LAKSHMIPAT SINGHANIA ACADEMY

SESSION (2025-2026)

PROJECT PLAN –TERM 1

CLASS IX

SUBJECT:ENGLISH
TOPIC:ECO-FRIENDLINESS IN YOUR STATE

West Bengal, with its rich ecological diversity and heritage, is home to several individuals and communities quietly contributing to the environment through sustainable practices. Be it NGO workers, gardeners from the prestigious Horticultural Society in Alipore, or elders preserving traditional eco-friendly knowledge—these unsung heroes deserve a voice.

This project aims to encourage students in conducting interviews and writing reports, while also raising awareness about local environmental champions. Students will reach out to such individuals and document their journey, motivations, challenges, and impact on the community.

This project focuses on eco-friendliness in your state.

- This will be a group activity.
- It should be presented in the digital format.
- Should consist of relevant data, illustration, statistical representation, index and bibliography.

PROJECT GUIDELINES:

- ❖ Students will identify and approach one of the following:
- *An environmental NGO worker or volunteer in Kolkata or nearby areas.*
- *A gardener, horticulturist from the Horticultural Society in Alipore.*
- *An elderly family/community member who still practices traditional eco-friendly methods (e.g., composting, herbal gardening, rainwater harvesting).*
- ❖ They must prepare 10–12 well-researched and open-ended questions covering:
- *Personal journey and motivation*
- *Daily practices and challenges*
- *Views on climate change and local environmental concerns*
- *Advice to youth*
- *Success stories or case studies*
- ❖ Encourage a conversational tone and natural flow.

❖ The report should include:
- *Title*
- *Introduction*
- *Profile of the Interviewee*
- *Summary of the Interview*
- *Observations and Reflections*
- *Conclusion*
- *Photographs from the interview*

Marks Distribution (out of 20)
- Content-8
- Presentation-6
- Creativity-6

LEARNING OBJECTIVE:
Students will be able to;
- Understand and apply the format and tone of interview and report writing.
- Frame relevant and engaging interview questions.
- Develop communication and interpersonal skills through real-world interaction.
- Recognize and appreciate local sustainable practices.
- Use digital tools to present their findings in a creative format.
- Work in groups to plan, research, and document a comprehensive report

LEARNING OUTCOMES:

1. Students will understand the importance of protecting the environment and develop awareness about eco-friendly practices.
2. Students will analyze the impact of human actions on the environment and think critically about sustainable solutions.
3. Students will learn to participate in community initiatives and promote eco-friendly practices among peers and family members.
4. Students will develop skills to identify environmental problems and propose innovative, eco-friendly solutions.

RUBRICS FOR EVALUATION

PARAMATERS	5	4	3
Authenticity of the contents and appropriate expression (5)	Content is unique and proper research done and concepts properly explained but lacks expression	Not Unique but the concepts are well explained	Neither unique nor well explained
Timely submission	The submission addresses the	The submission	The submission

demonstrates concise knowledge and understanding of the theme (5)	requirement in meaningful and relevant way. The information is concise and accurate	addresses the requirement. The information is presented accurately and in a concise manner	somewhat addresses the requirement, but not in a cohesive or concise manner
Use of Technology (5)	Accesses suggested sites and employed technologies fluently	Accesses suggested sites and employed technologies adequately with support	Struggled while using technology. Struggled with teacher-provide strategies and resources
Creativity and Art Integration (5)	The concept and presentation in submission is creative, especially as compared with other submissions	The concept in the submission is somewhat creative	The concepts in the submission lacks creativity

SUBJECT :MATHEMATICS
TOPIC: SUSTAINABLE CITIES AND COMMUNITY: THE GREEN SPACE

LEARNING OBJECTIVES:

Our environment is a precious resource, and preserving it is crucial for future generations. West Bengal has been actively promoting eco-friendly initiatives, from sustainable businesses to community efforts that reduce waste and pollution. In this project, we will explore the importance of eco-friendliness in our state, highlight the efforts being made, and suggest ways we can contribute as responsible citizens.

Through this study, the following will be understood:

- Green practices adopted in Kolkata and other parts of West Bengal
- Eco-friendly lifestyle choices and initiatives
- How individuals and communities can make a difference

By understanding these aspects, we aim to raise awareness and inspire action toward a greener future.

1. How to calculate solar power output?   [10]
   The easiest way to calculate how much energy your solar panels will produce is to know two things-

(i) How many hours of sunlight does your location receive each day?
(ii) How many watts your panels can produce?

https://www.sunbasedata.com/blog/how-to-calculate-solar-panel-output#:~:text=For%20example%2C%20if%20you%20live%20in%20a%20location%20that%20gets,panel)%20to%20get%20150%2C000%20watts

2. How can individuals reduce their emissions from transport?   [10]
Transport accounts for around one-quarter of global carbon dioxide (CO_2) emissions from energy.[1] In some countries — often richer countries with populations that travel often — transport can be one of the largest segments of an individual's carbon footprint.

