



# SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

(Sponsored by the Exhibition Society), Tarnaka, Secunderabad

Affiliated to Osmania University, Approved by AICTE & PCI

ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course



SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Co-Ed.)

(Sponsored by the Exhibition Society)

Affiliated to Osmania University, Approved by PCI-New Delhi

NBA Accredited B. Pharmacy Course - NAAC Accredited with A+ Grade

UGC AUTONOMOUS INSTITUTION



## CIRCULAR

24-01-2026

All the Registered Teaching Staff of SNVPMV are hereby informed that the college is organizing a **Five-Day Faculty Development Program (FDP)** as per the details given below:

### Title of the FDP:

"Introduction to Artificial Intelligence & Machine Learning for Pharmacy Teachers"

### Duration:

From 27th January 2026 to 31st January 2026

### Time:

9:00 AM to 5:00 PM

### Venue:

SNVPMV, Tarnaka, Hyderabad

### Resource Persons:

1. **Dr. D. Shanthi** – Professor & HOD, Dept. of IT, Vignan's Institute of Management and Technology for Women
2. **Dr. Naadem Divya** – Associate Professor, Dept of CSE (Data Science), Sreenidhi Institute of Science and Technology (SNIST), Hyderabad
3. **Mr. Samudrala Varun Chandra** – Senior Software Engineering Consultant at CADvision Labs Pvt Ltd, Hyderabad
4. **Dr. K. Premnadh** – Assistant Professor, Dept. of CSE (data Science), Sreenidhi Institute of Science and Technology (SNIST), Hyderabad
5. **Mrs. Kumudini R. Bolleboina** – Entrepreneur/ Director & COO, Metalog Pvt Ltd, Hyderabad

The FDP aims to equip pharmacy teachers with basic knowledge and practical insights into Artificial Intelligence and Machine Learning, fostering their ability to adopt innovative technologies in pharmacy education, research, and healthcare practices. All are informed to attend and make use of this opportunity.

All faculty members are encouraged to utilize this opportunity for professional growth and academic enrichment.

*R.V.S. Latha Sree*

Coordinator:

Mrs. RVS Latha Sree,  
Associate Professor, SNVPMV

*Dr. T. Mamata*

Principal

Dr. T. Mamata  
Professor, Dept of Pharm. Q.A



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### Teaching Staff

#### Introduction to Artificial Intelligence & Machine Learning for Pharmacy Teachers

Sl.No	Faculty Name	Designation	Signatures
1	Dr.N.Srinivas	Professor & Director	N.Srinivas
2	Dr.T.Mamatha	Professor & Principal	Am
3	Dr.B.Haarika	Professor & Vice-Principal	B.H
4	Dr.S.Hemalatha	Professor & HOD	Sh
5	Dr.S.Anuradha Bai	Professor & HOD	Sh
6	Dr.T.Venu	Professor & HOD	Dr. T. Venu
7	Dr.Vivek Sagar	Professor & HOD	Dr. Vivek Sagar
8	Dr. B. Chandra Shekar Reddy	Professor & HOD	B. Chandra Shekar Reddy
9	Smt.R.V.S.Latha Sree	Associate Professor	R.V.S.Latha Sree
10	Dr.B. Siva Jyothi	Associate Professor	B. Siva Jyothi
11	Dr. S.Rohini Reddy	Associate Professor	S.Rohini Reddy
12	Dr.K.Vinutha	Associate Professor	K.Vinutha
13	Dr. M. Sreekanth	Associate Professor & HOD	M. Sreekanth
14	Dr. P. Ravi Kumar	Associate Professor & HOD	P. Ravi Kumar
15	Dr. T. Vani	Associate Professor	T. Vani
16	Dr.Ch.Bhargavi	Assistant Professor	Ch.Bhargavi
17	Smt.N.Indira Rani	Assistant Professor	N.Indira Rani
18	Smt.S.Muni Sireesha	Assistant Professor	S.Muni Sireesha
19	Dr.Akaram Sujala	Assistant Professor	Akaram Sujala
20	Mr. D. Suresh	Assistant Professor	D. Suresh
21	Mrs. Samreen	Assistant Professor	Mrs. Samreen



## **REPORT ON 5-DAY FDP PROGRAM ON THE THEME “INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING FOR PHARMACY TEACHERS”**

**Dates:** 27-01-26 to 31-01-26

**Programme Coordinator:** Mrs. R.V.S. Latha sree, Associate Professor, SNVPMV

**Faculty support team:** 1. Mrs.M. Sireesha, Assistant Professor, SNVPMV

2. Ms.S. Divya Assistant Professor, SNVPMV

3. Mrs. Samreen Begum, Assistant Professor, SNVPMV

4. Mrs. Sunayana, Assistant Professor, SNVPMV

**No. of Participants:** 23

### **INTRODUCTION**

The Five-Day Faculty Development Programme (FDP) on “Introduction to Artificial Intelligence (AI) and Machine Learning (ML) for Pharmacy Teachers” commenced successfully with its Day-1 inauguration and technical sessions.

