

(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

### LIST OF COURSES FOR THE A. Y 2022-23

S. No	Name of the course
1	Drug Discovery from Natural Products
2	Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny
3	<u>QbD implementation strategies: from theory to</u> <u>practice</u>
4	Artificial Intelligence (AI) in the Pharmaceutical Industry
5	Animal handling
6	Regulatory Affairs in Pharmaceutics
7	Clinical Trials and Research Methods
8	Hands-on Training on Analytical Instruments

T. Sove typesh

PRINCIPAL Satojini Naidu Vanita Phatmacy Maha Vidyalay: Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Drug Discovery from Natural Products"



(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



T. Sorityos



(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

#### **Detailed Program Schedule**

Name of Class: B. Pharm II year, B.	Course: "Drug Discovery
Pharm III year	from Natural Products"
Duration of Course: 15 Days	Duration: 2 Hours Time: 3:00 PM - 5:00 PM

Dates: 11<sup>th</sup> July to 29<sup>th</sup> July 2022.

Time: 3:00 PM – 5:00 PM

Duration: 30 hours

Number of students attended: 97

Organized by: Sarojini Naidu Vanita Pharmacy Mahavidyalaya

Coordinator: Mrs. M Rajeswari, Assistant Professor Department of Pharmacognosy.

Schedule: "Drug Discovery from Natural Products"

Session	Date & Time	Topic Name
1	11/07/2022	Introduction to Medicinal Plants and Natural Products Introduction to instructors and faculty. Distribution of program materials.
2	12/07/2022	Historical use of medicinal plants. Ethical considerations and modern applications. Principles of Pharmacognosy and Phytochemistry
3	14/07/2022	Introduction to Pharmacognosy. Study of plant sources and their properties. Methods of plant identification.
4	15/07/2022	Phytochemical Analysis Techniques Techniques for isolating and identifying bioactive compounds.
5	16/07/2022	Hands-on lab experience in phytochemical analysis.
6	18/07/2022	Principles of quality control in herbal medicines. Regulatory standards and guidelines.
7	19/07/2022	Case studies on herbal product standardization.
8	20/07/2022	Practical exercises on herbal drug standardization. Analytical methods for quality assessment.
9	21/07/2022	Study of the use of plants in different cultures.
10	22/07/2022	Traditional knowledge and modern drug discovery.
11	23/07/2022	Ethical considerations in Ethno pharmacological research
12	26/07/2022	In-depth exploration of traditional medicine systems (e.g., Ayurveda, Traditional Chinese Medicine).
13	27/07/2022	Methods for screening the pharmacological activity of natural products.

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalayo Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

14	28/07/2022	In vitro and in vivo assays.
15	29/07/2022	Case studies on successful drug discovery from natural sources.

Course outcomes: After completion of this course, learners can

- 1. Understand an overview of Historical use of medicinal plants. Ethical considerations and modern applications
- 2. Understand Study of plant sources and their properties.
- 3. Explore the Methods of plant identification.
- 4. Practical Training on Techniques for isolating and identifying bioactive compounds.
- 5. Traditional knowledge and modern drug discovery.
- 6. In-depth exploration of traditional medicine systems (e.g., Ayurveda, Traditional Chinese Medicine).
- 7. Methods for screening the pharmacological activity of natural products both In vitro and in vivo assays

### Value added Course Report

Title: Drug Discovery from Natural Products Academic Year 2022-2023 Dates: July 11<sup>th</sup> to July 29<sup>th</sup>, 2022. Time: 3:00 PM – 5:00 PM Duration: 30 hours Number of students attended: 97 Organized by: Sarojini Naidu Vanita Pharmacy Mahvidyalaya Coordinator: Mrs. M. Rajeswari, Assistant Professor, Department of Pharmacognosy Introduction: Drug Discovery from Natural Products aimed to offer a Comprehensive understanding the use of medicinal plants, Phytochemical Analysis, Practical exercises on herbal drug standardization, Case studies on successful drug discovery from natural sources. Spanning over 30hours.

#### **Program Objectives**

The primary objectives of the value added course were:

- To educate students about the significance of Natural products in drug discovery.
- To provide insights into the principles of pharmacognosy and phytochemistry.
- To offer practical knowledge about Herbal drug standardization and quality control.
- To promote an understanding of traditional medicine systems and their role in modern drug development.

T. Carilyo



(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

• To equip students with the skills and knowledge needed to pursue careers in natural product-based drug discovery.

