MY DREAM ECO-SMART SCHOOL

Objective

Design an Eco-Smart School of the Future.

Session 1: Data Collection and Organisation

Activity

Data Gathering in Word

- **Task**

  Collect information on eco-friendly practices in school such as electricity usage, water consumption, recycling habits or tree plantation drives.

- **Skills Practiced**

  - Creating and formatting tables in Word.
  - Inserting headings, bullet points and images.
  - Writing short observations and notes.

Outcome for Session 1

A well-organised Word document with data tables and notes representing the school's eco-friendly habits.

Session 2: Data Analysis and Visualising

Activities

1. **Data Analysis in Excel**

   - **Task**

     Create a worksheet using data from the Word document with months, categories (e.g., electricity usage, water consumption, recyclables) and their values for easy organisation and analysis.

- **Skills Practiced**
  - Using different data types to enter the data.
  - Moving and deleting data if required.

2. **Visual Presentation in PowerPoint**
   - **Task**

     Create a presentation using the data collected from Session 1. Insert various graphical elements to make the presentation more engaging and visually appealing.
   - **Skills Practiced**
     - Using a suitable layout for the theme.
     - Formatting graphical objects.
     - Using Master Slide feature.

Outcome for Session 2

An Excel file with clean data tables and an engaging PowerPoint presentation that showcases the data visually.

Session 3: AI with Scratch and Mobile App

Activities

1. **Interactive AI Project in Scratch**
   - **Task**

     Create a Scratch project using the **Text to Speech** extension, featuring a Robot and Student discussing energy-saving tips, technology and green practices like recycling and renewable energy.
   - **Skills Practiced**
     - Coding in Scratch
     - Using extension for interactive elements.
     - Using variables, broadcasts and received blocks for interactive behaviour.

2. **App Development with MIT App Inventor**

   - **Task**

     Create a simple app prototype called **Eco-Smart Helper**, where users can press a button to receive eco-friendly tips for the school or take an energy-saving challenge.

   - **Skills Practiced**

     - Designing a mobile app user interface (UI).
     - Creating basic functionality with MIT App Inventor (buttons, screens).

Outcome for Session 3

An interactive Scratch project and a mobile app prototype featuring innovative ideas.

Final Deliverables

Tick (✓) the box if submitted:

- Word document with data tables and notes
- Excel file with clean data tables
- Engaging PowerPoint presentation
- Interactive Scratch project
- Mobile app prototype

This project helps students learn how technology, AI and eco-friendly ideas can be combined to make a school that is fun, smart and good for the environment. They will use a mix of creativity, technology and real-world thinking to bring their Eco-Smart School to life.