(i) Prepare a table and bar graph to compare the carbon footprints of different travel modes measured by the amount of greenhouse gases emitted per person *to travel one kilometre, for a particular year*.
(ii) Prepare the table and bar graph show how the carbon footprint per kilometer higher for domestic flights than long-haul flights. Also show the carbon intensity in the graph.

https://ourworldindata.org/travel-carbon-footprint

LEARNING OUTCOME:

Students will be able to understand and adapt eco-friendly initiatives to reduce waste and pollution by mathematically analyse and compare through calculations and graphs.

RUBRICS FOR EVALUATION

CATEGORY	GREAT WORK (4)	GOOD WORK (3)	SATISFACTORY (2)	COULD BE BETTER (1)
TOPIC CONTENT – ACCURACY (4)	Content regarding Sustainable Cities and Communities : The Green Space	Content regarding Sustainable Cities and Communities : The Green Space well explained 90 – 95% of the facts are accurate	Explanation needs improvement 80 – 89% of the facts are accurate	More points need to be added Less than 80% of the facts are accurate
WRITING-	Use of	Use of few	Less use of	No Use of

VOCABULARY EDITING-LANGUAGE (4)	mathematical terms in the proper way Presentation is free from grammatical errors	mathematical terms in the proper way The presentation may have one or two grammatical errors	mathematical terms in the proper way The presentation may have few grammatical errors	mathematical terms in the proper way There are many grammatical errors
GRAPHICS-FORMULAE (4)	Calculations, tables and graphs go well with the text ,calculations are correct and there is good mix of text and graphics	Calculations, tables and graphs go well with the text , calculations are correct but they are inappropriately sized, too small or hard to read	Calculations, tables and graphs go well with the text , but calculations are incorrect they are too few and the project seems text heavy.	There are no calculations, tables and graphs or they do not go with the topic.
OVERALL PRESENTATION (4)	The presentation is exceptionally attractive, in terms of design, layout and neatness.	The presentation is attractive, in terms of design, layout and neatness.	The presentation is acceptably attractive, though it may be a bit messy.	The project is distractingly messy or very poorly designed
USE OF PROPER FORMULA AND CALCULATIONS (4)	Calculations are properly done with the correct formulae	Calculations are properly done with the correct formulae but all steps are not shown	Calculations are not properly done and all steps are not shown	Calculations are not properly done and all steps are not shown. Needs a lot of improvemen

				t in terms of presentation and neatness.

SCIENCE

SUBJECT : PHYSICS

TOPIC: ECO-FRIENDLINESS IN YOUR STATE

Eco friendliness refers to products, practices or behaviors that minimize harm to the environment to conserve natural resources, reduce greenhouse gas emissions and protect bio diversity.

<u>**LEARNING OBJECTIVES**</u>: Students will learn about

- Designing Energy-efficient buildings for the state's climate
- Proposing for a better sustainable transportation system in your state.

1. Make a model of an energy efficient building with card board and upload the photograph of it in your PPT.

2. Promote sustainable transportation systems in your locality through handmade flyers.

<u>**LEARNING OUTCOME:**</u> Students will learn how to:

- Design Energy-efficient buildings for the climatic condition of your state-West Bengal.
- Promoting for sustainable transportation system in your state.

<u>RUBRICS FOR EVALUATION</u>

PARAMATERS	2	1.5	1
Details of Research on the topic(2)	Content is well researched ,genuine with detailed explanation	Not well researched , but the concepts are well explained	Neither well researched , nor well explained
Presentation (2)	Well presented	Average	Sketchy

Creativity and Art Integration (2)	The concept in submission is creative, especially as compared with other submissions	The concept in the submission is somewhat creative	The concepts in the submission lacks creativity	

SUBJECT :CHEMISTRY

TOPIC: ECO FRIENDLINESS

LEARNING OBJECTIVES:

Students will

- Understand environmental and health implications of microplastics in makeup
- Explore possible solutions

Eco friendly makeup focusses on using natural and sustainable ingredients, avoiding harmful chemicals and reducing wastes.

Companies are now opting for cruelty- free testing methods, which means no animals are harmed in the process.

Microplastics (like glitter) and Microbeads that are used in facial scrubs are infiltrating the food chain at every level. When washed down the drain, they pass through sewage treatment filters and make their way into rivers and canals, resulting in plastic particle water pollution.

1. Name the ingredients present in microplastics and microbeads which harm the environment.
2. Companies today continue to "greenwash" their customers by stating that their product contains *only* 'natural' ingredients. Is this possible? Give examples.
3. Use natural ingredients available at home/surroundings to make a beauty product. Write down its composition and utility. Make a video to show its process of preparation

LEARNING OUTCOME:

Students will be able to:

- Understand environmental and health implications of microplastics in makeup
- Explore possible solutions

RUBRICS FOR EVALUATION

PARAMATERS	2	1.5	1
Details of Research on the topic(2)	Content is well researched ,genuine with detailed explanation	Not well researched , but the concepts are well explained	Neither well researched , nor well explained
Presentation (2)	Well presented	Average	Sketchy
Creativity and Art Integration (2)	The concept in submission is creative, especially as compared with other submissions	The concept in the submission is somewhat creative	The concepts in the submission lacks creativity

SUBJECT :BIOLOGY
TOPIC :- ECO FRIENDLINESS IN WEST BENGAL: EXPLORING LOCAL SOLUTIONS FOR A GREENER TOMORROW.