#### **Program Overview**

The program comprised 15 sessions, each lasting 2 hours, and covered various aspects of Drug Discovery from natural sources, emphasizing the principles of Pharmacognosy and phytochemistry.

#### **Key Session Highlights**

The 30-hour Value added course was designed to cover a wide range of topics, including: Session 1: Medicinal Plants in History, Principles of Pharmacognosy and Phytochemistry Speaker Name: Dr. V Jyothi, Professor & HOD, Department of Pharmacognosy, SNVPMV. Session 2: Phytochemical Analysis Techniques

**Speaker Name:** Dr. P. Praneetha, Associate Professor, Department of Pharmacognosy, SNVPMV.

Session 3: Herbal Drug Standardization and Quality Control

**Speaker Name:** Dr. S. Hemalatha Professor & HOD, Department of Pharmaceutical Chemistry

Session 4: Ethnopharmacology and Traditional Medicine Systems

**Speaker Name:** Mrs. Leemol Varghese, Sr. Assistant Professor, Department of Pharmacognosy, SNVPMV

Session 5: Pharmacological Screening of Natural Products

**Speaker Name:** Dr. V Jyothi, Professor & HOD, Department of Pharmacognosy, SNVPMV.

**Conclusion:** The 30-hour Value added Program on Drug Discovery from Natural Products, organized by Sarojini Naidu Vanita Pharmacy Mahavidyalaya during the academic year 2022-23, was success. The program not only empowered students with essential knowledge but also ignited their passion for contributing to the field of Pharmacognosy and phytochemistry. We are confident that the skills and insights gained by the participants will prove beneficial in their future endeavors.

We express our gratitude to all the students, faculty members, and staff who made this program possible. Sarojini Naidu Vanita Pharmacy Mahavidyalaya remains committed to providing high-quality educational opportunities for aspiring pharmacists and pharmaceutical researchers.







T. Sorityoel

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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



Program Organizer: SNVPMV Department of Pharmacognosy Date: 02/08/2022



T. Souryyosh

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny"



(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





(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

# **Detailed Program Schedule**

Name of Class: M. Pharmacy	Course: Pharmaceutical Audits
(QA) III Semester, B. Pharmacy	& Inspections: Preparing for
III Year	Regulatory Scrutiny
Duration of Courses 15 Days	Duration: 2 Hours
Duration of Course: 15 Days	Time: 3:00 PM - 5:00 PM

Dates: 11th July to 29th July 2022

Time: 3:00 PM - 5:00 PM

Duration: 30 Hours

Number of students attended: 42

Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya

**Coordinator:** Dr. B. SivaJyothi, Associate Professor, Department of Pharmaceutical Quality Assurance.

Schedule: Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny

Session	Date & Time	Topic Name
1	11/07/2022	Introduction to Pharmaceutical Audits & Inspections
2	12/07/2022	Types of audits and inspections
3	14/07/2022	Regulatory landscape and requirements
4	15/07/2022	Importance of audit preparedness
5	16/07/2022	Pre-audit activities and documentation
6	18/07/2022	Opening meeting and document review
7	19/07/2022	Walk-through inspections and interviews
8	20/07/2022	Closing meeting and exit interview
9	21/07/2022	Responding to audit findings and corrective actions
10	22/07/2022	Good Manufacturing Practices (GMP) compliance
11	23/07/2022	Data integrity and quality control
12	26/07/2022	Documentation management and record keeping
13	27/07/2022	Supply chain and vendor management
14	28/07/2022	Mock audits and simulations
15	29/07/2022	Communication skills for interacting with auditors



(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

#### **Course outcomes:**

After completion of this course, learners can

1. Understand the key terms and Identify the key areas of focus during pharmaceutical audits

2. Effectively communicate with auditors during the inspection process.

3. Explain the importance of data integrity and record keeping for audits.

4. Summarize specific regulatory requirements for inspections by various agencies (e.g., FDA, EU GMP, WHO).

- 5. Conduct mock audits and simulations to prepare for real inspections.
- 6. Maintain continuous improvement practices for ongoing audit readiness.