### **Inaugural Session**

The programme began at 10:00 am with the inaugural ceremony, wherein the resource persons, Principal, Director, Vice-Principal, and the Programme Organiser, Mrs. Latha Sree, were invited onto the dais. Three distinguished resource persons Dr. D. Shanthi, Dr. N. Divya, and Dr. S. Samudrala Varun Chandra have attended inaugural session and eco-friendly greetings were extended to them.

The inauguration was marked by the lighting of the ceremonial lamp, followed by a prayer song rendered by Ms. Tanmayee Pharm D II year student, setting an auspicious tone for the programme.

### **Welcome and Inaugural Addresses**

The Welcome Address was delivered by the Principal, Dr. T. Mamatha, who highlighted that the FDP was conceptualized as per the vision of A. V. Srikanth Sir. She briefed the participants about the five-day programme structure, emphasizing the importance of interactive sessions and an evaluation test at the end of the FDP to assess learning outcomes.

The Director, Mr. Srinivas, addressed the gathering and expressed his gratitude to all coordinators and organizers. He emphasized that the primary objective of the FDP was to train faculty members by integrating trial-and-error human learning processes into AI systems, thereby reducing loss and improving efficiency in education and research.

The Programme Organiser, Mrs. Latha Sree, welcomed all participants and stated that the FDP





was specifically designed for pharmacy teachers. She elaborated on the objective, relevance and outcomes of this FDP. Also explained the difference between the three terms AI, Python, and Machine Learning citing real-world applications such as face recognition in mobile devices. She also provided an overview of the five-day FDP schedule.

### Introduction of Resource Persons

- Mrs. Sunayna, Assistant Professor, presented a brief profile of Dr. D. Shanthi and invited her to address the participants. In her address, Dr. D. Shanthi advised the participants to focus on research in their respective areas and to incorporate Artificial Intelligence into their work, emphasizing that meaningful research begins after the completion of a PhD.
- Mrs. Samreen Begum, Assistant Professor, introduced Dr. N. Divya and later gave an introduction to Dr. S. Varun Chandra. In her address, Dr. N. Divya spoke about Artificial Intelligence and Machine Learning, various algorithms, and Python programming, and expressed her gratitude to Mr. A. V. Srikanth for organizing the FDP.
- Dr. S. Varun Chandra, while addressing the gathering, shared a brief childhood **anecdote** and interacted with the participants in Telugu, making the session engaging and relatable before proceeding with his technical presentation.

The Vote of Thanks was proposed by Dr. Harika, vice-principal, acknowledging the efforts of the management, organizers, resource persons, and participants.

### Participants' Introduction

A total of 23 participants attended Day-1. Each participant introduced themselves by sharing their name and teaching experience, promoting interaction and collegial learning.





**Day 1-27<sup>th</sup> January 2026**

**Session 1**

The first technical session was conducted by Dr. D. Shanthi on the topic “Foundations of Artificial Intelligence”. Dr. Shanthi then provided a comprehensive overview of Artificial Intelligence, beginning with its introduction and historical evolution, and explained the AI life cycle in a structured manner. The session covered various applications of AI across multiple domains, with particular emphasis on its significance and growing role in pharmacy education, research, and professional practice.

The speaker elaborated on commonly used AI-related buzzwords such as Artificial Intelligence, Machine Learning, and Deep Learning, and clearly distinguished these concepts from traditional programming approaches. Different types of learning methods, including supervised, unsupervised, and reinforcement learning, were discussed in detail. Fundamental concepts such as regression and classification, clustering, and dimensionality reduction were explained using simple examples for better understanding. In addition, participants were introduced to essential Python libraries such as NumPy and Pandas, along with a brief overview of neural network technology. The session was highly interactive, encouraging active participation, discussions, and clarification of doubts, which helped participants build a strong foundational understanding of AI and ML concepts relevant to pharmacy education and research.

**Lunch break:** 1:00 pm-1:30 pm





## Session 2

The session covered the applications of Artificial Intelligence across various domains and explained key AI-related terminologies, including Artificial Intelligence, Machine Learning, and Deep Learning, highlighting their differences from traditional programming approaches.

The speaker discussed the types of AI learning approaches, namely supervised learning, unsupervised learning, and reinforcement learning, and elaborated on core concepts such as regression and classification, clustering, and dimensionality reduction. An introduction to essential Python libraries, including NumPy and Pandas, was also provided, along with an overview of neural network technology.