West Bengal is actively pursuing eco-friendly initiatives. These efforts include green city planning, initiatives to conserve water bodies, and the promotion of eco-friendly products and practices. The state is also focusing on reducing pollution, promoting sustainable practices in agriculture, and developing ecotourism.
Students will make a PowerPoint presentation with 10 slides emphasizing on the following points:

- Title(1 slide)
- Names of the group members (1 slide)
- Introduction: A brief overview of West Bengal's natural diversity (2 slides)
- Common environmental challenges faced by West Bengal (1 Slide)
- A case study on Solid waste management in Kolkata (with interviews, photos and articles) (2 slides)
- A survey report on waste segregation habits in your neighbourhood. (2 slides)

- Conclusion: What steps can you take as an individual and what did you learn from it? (1 slide)

LEARNING OBJECTIVE:

To help the students explore and understand eco-friendly practices and environmental issues specific to West Bengal, and propose suitable sustainable solutions.

LEARNING OUTCOME:

- To understand local environmental challenges
- To learn about sustainable practices
- To develop research and survey skills
- Practice eco-conscious behaviour

RUBRICS FOR EVALUATION

PARAMATERS	2	1.5	1
Details of Research on the topic (2)	Content is well researched ,genuine with detailed explanation	Not well researched , but the concepts are well explained	Neither well researched , nor well explained
Presentation (2)	Well presented	Average	Sketchy
Creativity and Art Integration (2)	The concept in submission is creative, especially as compared with other submissions	The concept in the submission is somewhat creative	The concepts in the submission lacks creativity
Ethical aspect (2)	Concept well related to life problems	Concept is related to life problems is not well explained	Lack of problem solving aspect

SOCIAL SCIENCE

ALIGNED WITH CBSE PROJECT

SUBJECT :HISTORY

TOPIC: FOREST SOCIETY AND ITS CHALLENGES

Ever since the advent of the industrial revolution, forests and their resources have been subject to overexploitation worldwide. Forests and its resources play a vital role in managing both the ecosystem and the economy of a country. The depletion of forest cover and resources is a significant threat to our country's ecosystem and economy. . Furthermore, the paper also discusses the current forest laws and suggests solutions to replenish the precious forest resources. The histories of

humans and forests have long been interlinked. They have inspired human traditions and folklore, appearing as symbols of life, knowledge, and fertilitIIity It can also be concluded after looking at Kautilya's Arthashastra and the rules and regulations of the various rulers before the British era that protection and conservation of forest was one of the important goals. However, ever since the British era the policies and legislations that were aimed at forest conservation have instead undermined their true purpose. Most of these policies have been contradictory in nature and further escalated the loss of forest resources and wealth by giving rise to new conflicts and distortions. In India, the connection among tribal groups and forests was defined by coexistence, and these populations were seen as essential to the natural system's survival and sustenance. This mutualistic interdependence was recognized, and customary rights over natural forests were established. However, during the colonial era and in Indian independence, the administration did not acknowledge or register these rights when combining state forests.

Learning Objective -Students through their project learn about the **forest management** in **India**, which is based on 'co-**management**' and a 'give and take' relationship, Sustainable forest management (SFM) is defined as a "dynamic and evolving concept, which aims to maintain and enhance the economic, social and environmental values of all types of forests.

METHODOLOGY: Project will be handled by the 4 HOUSE , each HOUSE will handle only 2 questions according to the instructions given and follow the CBSE rubrics given below. Projects should be supported by photographs, relevant articles from newspaper and magazines, graphics, videos, cartoon drawing and digital storyboard . etc

Presentation of project will be presented digitally.

1A) How are the environmental situation, in the forests handled in India today?

1B)With more than a fifth of population dependent on forest for livelihood and the rich ecological, economic and development value it produces. there is an urgent need to redefine India's 'forests. Given the critical state of India's forest, it is imperative to move beyond compensatory afforestation and adopt meaningful strategies for creating serious impact on the ground. Discuss about strategies India has adopted so far? :

2A) Social Forestry can be characterized as "Forestry by the people, for the people, and of the people." It involves the management and preservation of forests, afforestation of barren lands, and aims to contribute to environmental, social, and rural development. **What are the Objectives of Social Forestry?**

2B)Discuss the strategies for implementation of Social Forestry in India and its drawbacks

3A) Discuss in your project What are the avenues of Joint Forest Management in India, ?
https://www.sciencedirect.com/science/article/abs/pii/S0921344909002274

3B)What are the present challenges in Joint Forest Management in India?
4A)The Sustainable **forest management in India** is a success story . Justify. Make a story board and high light the role of emerging digital technology can transform forestry and its management in INDIA

4B) Research on the FOREST SURVEY REPORT OF2021 and make charts, graphs, map presentation to hight the report of the survey