#### Value added Course Report

Title: "Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny"

Academic Year 2022-2023

Dates: 11th July to 29th July 2022

Time: 3:00 PM - 5:00 PM

Duration: 30 Hours

#### Number of students attended: 42

Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya

**Coordinator:** Dr. B. Siva Jyothi, Associate Professor, Department of Pharmaceutical Quality Assurance.

#### Speaker:

- 1. Dr. T. Mamatha, Professor & Head, Department of Pharmaceutical Quality Assurance, SNVPMV Speaker
- 2. Dr. S. Anuradha Professor, Department of Pharmaceutical Quality Assurance, SNVPM.
- 3. Mrs. R. Prasanthi, Assistant Professor, Department of Pharmaceutical Quality Assurance Speaker

#### Introduction

In the pursuit of academic excellence and in line with our commitment to fostering knowledge and skill development among our students, Sarojini Naidu Vanita Pharmacy Maha Vidyalaya organized a 30-hour Value added program on "Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny " during the academic year 2021-2022. The program was conducted from 11th July to 29th July 2022

#### **Program Objectives**

The program was designed with the following key objectives:

1. Lectures and Workshops: A series of expert-led lectures and interactive workshops were conducted, focusing on essential Practical Tools and Techniques for Audit Preparation and practices in the pharmaceutical sector.



(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

2. **Case Studies**: Real-life case studies were examined to understand quality challenges towards Specific Regulatory Requirements and Inspections.

3. **Regulatory Compliance**: Detailed discussions on regulatory compliance requirements and industry standards.

4. Quality Audits: Practical insights into quality audits and inspection preparation, fanaka students.

5. Quality Improvement: Strategies for continuous quality improvement and best practices.

#### **Program Overview**

The certificate program on Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny was designed to provide students with in-depth knowledge of quality management practices in the pharmaceutical industry. The curriculum covered various aspects of Implementing corrective actions and CAPAs, Managing relationships with regulatory agencies, Continuous monitoring and improvement, quality assurance, compliance, and regulatory requirements, ensuring that participants gained a comprehensive understanding of the subject.

#### **Key Session Highlights**

Session 1: Introduction to Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny

This session provided participants with an introductory overview of Unveiling the Audit World: Demystifying different types of inspections and their impact on your work, Regulatory Maze: Navigating the complexities of GMP compliance across regions, Case Studies Unveiled: Learning from both success stories and missed steps in past audit

#### Session 2: Understanding the Audit Process

Participants delved into the core concepts of Auditing under the Microscope: Understanding the auditor's perspective and inspection process, Documenting Your Worth: Maintaining meticulous records for a seamless audit experience, Hot spots for Scrutiny: Unveiling key areas auditors focus on during inspections.

#### Session 3: Quality Management Systems (QMS) and Audit Preparation

Focusing on the application of Quality Management Tools in risk assessment, this session covered topics such as Regulatory Landscape Unveiled: Understanding specific requirements for FDA, EU GMP, WHO, and ICH inspections, Case Studies Revisited: Analyzing recent high-profile audit findings and their implications, Overcoming Common Pitfalls: Avoiding common audit deficiencies and ensuring compliance.

Session 4: Post-Audit Activities and Follow-Up

The session explored how Beyond the Audit Implementation of CAPAs, managing relationships with regulators, and continuous improvement, Q&A Wrap-up: Addressing any

T. Conityos



#### 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

final questions and solidifying your course takeaways, Course Evaluation: Sharing your feedback and shaping future learning experiences.

#### Conclusion

The 30-hour Value added program on "Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny " was a resounding success. It not only enhanced the knowledge and skills of our students but also strengthened their understanding of the importance of quality audits in the pharmaceutical sector. This program, organized by Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, contributed significantly to the academic growth and professional development of the participants. We express our gratitude to the instructors, students, and everyone involved in making this program a success. We remain committed to organizing such educational initiatives in the future to nurture and empower the next generation of pharmaceutical professionals.

**Name of the Program:** "Pharmaceutical Audits & Inspections: Preparing for Regulatory Scrutiny"



**Program Organizer:** SNVPMV, Department of Pharmaceutical Quality Assurance Date: 30/07/2022.

T. Sorityoel

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyslayo Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "QbD Implementation Strategies: From Theory to Practice"



(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 (Sponsored by the Exhibition Society),Tarnaka, Secunderabad, Affiliated to Osmania University, Approved by AICTE & PCI NBA Accredited B. Pharmacy Course

DATE: 25.11.2022

#### CIRCULAR

This is to inform M.Pharmacy I Year (Pharma Ceutics) and B.Pharmacy IV Year students have value added course on "QbD Implementation Strategies: From Theory to Practice" as per the schedule given below. Hence all the students informed to attend the programme without fail.

