do not use high-voltage devices.</p> <p> <b>Documentation Guidelines</b></p> <p>You must prepare a Project Report in the following format:</p> <p> Project Report Format</p> <ol style="list-style-type: none"> <li>1. Title Page</li> </ol>	

- School Logo, Class & Section
  - Project Title and Team Name
  - Students Name along with Admission Number
2. Objective
    - What does your project do?
    - Why is it useful or interesting?
  3. Materials Used
    - List all components with quantity.
  4. Circuit Diagram / Setup Image
    - Drawn by hand or created using software (Tinkercad)
    - Attach real photos of your working setup.
  5. Working Principle
    - Explain how the project works.
    - Include code snippets and flow of logic.
  6. Code
    - Include your Arduino/Python/Block code with comments. (If require)
  7. Challenges Faced
    - Mention problems and how you solved them.
  8. Conclusion / Learning Outcome
    - What did you learn while doing this project?
  9. Optional Add-ons
    - Video link of the working model
    - Future scope or improvement ideas

#### **Submission Requirements**

-  A neatly written or printed Project Report (hard copy)
-  2-3 Photos of your working model
-  Optional: Short 1–2-minute video demonstration

#### **Robotics Projects for Holiday Homework(G1- 1, G2-2 and so on....)**

1. Line Following Robot
  - Build a robot that can follow a black line on a white surface using IR sensors.
  - Skills: basic robotics, sensor interfacing;
  - components: IR sensors, Arduino, motors.
2. Obstacle Avoidance Robot
  - Create a robot that uses ultrasonic sensors to detect and avoid obstacles.
  - skills: Arduino programming, motion control;
  - components: Ultrasonic sensor, Arduino, motor driver.
3. Light Following Robot
  - Program the robot to move towards a light source using LDR sensors.
  - skills: analog sensor handling;
  - components: LDRs, Arduino, motors.
4. Automatic Hand Sanitizer Dispenser
  - Use an IR sensor and servo motor to create a no-touch hand sanitizer.
  - skills: automation logic;
  - components: IR sensor, servo motor, Arduino.
5. Smart Dustbin
  - Make a dustbin lid that opens automatically when someone approaches.
  - skills: motion detection;
  - components: Ultrasonic sensor, servo, Arduino.
6. Soil Moisture-Based Plant Watering System
  - Automatically water plants when the soil is dry.
  - skills: sensor-based automation;
  - components: Soil sensor, relay, Arduino, pump.
7. Home Security Alarm System
  - Design a simple intruder alarm using motion sensors and buzzers.
  - skills: basic security logic;
  - components: PIR sensor, buzzer, Arduino.
8. Temperature Monitoring System
  - Build a device using a temperature sensor that displays readings on an LCD.
  - skills: sensor data display;
  - components: Temperature sensor, LCD, Arduino.
18. Traffic Light System
  - Simulate traffic lights using LEDs and a timer.
  - skills: timing logic;
  - components: LEDs, Arduino, resistors.

	<p>19. Burglar Alarm System  – Trigger a buzzer when motion is detected.  – skills: motion detection;  – components: PIR sensor, buzzer, Arduino.</p> <p>20. Touchless Doorbell  – Use a proximity sensor to activate a buzzer instead of a push-button.  – skills: proximity sensing;  – components: IR sensor or Ultrasonic, buzzer, Arduino.</p> <p>12. Night Lamp Using LDR  – Turn on an LED when it gets dark.  – skills: analog sensing;  – components: LDR, transistor, LED</p> <p>13. Digital Dice with LEDs  – Press a button to generate a random number using LEDs.  – skills: random function usage;  – components: Button, LEDs, Arduino.</p> <p>14. Mini Fan with Temperature Control  – Fan turns on when temperature rises.  – skills: sensor-actuator control;  – components: Temperature sensor, fan, Arduino.</p> <p>15. Water Level Indicator  – Show tank water levels using LEDs.  – skills: level detection;  – components: Water sensors, LEDs, Arduino.</p> <p>16. Simple RC Car (Remote-Controlled)  – Control a basic robot using toggle switches (wired).  – skills: motor control;  – components: DPDT switches, battery, motors.</p> <p>17. Clap Switch LED  – Turn LED on/off by clapping.  – skills: sound detection;  – components: Sound sensor, Arduino, LED.</p> <p>18. LED Pattern Blinker (Like a Mini Disco Light)  – LEDs blink in a pre-defined or random pattern.  – skills: logic sequencing;  – components: LEDs, Arduino.</p> <p>19. Autonomous Maze-Solving Robot  – Concept: A robot that automatically navigates a maze using logic (e.g., left-wall or right-wall following).  – Skills: Autonomous decision-making, sensor-based path planning.  – Components: IR sensors (or ultrasonic sensors), Arduino, motor driver, motors, wheels, chassis.</p> <p>20. Joystick-Controlled Car (Wired or Wireless)  – Concept: Use a joystick module to manually control the robot car.  – Skills: Analog input handling, motor control.  – Components: Joystick module, Arduino, motor driver, DC motors, jumper wires (for wired) or RF module (for wireless).</p>
<p><b>SUPW</b></p>	<p>The SUPW (Socially Useful Productive Work) project for Grade X students is divided into two categories for the academic year 2025–2026.</p> <p style="text-align: center;"><b>Category I: SUPW at Home</b></p> <p>Students are required to spend at least 30 minutes per day on SUPW activities at home. Each student must record any ten tasks performed during the month of June in the SUPW Record Book on Page No. 30.</p> <p>Please note that ordinary or routine tasks, such as making your bed, laying the table, keeping your home tidy, or running errands for your parents, should not be included.</p> <p>Only tasks of a special nature, which require a considerable amount of time and effort, should be recorded. Examples of acceptable activities include:</p> <ul style="list-style-type: none"> <li>• Gardening</li> <li>• Defrosting and cleaning the refrigerator</li> <li>• Weeding the garden</li> <li>• Polishing furniture</li> </ul>

- Teaching a younger sibling or a neighbour's child

Photographic proof of each activity must be attached in the SUPW Record Book.

**Category II: Craft/Skill**

Students must choose one main craft or a subsidiary craft as listed in the SUPW Record Book on Page No. V. They are required to fill out the following sections:

1. Assessment Record for Craft/Skill – Include only the name of the school, name of the candidate, year, standard, and date under the tabs: Planning, Execution, Resourcefulness, and Interest (refer to Page No. 76 for sample format).
2. Student's Record of Craft/Skill – Planning (Page No. 83)
3. Details of Planning and Organization (Page No. 85)
4. Student's Record of Craft/Skill – Execution (Page No. 87)
5. Student's Record of Craft/Skill – Resourcefulness (Page No. 89)

Please refer to Pages 78 and 79 for detailed instructions on how to complete these sections.

It is highly recommended that students complete their craft/skill using waste materials.

On the submission date, students are required to submit tangible proof of the craft or skill performed.

The deadline for submission of the SUPW Record Book is 25th July 2025, to the respective class teacher.

**Prepared by**

**Approved bys**