Learning Outcome - Protection of forests will help to conserve our rich biodiversity, promote wildlife and ensure the welfare of the Scheduled Tribes and other forest dwellers. The promotion of tree cover outside forest areas will help to increase green cover, provide raw materials for industries and control pollution. Forest projects which researched on participatory forest management will highlight   on most successful aspect of the Indian economy that is -balancing poverty reduction, livelihoods and creating employment

REFERENCES :
https://www.sciencedirect.com/science/article/abs/pii/S0921344909002274

- http://pdf.wri.org/ref/nayak_02_com-based_forest.pdf*https://www.lawteacher.net/free-law-essays/land-law/law-forest-dwellers.php*

- https://blog.ipleaders.in/all-about-the-forest-rights-act-in-india/

- https://www.researchgate.net/publication/265000880_The_Indian_Forest_Rights_Act_2006_A_critical_appraisal

- https://migrate.theleaflet.in/validity-of-the-forest-rights-act-supreme-court-directing-eviction-of-almost-two-million-tribal-peoples-is-a-gross-travesty-of-justice/

- https://www.scobserver.in/court-case/eviction-of-forest-dwellers

- https://blog.ipleaders.in/forest-rights-act-2006-advantages-disadvantages-environment-conservation/amp/

- https://www.scconline.com/blog/post/2019/02/20/sc-orders-forced-eviction-of-more-than-1000000-tribals-from-from-forestlands-across-16-states/

- https://www.scconline.com/blog/post/tag/forest-dwellers/

- https://www.researchgate.net/publication/332107497_Understanding_India's_Forest_Land_Rights_through_Spatial_Justice_Framework_-_A_Policy_Analysis_of_the_Forest_Rights_Act_2006.

Rubrics for Evaluation

PARAMATERS	4	3	2	1
Content (4)	Applicable to Theoretical	Applicable to Theoretical knowledge	Applicable to Theoretical knowledge	Applicable to theoretical

	knowledge and all facts are correct. Map work done perfectly.	and all facts are correct. One or two factual errors. Map work done but not shaded/colored correctly.	and all facts are correct. Few factual errors. Map work not shaded correctly. All states are not marked.	knowledge and all facts are not at all relevant to the topic. Map is missing.
Presentation (3)	-	Overall impact of the project is attractive and appealing to the viewers. Students are well prepared. Teamwork is visible. Project is compiled up to the mark.	Overall impact of the project is quite appealing to the viewers. Students are well prepared. Teamwork is visible. Project is fairly compiled.	Some attempt has been made to make the presentation appealing to the viewers. Students are well prepared. Teamwork is visible. Project is not compiled up to the mark.
Graphics/Photographs/Charts/ Relevance to the topic and Team Work (3)	-	Presentation includes relevant photographs/ charts/ Maps/ model/diagrams are correct/relevant to the topics. Independent research work and collaboratio	Presentation includes relevant photographs/ charts/ Maps/ model/diagrams are partially correct/relevant to the topics. Team work shows communication gap.	Graphics / Chart /models are not clear. They are irrelevant to the topic. No group coordination shown.

		n shown by the team members. Tried to adapt the new technology.		

SUBJECT :GEOGRAPHY

TOPIC: "NATURAL VEGETATION AND WILDLIFE"
SUB TOPIC: NATURAL VEGETATION

Natural vegetation is a plant population that has formed organically even without the assistance of humans. They have also been unharmed by humanity for a long time. The term "virgin vegetation" refers to this type of vegetation. Vegetation includes cultivated crops such as fruits and orchards, but not natural vegetation. With a coastline spanning more than 7500 km, India has a total geographic area of over 3.28 million hectares. The ecological or ecosystem diversity of the nation is immense, spanning from sea level to the tallest mountain ranges in the world; hot and arid conditions in the northwest to cold, arid conditions in the trans-Himalayan region; tropical wet evergreen forests in Northeast India and the Western Ghats; mangroves in the Sundarbans; and freshwater aquatic to marine ecosystems. India ranked 10th in the world and fourth in Asia for plant diversity, with approximately 47,000 plant species.

Group 1 & Group 6 : TROPICAL EVERGREEN FORESTS.

Conservation through private initiative: A case study in the Western Ghats, India.

Group 2: TROPICAL DECIDUOUS FORESTS.

A case study in Behali Reserved Forest, Assam, India.

Group 3: MONTANE FORESTS.

Case study: Protecting forests and securing customary rights through Community Forest Governance.

Group 4: TROPICAL THORN AND SCRUB FORESTS.

Case Study: Joint Forest Management (JFM) as an example of a non-monetary positive incentive.

Group 5: Mangrove Forests

Case Study : Sunderbans.

- **Students will have to research on the type of forest assigned to their group. Shade the forest area in an outline political map of India.**

- **Students will write about their growing conditions, economic values and support with any two relevant pictures of the vegetation assigned.**

- **Students will provide a brief report on the <u>CASE STUDY</u> assigned to them. (80 Words)**

PROJECT FORMAT:

✓ Projects need to be done in groups.

✓ Support the project with relevant pictures.

✓ Students will make a PowerPoint presentation (maximum 8 slides including cover page, acknowledgement, index, content and bibliography)

✓ Each group designs a simple online quiz or interactive game based on their forest type.

