

Government Polytechnic for Girls, Ahmedabad

Department Of Information Technology



**A report on a Hands-on session of
“Python Programming”
Academic Year: 2025-26**

Objective

The Information Technology Department organized a seminar on Python Programming to provide students with an understanding of the fundamentals and practical applications of the Python programming language. Python is one of the most widely used programming languages in the industry today, known for its simplicity, versatility, and strong community support. The seminar aimed to introduce participants to Python basics, best practices, and its real-world applications in areas such as web development, data science, automation, and artificial intelligence.

Details of the Speaker:

Name of the Speaker: Mr. Anurag Kalmodiya

Organization of the Speaker: IANT, 4th Floor, Murlidhar Complex, Fatehpura Cross Rd., Opp. Ankur School, Paldi, Ahmedabad - 380 007. Gujarat, INDIA.

Details of the students:

Programme: Diploma in Information Technology.

Semester: First Semester.

Number of Students present: 110

Date : 09/09/2025

Time : 2 to 4

Seminar Content and Highlights

The seminar was conducted in an interactive manner, combining theoretical knowledge with live demonstrations. The key topics covered included:

- **Introduction to Python:** History, evolution, and features that make Python a preferred language.
- **Setting Up the Environment:** Installation of Python, using IDEs like PyCharm, VS Code, or Jupyter Notebook.
- **Basic Syntax and Data Types:** Understanding variables, operators, strings, numbers, lists, tuples, dictionaries, and sets.
- **Control Flow:** If-else statements, loops (for, while), and nested conditions.
- **Functions and Modules:** Writing reusable code, creating and importing modules.
- **Exception Handling and File Operations:** Writing robust code and handling files effectively.
- **Introduction to Libraries:** Overview of popular libraries such as NumPy, Pandas, Matplotlib, and their applications.
- **Career Scope:** Insights into how Python is used in fields like data science, machine learning, automation scripting, web development, and AI.

Photographs of the lecture:



Conclusion:

The Python Programming seminar successfully introduced students to one of the most important programming languages in the industry. The session was informative, interactive, and beneficial for students looking to strengthen their programming skills and career prospects.

Mapping with Programme Outcomes:

Addressed	PO-1 Engineering knowledge
Addressed	PO-2 Problem Analysis
Addressed	PO-3 Design / development of solution
Addressed	PO-4 Engineering Tools, Experimentation & Testing
Not Addressed	PO-5 Engineering Practices for society, Sustainability and Environment
Not Addressed	PO-6 Project Management
Addressed	PO-7 Life-long learning solution