The session was interactive and informative, offering participants a strong foundational understanding of AI and ML concepts, with particular emphasis on their relevance to pharmacy education and research.

Overall, Day 1 of the FDP concluded successfully with enthusiastic participation and active engagement from faculty members. The sessions laid a strong conceptual foundation for the forthcoming days of the programme and effectively highlighted the importance of Artificial Intelligence and Machine Learning in pharmacy teaching, research, and real-world applications. At the end of the session, Dr. D. Shanthi was felicitated with a memento as a token of appreciation and gratitude for her valuable contribution and insightful deliberations during the programme.





### **Day 2-28<sup>th</sup> January 2026**

#### **Session 1**

Day 2 of the Faculty Development Programme (FDP) was conducted successfully with continued technical sessions by Dr. N. Divya, focusing on Machine Learning essentials. The sessions were well-structured and were delivered using detailed PowerPoint presentations.

The day began with a recap of the previous day's concepts, followed by an in-depth discussion on Machine Learning fundamentals. Dr. Divya explained the definition and scope of Machine Learning, emphasizing its relevance and applications in the field of pharmacy and healthcare research. The difference between Artificial Intelligence, Machine Learning, and Deep Learning was revisited for better conceptual clarity.

The sessions covered important Machine Learning algorithms, including:

- Supervised learning algorithms such as regression and classification
- Unsupervised learning algorithms such as clustering
- An overview of model training, testing, and validation

Dr. Divya discussed commonly used Machine Learning workflows, explaining how data is collected, pre-processed, analyzed, and used for building predictive models. The importance of data quality, feature selection, and evaluation metrics was highlighted. Real-time and practical examples were shared to help participants understand how Machine Learning models can be



applied in pharmaceutical research, drug development, and data analysis.

Lunch break: 1:00 pm-1:30 pm

## Session 2

Session 2 of day 2 generally focused on introducing faculty members and research scholars to key concepts of classification and clustering in Machine Learning, with emphasis on pharmaceutical and healthcare applications. The session explained supervised and unsupervised learning, highlighting classification, prediction, and clustering techniques with real-world examples.

The session covered the classification process, including model construction, testing, and accuracy evaluation. Major algorithms such as Naïve Bayes, Neural Networks with backpropagation, Linear and Logistic Regression, and k-Nearest Neighbors (KNN) were discussed to provide a strong conceptual foundation.

Unsupervised learning methods including K-Means and Hierarchical Clustering were also explained, focusing on their working principles, advantages, limitations, and applications in patient segmentation and clinical decision-making. Overall, Session 2 was informative and effective in enhancing participants' understanding of machine learning techniques and their practical relevance in academic, research, and healthcare domains.

Overall, Day 2 of the FDP was informative and engaging. It strengthened the participants' foundational knowledge of Machine Learning and its practical relevance for pharmacy teachers, setting a strong base for the advanced topics planned for the subsequent days of the programme.

At the end of the session, Dr. N. Divya was felicitated with a memento as a token of appreciation and gratitude for her valuable contribution and insightful deliberations during the programme.







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### Day 3-29<sup>th</sup> January 2026

Day 3 of the program commenced with a warm welcome to Dr. K. Premnadh, Associate Professor, Department of Computer Science and Engineering (Data Science), Sreenidhi Institute of Science and Technology (SNIST).

Dr.K. Premnadh gave his session on the topic “ Python setup and core basics”. The guest was welcomed with eco-friendly greetings, followed by a brief introduction highlighting his academic expertise and teaching experience.

The session began with a focus on “Introduction to Programming and Python”, emphasizing its relevance in modern technology and interdisciplinary applications. He explained the fundamentals of computer systems, including hardware and software components, computer architecture, memory types, and storage devices.

Dr. Premnadh provided a clear overview of computer languages, explaining the evolution from machine language to symbolic language and high-level languages, with special emphasis on C and Python. He discussed the program development process, including writing, compiling, linking, and executing programs, along with an introduction to the System Development Life Cycle (SDLC) and problem-solving methodologies such as algorithms, pseudocode, and flowcharts.

The session further highlighted Python programming, covering its history, features, modes of execution (interactive and script mode), and areas of application such as data science, machine learning, web development, artificial intelligence, and pharmaceutical research. Key Python



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concepts including basic syntax, variables, data types, operators, conditional statements, loops, input–output operations, and data structures (lists, tuples, sets, dictionaries) were explained with examples.

Dr. Premnadh also discussed the importance of Python in pharmaceutical and research domains, including drug discovery, molecular modeling, clinical trials, quality control, data analysis, and bioinformatics. In-between a lunch break was taken from 1:00 pm to 1:30 pm. The session concluded with an interactive discussion, where faculty gained clarity on programming fundamentals and the practical importance of Python in academics and industry.