Platform suggestions (free & easy to use):

- Kahoot
- Wordwall
- Quizizz
- Google Forms (Quiz mode)

Game Content Suggestions:

- MCQs about forest facts
- Match-the-following for flora & fauna
- Identify the region based on vegetation clues
- Picture-based questions

Submission: Game link + Screenshot of the game page

SUBJECT INTEGRATION: History, Biology, Life-skills, Political Science, Economics, Mathematics, A.I. and English.

LEARNING OBJECTIVE:

- ✓ To find out the nature of diverse flora and fauna as well as their distribution.
- ✓ To develop concern about the need to protect the biodiversity of our country.
- ✓ Students will develop citizenship through understanding the Indian environment in its totality and diversity in natural vegetation and wildlife.
- ✓ Students would be able to enhance their communication skills by debating on positive and negative impacts of human activities.
- ✓ Application ,understanding and analytical skills reinforced through online games.

LEARNING OUTCOME: The learning outcome will include –

- ✓ Independent research work.
- ✓ Collaboration.
- ✓ Awareness and awakening among all.
- ✓ They will learn about the number of species of plants and animals in India.
- ✓ How climate, topography and slope affect the growth of natural vegetation and wildlife.
- ✓ Importance of the ecosystem.

LINKS:

https://ncert.nic.in/textbook.php?ln=en

https://www.iucn.org/news/commission-environmental-economic-and-social-policy/202003/conservation-through-private-initiative-a-case-study-western-ghats-india

https://www.researchgate.net/publication/356613671_Deforestation_A_Case_study_in_Behali_Reserved_Forest_Assam_India

https://www.cbd.int/doc/case-studies/inc/cs-inc-india-forest-en.doc

https://www.iwgia.org/images/documents/briefings/Case-Study-India.pdf

https://en.wikipedia.org/wiki/Forest

https://www.scribd.com/doc/44125801/Sunderbans-Case-Study

RUBRICS FOR EVALUATION

Parameters	4	3	2	1
Content (4)	Applicable to Theoretical knowledge and all facts are correct. Map work , Game and Case Study done perfectly.	Applicable to Theoretical knowledge and all facts are correct. One or two factual errors. Map work done but not shaded/colored correctly. Case Study and game should be descriptive and completed with one error.	Applicable to Theoretical knowledge and all facts are correct. Few factual errors. Map work not shaded correctly. All states are not marked. Case Study and game should be descriptive and completed with two error.	Applicable to theoretical knowledge and all facts are not at all relevant to the topic. Map is missing. Case Study and game not attempted.
Presentation (3)	-	Overall impact of the project is attractive	Overall impact of the project is quite	Some attempt has been made to

		and appealing to the viewers. Students are well prepared. Teamwork is visible. Project is compiled up to the mark.	appealing to the viewers. Students are well prepared. Teamwork is visible. Project is fairly compiled.	make the presentation appealing to the viewers. Students are well prepared. Teamwork is visible. Project is not compiled up to the mark.
Graphics/Photographs/Charts/ Relevance to the topic and Team Work (3)	-	Presentation includes relevant photographs/ charts/ Maps/ model/diagrams are correct/relevant to the topics. Independent research work and	Presentation includes relevant photographs/ charts/ Maps/ model/diagrams are partially correct/relevant to the topics. Team work shows	Graphics / Chart /models are not clear. They are irrelevant to the topic. No group coordination shown.

		collaboration shown by the team members. Tried to adapt the new technology.	communication gap.	

SUBJECT: ARTIFICIAL INTELLIGENCE
TOPIC: USE OF AI TO CATER SDGS

LEARNING OBJECTIVE:-
- Foster a deeper understanding of Sustainable Development Goals
- Research on AI based skills and soft skills required for futuristic solutions
- Empower youth to become human-centric designers and users of AI

LEARNING OUTCOME:

STUDENTS WILL BE ABLE TO -

- Develop 21st century's creative presentation and communication skill.
- Handle video editing application.
- Empower themselves as design thinkers by giving proposal of prospective solutions.

Introduction:-
The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

Source-https://www.undp.org/sustainable-development-goals

Global leaders acknowledged that Artificial Intelligence has the potential to accelerate the SDG goals through a responsible application in energy, climate change, food security, health, environment, poverty, and education.
The students of today will be the change makers of tomorrow.

To Do:-
Choose any one SDG and identify a real-world problem related to it. Create a 150-second video proposing your AI-enabled solution.

Be creative. Be solution-focused. Think how AI can help!

Guidelines for making video proposal :-

- YOU MUST BE IN REGULAR SCHOOL UNIFORM AND PROPERLY GROOMED.
- Prefer to take video in landscape orientation.
- There should be enough light at the location.
- An organized/ clean background is expected.
- Use any free video editing software in order to present your research work.

Video Content:-

Once you have identified a problem statement and ideated a proposed solution using Artificial Intelligence, you have to share it in the form of an approximately 150 seconds video.