1" December to 19th December, 2022



T. (-

Principal PRINCIPAL Sarojini Naidu vanita Pharmacy Maha Vidyala; Vijayapuri Colony, S. Lalaguda, Tarnaka, Secunderabad-500 017.

T. Souryosh



(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

# **Detailed Program Schedule**

Name of Class: B. Pharmacy IV Year &	Course: QbD Implementation Strategies:
M. Pharmacy I Year (Ph.Ceutics)	From Theory to Practice
Duration of Courses 15 David / 20 Ura	Duration: December 1 <sup>st</sup> to 19 <sup>th,</sup> 2022
Duration of Course: 15 Days / 30 Hrs	Timings: 3 P.M to 5.00 P.M

Dates: December 1st to December 19th, 2022

Time: 3:00 PM - 5:00 PM

Number of students attended: 46

**Organized by:** Sarojini Naidu Vanita Pharmacy Maha Vidyalaya **Coordinator:** Dr. S. Rohini Reddy, Assistant Professor, Department of Pharmaceutics. **Schedule:** QbD Implementation Strategies: From Theory to Practice

Session	Date	Topic Name
		Introduction to QbD
1	1/12/2022	Welcome and Program Overview
		Key Concepts of Quality by Design (QbD)
		Risk-Based Approaches in QbD
2	2/12/2022	Understanding Risk Assessment and Management in QbD
		Practical Application of Risk-Based QbD
		QbD in Biopharmaceuticals
3	3/12/2022	QbD Applications in Biologics and Biosimilars
		Case Studies: QbD Success Stories in Biopharmaceuticals
		Continuous Manufacturing and QbD
4	5/12/2022	Integrating QbD into Continuous Manufacturing Processes
		Continuous Manufacturing Case Studies
	6/12/2022	Formulation Design using QbD Principles
5		Applying QbD in Drug Formulation and Development
		Formulation Optimization and QbD
	7/12/2022	Regulatory Perspectives on QbD
6		Global Regulatory Guidelines and Compliance
		QbD in Regulatory Submissions
		QbD in Generic Drug Development
7	8/12/2022	QbD Approaches in Generic Product Development
		Case Studies: QbD in Generic Drug Approval
	9/12/2022	Patient-Centric QbD
8		Tailoring Drug Delivery Systems for Patient Convenience
		Patient-Centric Case Studies
		Advanced Analytical Techniques in QbD
9	12/12/2022	Application of Modern Analytical Tools in QbD
		Real-time Monitoring and PAT in QbD

1. Sourtyou



(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

		Emerging Technologies in QbD
10	13/12/2022	Future Trends and Innovations in QbD
		Green Chemistry and Sustainability in QbD
		Hands-on Training with QbD Software
11	14/12/2022	Practical Workshop: QbD Software Training
		Interactive Q&A Session
		Interactive Group Discussions on QbD Challenges
12	15/12/2022	Analyzing Real-world QbD Case Studies
		Certificate Distribution and Closing Remarks
		Capstone Project Introduction
13	16/12/2022	Capstone Project Guidelines and Expectations
		Forming Capstone Project Teams
		Capstone Project Work Session
14	17/12/2022	Guided Work Time for Capstone Projects
		Field Work
15	19/12/2022	Course Assessment
		Capstone Project Presentations and Certification

#### **Course outcomes:**

After completion of this course, learners can

1. Understand the key terms and concepts related to the Quality by Design (QbD). And explain the role of QbD Implementation Strategies: From Theory to Practice.

2. Understand the risk assessment and management in QbD, practical application of risk-based QbD.

3. Explain the QbD Applications in Biologics and Bio-similar, Modern Analytical Tools in QbD, Case Studies: QbD Success Stories in biopharmaceuticals, continuous manufacturing and Patient-Centric Case Studies.

4. Explore how QbD application in Drug Formulation and Development, Formulation Optimization.

5. Explore and understand the application of QbD in regulatory submission, generic development.

6. Explore current trends and emerging technologies in QbD Implementation Strategies: From Theory to Practice.

## Value Added Course Report

Title: "QbD Implementation Strategies: From Theory to Practice"

Duration: 30 Hours

Dates: December 1st to 19th, 2022

Time: 3:00 PM - 5:00 PM

Number of students attended: 46

Coordinator: Dr.S.Rohini Reddy, Assistant Professor, SNVPMV.