Overall, the session was highly informative and engaging, providing faculty with a strong foundation in programming concepts and insights into real-world applications of Python.





### **Day 4-28<sup>th</sup> January 2026**

Day 4 of the program was also conducted by Dr. K. Premnadh, Associate Professor, Department of Computer Science and Engineering (Data Science), Sreenidhi Institute of Science and Technology (SNIST) on topic “Python programming and Mini-project”. The session continued from previous day.

The session began with an explanation of conditional statements in Python, including single conditional statements and nested if conditions, highlighting their importance in decision-making within programs. Dr. K. Premnadh emphasized the role of logic and conditions in controlling program flow.

He then explained algorithms and their pictorial representation using flowcharts, helping students understand how program logic can be visualized before coding. He clearly stated that every program consists of three fundamental components: declaration, condition, and iteration, which form the backbone of any programming structure.

The session continued with a discussion on repetitive and iterative statements, followed by an overview of loops in Python. The four types of Python loops were explained along with their applications. Input and output statements were also discussed to demonstrate how data is accepted from users and displayed as output.

Dr. K. Premnadh further covered collection-related data types in Python such as List, Tuple, Set, Dictionary, and Bytes, explaining their features and usage in organizing and managing data efficiently. Towards the end of the session, a brief introduction to Tkinter was given to create awareness about Python.

At the end of the session, an online multiple-choice test was conducted to assess the students’ understanding of the concepts covered during the lecture. In-between a lunch break was taken from 1:00 pm to 1:30 pm.

Overall, Day 4 was an engaging and informative session that enhanced students’ conceptual clarity in Python programming, control structures, loops, and data handling. At the end of the session, Dr. K. Premnadh was felicitated with a memento as a token of appreciation and gratitude for her valuable contribution and insightful deliberations during the programme.

### **Day 5-28<sup>th</sup> January 2026**

On Day 5 of the Faculty Development Programme, three insightful and interdisciplinary sessions were conducted, focusing on the topic “AI/ML in Pharmaceutical Sciences”.

The first session was delivered by Mr. Varun Chandra S on *Industrial Applications of AI and ML in Pharmaceuticals*. The session covered the role of AI/ML in drug discovery, formulation development, quality control, supply chain optimization, pharmacovigilance, and bioinformatics. Advanced concepts such as protein structure prediction (AlphaFold), neural networks, clustering techniques, and gene prediction models were explained, highlighting how





AI is transforming pharmaceutical research and industry practices.

The second session was delivered by Mrs. Kummudini R. Bolleboina, Entrepreneur, Director & COO, on the topic “Digital Therapeutics in Pain Management: The Role of Immersive and Cognitive Technologies”. The speaker provided valuable insights into the emerging field of digital therapeutics, emphasizing the use of virtual reality, immersive technologies, and cognitive-behavioral interventions in pain management. The session highlighted the transition from conventional pharmacological approaches to technology-enabled, patient-centric, and non-invasive therapeutic solutions, and discussed their implications for clinical practice and pharmacy education.

The third session, again handled by Mr. Varun Chandra S, focused on *Research Applications of AI and ML*. This session emphasized the use of AI/ML in QSAR/QSPR modeling, clinical trials, personalized medicine, chemical topic modeling, dimensionality reduction, and genomics-based research. The integration of machine learning algorithms, decision trees, finite state machines, and deep learning models in biomedical data analysis was explained with relevant examples.

Day 5 of the FDP successfully demonstrated the synergistic role of AI, ML, and digital therapeutics in modern healthcare and pharmacy practice. The sessions enriched participants’ understanding of emerging technologies, interdisciplinary research opportunities, and future-ready teaching strategies, making the final day of the FDP highly informative and impactful.

At the end of all session, Mr. Varun Chandra S and Mrs. Kumudini was felicitated with a memento as a token of appreciation and gratitude for her valuable contribution and insightful deliberations during the programme.





### **Valedictory Session**

At the end of the programme, a valedictory session was conducted to mark the successful conclusion of the FDP. The resource persons Mr. Premnadh, Mrs. Kummudini R. Bolleboina, Dr. Divya, & Mr. Varun Chandra S shared their experiences and reflections on the FDP, appreciating the active participation and enthusiastic interaction of the participants throughout the programme.

Following this, the Vote of thanks was proposed by Mrs. R. V. S. Lathasree, expressing sincere gratitude to the management, resource persons, organizing committee, and participants for their support and cooperation. Certificates of Participation were distributed to all participants, and the organizing team was honored with Certificates of Appreciation in recognition of their efforts in successfully conducting the FDP.

In the concluding segment, the participants shared their feedback and expressed their satisfaction with the FDP, highlighting the relevance of the theme, quality of sessions, and overall organization of the programme. The valedictory session concluded on a positive note, reflecting the success and impact of the FDP.





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