The 150 second's video should consist of the following –

i. Introduction [15 sec] your video must begin with a TITLE SLIDE with your Full Name,

Class & Section followed by self-introduction.

ii. Problem Statement [40 seconds] a. Talk about the problem you want to solve. b. Why do you want to work on this problem?

iii. Proposed Solution [95 seconds] a. What is your idea to solve the problem? b. Why do you think your idea is innovative? c. How will you work on the solution? d. What role will artificial intelligence and related technology play in your solution?

[Note: You may include supporting data with resource links in your video]

Submission Process:-

i.   Upload the video on your YouTube channel, **make it unlisted**
ii. Create a word file.
iii. Write your Full name, class section, Subject, mention the Project theme
iv. Copy the YouTube link in the same document.
v.   Add the consent form duly filled up.
vi. Save your word file as ClassSec_Name_AIProj and submit through Teams.

I, _____ (full name) of class-_____ sec_____, do hereby give my consent to the use my image, video, voice, and or all three of them, for the Artificial Intelligence Term1 project (Session 2024-25).

I agree that all such pictures, video or audio recordings and any reproduction thereof shall remain the property of the academy and will be used for educational purposes only.

Date: _____

RUBRICS FOR EVALUATION

Criteria	Excellent - 4	Needs improvement - 3	Poor -1
Potential Impact & Clarity of Explanation (4)	The proposed AI-enabled solution has the potential to make a significant impact on the problem identified, and the video clearly explains this.	The solution may have some impact and the explanation is partially clear.	The solution lacks impact and the video fails to explain it clearly.
Quality of Production (4)	Excellent audio and video quality, easy to understand and visually clear.	Moderate quality, somewhat understandable but with some distractions.	Poor quality or no audio, hard to follow.
Originality & Independent Work (4)	Content shows deep understanding; not copy-pasted; student can explain and reflect on the idea clearly.	Some parts appear AI-generated or borrowed but reflect an attempt to customize and understand.	Content is mostly copy-pasted from GPT or web, with little to no understanding demonstrated.
Personal Grooming & Presentation Discipline (4)	Proper grooming, in school uniform, and maintains professional presentation throughout.	Not properly groomed but in uniform, presentation is inconsistent.	Not groomed properly, not in uniform, or lacks presentation discipline.
Title Slide, Consent & Timely Submission (4)	All followed: Title slide included, Consent form complete, Submitted on time.	Any one is missing or not followed properly.	More than one missing or none followed (No title slide, no consent, and/or late submission).

SUBJECT- HINDI

विषय- पश्चिम बंगाल में पर्यावरण संरक्षण के प्रयास

पर्यावरण मानव जीवन का अभिन्न अंग है, जिसमें वायुमंडल, जलमंडल, स्थलमंडल एवं जैवमंडल सम्मिलित होते हैं।प्राकृतिक संतुलन की निरंतरता हेतु पर्यावरण का संरक्षण अत्यंत आवश्यक है। वर्तमान युग में औद्योगिकीकरण, नगरीकरण तथा वनों की अंधाधुंध कटाई के कारण पर्यावरण पर गंभीर प्रतिकूल प्रभाव पड़ रहा है।

पश्चिम बंगाल राज्य पर्यावरण संरक्षण के क्षेत्र में निरंतर एवं सुदृढ़ पहल कर रहा है। राज्य सरकार द्वारा एकल-प्रयोग प्लास्टिक पर कठोर प्रतिबंध लागू किया गया है और नागरिकों को इसके सतत विकल्पों के प्रति शिक्षित एवं प्रेरित किया जा रहा है। वन-संपदा के संवर्धन हेतु 'हरित पश्चिम बंगाल' जैसे अभिनव अभियानों का संचालन किया जा रहा है, जिन्होंने वृक्षारोपण को जनसहभागिता का आयाम प्रदान किया है।

पर्यावरणीय संरक्षण हेतु नवीकरणीय ऊर्जा संसाधनों के प्रसार के साथ भावी पीढ़ी में प्रकृति के प्रति उत्तरदायित्व की भावना का उल्लेख करते हुए एक सचित्र पॉवरपॉइंट प्रस्तुति तैयार करें।

आवश्यक निर्देश:

प्रत्येक कक्षा को 6 समूहों में विभाजित किया जाएगा।

समूह- 1,2,3 – (संकेत बिन्दु)

- पश्चिम बंगाल में पर्यावरणीय असंतुलन के प्रमुख कारक और राज्य सरकार हेतु प्रयास ।
- 'हरित पश्चिम बंगाल' एवं अन्य अभियान का उद्देश्य और उपलब्धियाँ ।
- सुंदरबन क्षेत्र की पारिस्थितिकीय विशेषता और उसे संरक्षित रखने हेतु राज्य द्वारा विशेष उपाय ।
- वर्षा जल संचयन (Rainwater Harvesting) को ग्रामीण एवं शहरी क्षेत्रों लागू करना ।

समूह - 4,5,6- (संकेत बिन्दु)

