Class VI to VIII ARTIFICIAL INTELLIGENCE CURRICULUM (AI)

WEEK - I

Module Name: Demystify			
Sessions	Topics	Duration	
Unit 1	 What is Artificial Intelligence (AI)? How is Artificial Intelligence different from Automation? 	7 hours	
What is AI - How does AI work	What are the applications of Al? Where is it used in everyday life?		
	How does Al work? What are the types of Al?		
Unit 2	What are the three domains of Al? What are their applications in everyday life?	8 Hours	
Al & Other Technologies - Domains of Al	What is Computer Vision? Where do we use Computer Vision in everyday life?		

Topics & Activities:

1. What is AI?

- Simple definition (e.g., "Al is when machines can think or learn like humans")
- Show examples: Alexa, Siri, YouTube recommendations
- o Activity: "Guess Who is AI?" quiz with images/videos

2. Al vs Automation

- o Explain the difference with stories and games (e.g., automatic fan vs. chatbot)
- o **Activity**: Match the task to either "Automation" or "AI"

3. Applications of AI in Daily Life

- o In education, games, Google Maps, smart home devices
- o **Activity**: "Spot the AI" students identify AI in a comic strip

4. How does AI Work? Types of AI

- Teach using the "learning like a human" concept (with examples)
- o Brief about types: ANI (Narrow AI), AGI (General), ASI (Super)
- Activity: Build a simple decision tree (like "Should I wear a jacket?")

Unit 2: Al & Other Technologies – Domains of Al

① Duration: 8 Hours Topics & Activities:

1. Three Domains of AI

- Data (Learning), Natural Language (Speaking/Understanding), Vision (Seeing)
- o Everyday examples: Google Translate, chatbots, image recognition
- o Activity: Group project Each group explains one domain using skit or poster

2. What is Computer Vision?

- o Explain how computers "see" images
- o Real-life examples: Face unlock, self-driving cars
- Activity: "Emoji Vision" students draw how they think a computer sees a
 face

3. Where is Computer Vision used?

- Security cameras, social media filters, Google Lens
- Activity: Use a basic app (like Teachable Machine by Google) to train computer to recognize objects

WEEK - II

Module Name: Demystify TABLE OF CONTENTS				
AI & Other Technologies Domains of AI	 Navigating Al Domains and Emerging Frontiers Natural Language Processing Applications of Natural Language Processing Statistical data Applications of Statistical Data 	8 hrs		
Artificial Intelligence: Exploring Innovations and Societal Sustainability	 Sustainability Importance of sustainability for society Sustainable Development Goals (SDGs) System thinking and System maps Purpose of System maps 	7 hrs		

Unit 1: Al & Other Technologies – Domains of Al

Duration: 8 Hours Topics & Activities:

1. Three Domains of Al

- o Data (Learning), Natural Language (Speaking/Understanding), Vision (Seeing)
- o Examples: Google Translate, chatbots, image recognition
- o Activity: Group project Each group explains one domain using skit or poster

2. What is Computer Vision?

- o Explain how computers "see" images
- o Examples: Face unlock, self-driving cars
- Activity: "Emoji Vision" students draw how they think a computer sees a face

3. Where is Computer Vision used?

o Security cameras, social media filters, Google Lens

 Activity: Use Teachable Machine (by Google) to train a computer to recognize objects

4. Navigating AI Domains and Emerging Frontiers

- o Explore cutting-edge AI trends (like robotics, generative AI, ethical AI)
- o **Activity**: Show-and-tell with short clips or news articles

5. Natural Language Processing (NLP)

- Basics of NLP (chatbots, voice assistants)
- Activity: Chatbot interaction game or story-telling with AI

6. Applications of NLP

- Translation apps, email filters, smart replies
- o Activity: Translate simple sentences using AI tools

7. Statistical Data in Al

- Introduction to how AI uses numbers to learn
- Activity: Students collect favorite fruit stats and draw bar graphs

8. Applications of Statistical Data

- Surveys, Al predictions (weather, games)
- Activity: Class mini-survey and discussion

Unit 2: Artificial Intelligence - Exploring Innovations and Societal Sustainability

Duration: 7 Hours
Topics & Activities:

1. Sustainability and AI

- What is sustainability and why it matters
- o How AI helps in clean energy, farming, and climate monitoring
- o **Activity**: Green tech storybook or poster

2. Importance of Sustainability for Society

- o Link between environment, people, and innovation
- o Activity: Create a "Sustainable Village" model in groups

3. Sustainable Development Goals (SDGs)

o Explore UN goals like clean water, quality education, climate action

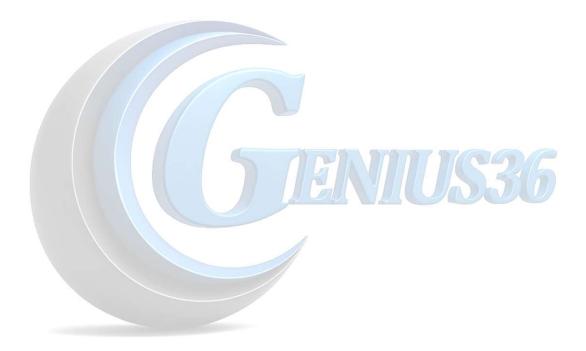
o **Activity**: Match Al applications to SDG cards

4. System Thinking and System Maps

- o Explain how parts of a system (like traffic or school) are connected
- o **Activity**: Draw a system map (e.g., lunch system at school)

5. Purpose of System Maps

- o Help visualize problems and find AI solutions
- o **Activity**: Group discussion on AI ideas to solve real problems



WEEK III

TABLE OF CONTENTS			
Sessions	Topics	Duration	
Introduction to Al Project Cycle & Al Ethics	 What is AI project cycle? What are the different stages of AI project cycle? What is the importance of each stage? What is ethics? What is AI ethics? 	8 hrs	
Project 0: Presentation	 How to map an AI solution to the three domains of AI? How to map the AI use case to the different stages of the AI project cycle? 	7 hrs	

Unit 4: Introduction to Al Project Cycle & Al Ethics

- 1. What is Al Project Cycle?
 - Phases: Problem Scoping, Data Acquisition, Data Exploration, Modeling,
 Evaluation
 - Activity: Role-play each phase of the cycle
- 2. Importance of Each Stage
 - Why each phase matters for successful Al projects
 - Activity: Break down a real-world AI example into stages
- 3. Ethics in Al
 - o What is ethics? What is AI ethics?
 - o Real examples of ethical dilemmas (e.g., facial recognition, bias)
 - o **Activity**: Debate or scenario-based group discussion
- **⑥** Unit 5: Project 0 − Al Presentation & Mapping

Duration: 7 Hours Topics & Activities:

- 1. Mapping AI Solution to AI Domains
 - o Understand how one use case connects to data, NLP, or vision
 - Activity: Use-case worksheet and mapping exercise
- 2. Mapping Use Case to AI Project Cycle
 - o Trace how a student-chosen problem goes through the full cycle
 - o **Activity**: Presentation preparation and peer feedback session.