T. Sore your



(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

#### Introduction:

The 30-hour Value added Programme on "QbD Implementation Strategies: From Theory to Practice" was conducted from December 1 to December 19, 2022. The program aimed to provide participants with comprehensive insights into Quality by Design (QbD) principles and their practical applications in the pharmaceutical industry. Sessions were held daily, from 3:00 PM to 5:00 PM, covering various topics related to QbD implementation.

#### **Program Highlights:**

#### Session 1: Introduction and Fundamentals

#### Speaker Name: Dr. T. Mamatha, Vice-Principal, SNVPMV, Hyderabad.

The initial sessions focused on introducing the participants to QbD concepts. Fundamental aspects such as risk assessment, tools, and techniques were covered. Participants engaged in interactive discussions to understand the theoretical framework of QbD.

#### Session 2: Specialized Topics

#### Speaker Name: Dr.B.Haarika, Professor, SNVPMV, Hyderabad

Sessions during this period delved into specialized areas, including biopharmaceuticals, continuous manufacturing, generic drug development, and patient-centric QbD. Real-world case studies were analyzed, providing participants with practical insights into QbD applications in diverse scenarios.

Session 3: Advanced Techniques and Hands-on Training

#### Speaker Name: Dr. T. Mamatha, Vice-Principal, SNVPMV, Hyderabad.

Participants were exposed to advanced analytical techniques and QbD software. Hands-on workshops were conducted, allowing attendees to apply QbD principles practically. Group discussions facilitated knowledge sharing among participants.

#### Session 4: Capstone Project and Presentations

#### Speaker Name: Mrs. R. Prasanthi, Assistant Professor, SNVPMV, Hyderabad.

The final sessions were dedicated to the capstone project, where participants formed teams and worked on real-life QbD scenarios. On Day 15<sup>th</sup>, participants presented their projects, showcasing their understanding of QbD implementation strategies.

Key Learning's:

Understanding of QbD Principles: Participants gained a strong understanding of the foundational principles of QbD, including risk assessment, continuous manufacturing, and regulatory compliance.

Practical Application: Hands-on sessions and case studies enabled participants to apply QbD concepts in real-world scenarios, enhancing their problem-solving skills.

Collaborative Learning: Group discussions and team-based capstone projects encouraged collaboration and knowledge exchange among participants, fostering a rich learning environment.

T. Conityos

PRINCIPAL Garojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

#### **Conclusion:**

The 30-hour value added Programme on "QbD Implementation Strategies: From Theory to Practice" provided participants with a comprehensive understanding of QbD principles and their practical applications. The program's interactive approach, including hands-on sessions and capstone projects, ensured that participants could effectively implement QbD strategies in their professional endeavors. The engaging discussions and collaborative learning environment made the program a valuable experience for all attendees.



**Program Organizer:** SNVPMV, Department of Pharmaceutics Date: 21/12/2022.

T. Sorityos

PRINCIPAL Sarojini Naldu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Artificial Intelligence (AI) in the Pharmaceutical Industry"



(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 (Sponsored by the Exhibition Society). Tarnaka, Secunderabad Affiliated to Osmania University, Approved by AICTE & PCI 180 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Date: 15/11/2022

#### CIRCULAR

This is to inform M.Pharmaey I&II Year (Ceu & QA) and B.Pharmacy IV Year students have Value added Course on "Artificial Intelligence (AI) in the Pharmaceutical Industry" as per the schedule given below. Hence all the students informed to attend the programme without fail.

1st December to 19th December, 2022



ncipa

T. Sanityosh

PRINCIPAL Satojini Naldu Vanita Phamacy Maha Vidyalayo Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# **Detailed Program Schedule**

Name of Class: B. Pharmacy IV Year &	Course: Artificial Intelligence (AI) in the
M. Pharmacy I&II Year (Ceu & QA)	Pharmaceutical Industry
Duration of Courses 15 Days (2 Hours)	Duration: December 1 <sup>st</sup> to 19 <sup>th,</sup> 2022
Duration of Course: 15 Days (2 Hours)	Timings: 3 P.M to 5 P.M

Dates: December 1st to December 19th, 2022

Time: 3:00 PM - 5:00 PM

Duration: 30 Hours

#### Number of students attended: 54

Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya

**Coordinator:** Dr. S. Hemalatha, Professor, SNVPMV Mrs. S. Muni Sireesha, Assistant Professor, Department of Pharmaceutical Chemistry

1. Speakers: Dr. T. Sarita Jyostna, Professor, SNVPMV,

Associate Professor, SNVPMV

2. Deepankar Bhowmik, Associate solution Leader

Brane Enterprises Pvt Ltd, Mrs.