- पश्चिम बंगाल में प्रदूषण नियंत्रण बोर्ड (Pollution Control Board) की गतिविधियाँ ।
- 'हरित पश्चिम बंगाल' एवं अन्य अभियान का उद्देश्य और उपलब्धियाँ ।
- पर्यावरणीय शिक्षा का समावेश राज्य की शिक्षा प्रणाली और इसका युवाओं पर प्रभाव ।
- पश्चिम बंगाल में जलवायु परिवर्तन के संभावित प्रभाव हेतु राज्य सरकार की दीर्घकालिक रणनीति ।

LEARNING OBJECTIVES:

- पश्चिम बंगाल में पर्यावरण संरक्षण के प्रयास से अवगत कराना।
- प्राकृतिक संतुलन की निरंतरता हेतु पर्यावरण का संरक्षण के प्रति सजगता का विकास।
- वर्तमान युग में औद्योगिकीकरण, नगरीकरण की चुनौतीपूर्ण परिस्थितियों की अभिव्यक्ति संबंधी सृजनात्मकता का विकास।
- अनुसंधान, लेखन और सहयोग कौशल संबंधी स्थितियों की परख तथा उपयुक्त भाषा-कौशल का विकास।

LEARNING OUTCOME:

- पश्चिम बंगाल में पर्यावरण संरक्षण के प्रयास और उसके मूल उद्देश्य से परिचित हुए।
- विद्यार्थी राज्य सरकार द्वारा चलाए जा रहे अभियानों जैसे 'हरित पश्चिम बंगाल' से परिचित हुए।
- कचरा प्रबंधन, जल संरक्षण और प्लास्टिक प्रतिबंध जैसे उपायों की व्यावहारिक सामाजिक महत्त्व को जानने में सक्षम हुए।
- पश्चिम बंगाल में पर्यावरणीय समस्याओं और उनके समाधान के प्रयासों का विश्लेषण करने में सक्षम हुए।
- पर्यावरण संरक्षण से संबंधित अपने विचारों को मौखिक और लेखन रूप में प्रभावशाली ढंग से सचित्र अभिव्यक्ति के लिए उपयुक्त भाषा-कौशल का विकास हुआ।

RUBRICS FOR CLASS- IX

मानदंड	5	4	3	2
विषय-वस्तु का प्रभावी और सृजनात्मक वर्णन (5)	विषय सामग्री से जुड़े तथ्यों पर गहरा शोध और लेख में सटीक एवं विषयानुरूप वर्णन भूमिका और निष्कर्ष के साथ है।	एक या दो तथ्यात्मक त्रुटियों के अलावा अधिकांश तथ्य सही एवं विषयानुरूप है। भूमिका और निष्कर्ष त्रुटियों के साथ है। प्रश्नोत्तर से पहले भूमिका स्पष्ट नहीं थी ।	कुछ तथ्य विषयानुरूप है पर तीन से अधिक त्रुटियाँ पाई गई हैं।	प्रयुक्त लेखों में विषय सामग्री स्पष्ट नहीं है।
तकनीक एवं इंटरनेट संसाधनों का रचनात्मक प्रयोग एवं चित्र संकलन (5)	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए ग्राफिक्स, इंटरनेट संसाधनों, तस्वीरों का अच्छा उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए ग्राफिक्स, इंटरनेट संसाधनों, तस्वीरों का कुछ उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए ग्राफिक्स, इंटरनेट संसाधनों, तस्वीरों का कम उपयोग।	परियोजना के विषय की प्रभावी अभिव्यक्ति के लिए ग्राफिक्स, इंटरनेट संसाधनों, तस्वीरों का उपयोग नहीं किया गया ।
भाषा का प्रयोग (5)	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण-विन्यास एवं विराम चिह्न संबंधी त्रुटियाँ न होना। सहज एवं बोधगम्य भाषा का उपयुक्त प्रयोग।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण-विन्यास एवं विराम चिह्न संबंधी कुछ ही त्रुटियों का होना।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण-विन्यास एवं विराम चिह्न संबंधी त्रुटियों के कारण भाषा की उपयुक्तता का अभाव पाया जाना।	प्रस्तुतीकरण में वाक्य-विन्यास, वर्ण-विन्यास एवं विराम चिह्न संबंधी त्रुटियों के कारण विषयानुसार भाषा का प्रयोग न हो पाना।
समग्र प्रस्तुति (5)	परियोजना का समग्र प्रभाव रोचक और आकर्षक।	परियोजना का समग्र प्रभाव ध्यान आकर्षण के लिए पर्याप्त।	परियोजना की समग्र प्रस्तुति को आकर्षक बनाने के लिए कुछ ही प्रयास किया गया।	समग्र प्रस्तुति को रोचक बनाने के लिए विद्यार्थी ने किसी प्रकार का प्रयास नहीं किया।

SUBJECT : BENGALI 2ND LANGUAGE

TOPIC : Eco – friendliness in your state

পরিযোজনা কার্যের উদ্দেশ্য :

➢ Eco – friendliness বলতে কী বোঝায় সে সম্পর্কে ধারণা লাভ করা।

➢ এ বিষয়ে পশ্চিমবঙ্গ রাজ্য সরকারের নানাবিধ উদ্যোগ সম্পর্কে অবহিত হওয়া ।

➢ পরিবেশ রক্ষায় নিজেদের সচেতন করে তোলা।

➢ সৃজনশীলতার বিকাশ।

➢ ভাষাশৈলির বিকাশ ।

➢ ব্যবহারিক প্রয়োগক্ষমতা বৃদ্ধি।

➢ ভাষার ব্যবহার ও বিচারশক্তির বিকাশ ।

পরিবেশ মানব জীবনের একটি অবিচ্ছেদ্য অংশ। প্রাকৃতিক ভারসাম্য বজায় রাখার জন্য পরিবেশ সংরক্ষণ অত্যন্ত গুরুত্বপূর্ণ। বর্তমান যুগে শিল্পায়ন, নগরায়ণ এবং নির্বিচারে বন কাটার ফলে পরিবেশের উপর মারাত্মক বিরূপ প্রভাব পড়ছে। আমাদের রাজ্য পশ্চিমবঙ্গে পরিবেশ সুরক্ষার ক্ষেত্রে ধারাবাহিক এবং শক্তিশালী উদ্যোগ গ্রহণ করেছে। রাজ্য সরকার একবার ব্যবহারযোগ্য প্লাস্টিকের উপর কঠোর নিষেধাজ্ঞা জারি করেছে এবং নাগরিকদের টেকসই বিকল্পের প্রতি শিক্ষিত এবং অনুপ্রাণিত করা হচ্ছে। বন সম্পদ বৃদ্ধির জন্য, 'সবুজ পশ্চিমবঙ্গ'-এর মতো উদ্ভাবনী প্রচার পরিচালিত হচ্ছে, বৃক্ষরোপণে জনসাধারণের অংশগ্রহণ এই উদ্যোগকে এক অন্য মাত্রা দিয়েছে। পরিবেশ সুরক্ষার জন্য ভবিষ্যৎ প্রজন্মের মধ্যে প্রকৃতির প্রতি দায়িত্ববোধ জাগিয়ে তোলার উপর আলোকপাত করে একটি চিত্রিত পাওয়ারপয়েন্ট উপস্থাপনা কর যাতে থাকবে

➢ Eco – friendliness ধারণাটির সুস্পষ্ট ব্যাখ্যা

➢ এ বিষয়ে পশ্চিমবঙ্গ রাজ্য সরকারের নানাবিধ উদ্ভাবনী চিন্তাধারা

➢ রাজ্য সরকারের নেওয়া বিভিন্ন পদক্ষেপের উদাহরণসহ বিস্তারিত আলোচনা।

পরিযোজনা কার্যের কাঙ্ক্ষিত ফলাফল:
        এই প্রকল্পটি সম্পন্ন করার মধ্য দিয়ে শিক্ষার্থীরা Eco – friendliness কথাটির অর্থ ও গুরুত্ব সম্পর্কে অবহিত হবে। নিজের রাজ্যে নেওয়া বিভিন্ন পদক্ষেপ ও তার গুরুত্ব বুঝতে সক্ষম হবে। পরিবেশের প্রতি সচেতনতা জাগিয়ে তুলতে সক্রিয় অংশগ্রহনে উৎসাহ পাবে।

RUBRICS

দক্ষতা	4	3	2	1

বিষয়বস্তু (4 Marks)	সকল বিষয়ে সঠিকভাবে লেখা হবে এবং প্রতিটি ক্ষেত্র পৃথকভাবে উল্লেখিত হবে।	প্রতিটি বিষয়ের উল্লেখ থাকলেও তথ্যের অপ্রতুলতা	প্রয়োজনীয় প্রতিটি ক্ষেত্রের উল্লেখের অভাব।	অসম্পূর্ণ কাজ।
গবেষণা (4 Marks)	প্রতিটি ক্ষেত্রের যথাযথ তথ্যের উল্লেখ।	কোন একটি বা দুটি ক্ষেত্রে তথ্যের অপ্রতুলতা।	প্রতিটি ক্ষেত্রেই তথ্যের অভাব।	ভুল তথ্য প্রদান
সৃজনশীলতা (4 Marks)	বিষয়বস্তুর সাথে সমতা বজায় রেখে মৌলিক চিন্তার প্রকাশ	বিষয়বস্তুর সাথে সমতা থাকলেও মৌলিকতার অভাব।	বিষয়বস্তুর সাথে সামঞ্জস্যহীন	শিরোনামের অনুপস্থিতি
শিল্পকলার প্রয়োগ (4 Marks)	পরিচ্ছন্ন ও উপযুক্ত প্রচ্ছদ, উপযুক্ত শিল্প ভাবনা	উপযুক্ত প্রচ্ছদ থাকলেও সৃজনশীলতার অভাব	্পযুক্ত প্রচ্ছদের অভাব	প্রচ্ছদের অনুপস্থিতি
উপস্থাপনা (4 Marks)	নিখুঁত , উপযুক্ত উপস্থাপনা	উপস্থাপনা কার্যে আত্মবিশ্বাসের অভাব	উপস্থাপনা কার্যে উপযুক্ত শব্দ চয়নের অভাব	্পস্থাপনা কার্যে ভুলের বাহুল্য