3. Mrs. S. Muni Sirisha

Schedule: Artificial Intelligence (AI) in the Pharmaceutical Industry

Session	Date	Topic Name
1	1/12/2022	Introduction to AI in Pharma Overview of AI Applications in the Pharmaceutical Industry Significance and Current Trends in AI for Pharma
2	2/12/2022	Basics of Machine Learning and Deep Learning Understanding Machine Learning and Deep Learning Concepts
3	3/12/2022	Applications of ML and DL in Pharmaceuticals
4	5/12/2022	AI in Drug Discovery and Development Role of AI in Drug Discovery Process
5	6/12/2022	Predictive Analysis and Computational Drug Design
6	7/12/2022	AI in Clinical Trials and Patient Data Analysis AI Applications in Clinical Trials Patient Data Analysis and Predictive Healthcare
7	8/12/2022	Robotics and Automation in Pharmaceutical Manufacturing Robotic Process Automation (RPA) in Pharma
8	9/12/2022	Natural Language Processing (NLP) and Text Mining in Pharma NLP Techniques and Their Applications Text Mining in Pharmaceuticals and Clinical Research
9	10/12/2022	AI-driven Automation in Manufacturing Processes
10	12/12/2022	Regulatory Compliance and Ethical Considerations Compliance in AI-aided Pharmaceutical Practices

T. Sorityoel



(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

		Ethical Implications and Regulatory Frameworks
11	13/12/2022	AI Applications in Pharma co-vigilance and Drug Safety
	13/12/2022	Drug Safety Assessment and Al Tools
12	14/12/2022	Group Discussions on Practical Implementation
13	15/12/2022	Case Studies and Practical Applications of AI in Pharma
14	16/12/2022	Real-world Examples and Case Studies Field Work
		Course Assessment
15	17/12/2022	Future Prospects and Challenges in AI for Pharma
		Emerging Trends and Future Directions in Al for Pharma
		Challenges and Opportunities

#### **Course outcomes:**

After completion of this course, learners can

1. Understand the key terms and concepts related to the pharmaceutical industry. And explain the role of AI in transforming industries, with a focus on pharmaceuticals.

2. Understand the importance of data in the pharmaceutical industry and explore different types of data used in drug development.

3. Explain basic machine learning concepts and algorithms. Understand how machine learning models can be applied to pharmaceutical data.

4. Explore how AI is used in target identification, validation and lead compound identification.

5. Explore and understand the application of AI in monitoring and ensuring drug safety, adverse event detection, and reporting.

6. Explore current trends and emerging technologies in AI and how they may impact the pharmaceutical industry.

## Value Added Course Report

Title: "Artificial Intelligence (AI) in the Pharmaceutical Industry"

Duration: 30 Hours

Dates: December 1<sup>st</sup> to 19th, 2022

Time: 3:00 PM - 5:00 PM

Number of students attended: 54

**Coordinator:** Dr. S. Hemalatha, Professor, SNVPMV Mrs. S. Muni Sireesha, Assistant Professor, Department of Pharmaceutical Chemistry

#### Introduction:

The "Artificial Intelligence (AI) in the Pharmaceutical Industry" Value added program aimed to offer a comprehensive understanding of the role and applications of AI in pharmaceutical sciences. Spanning over 30 hours, the program delved into various facets of AI and its significance in advancing pharmaceutical research and development.

# ALL PRAFMYS

#### 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

#### Program Objectives

The program was designed with the following key objectives:

- Introduction to AI in Pharma: Providing an introduction to AI applications in the pharmaceutical industry.
- Machine Learning and Deep Learning Fundamentals: Exploring the fundamental concepts and applications of ML and DL in pharmaceutical research.
- AI Applications in Drug Discovery and Development: Understanding the role of AI in drug discovery and development processes.
- Practical Implementation and Case Studies: Showcasing practical use cases and realworld applications of AI in pharmaceutical scenarios.

#### **Program Overview**

The program comprised ten sessions, each lasting 3 hours, and covered various aspects of AI in the pharmaceutical industry, catering to the needs of professionals seeking to explore AI's potential in revolutionizing the sector.

#### **Key Session Highlights**

#### 1. Introduction to AI in Pharma

This session provided participants with an introductory overview of AI applications in pharmaceutical sciences, emphasizing its significance and potential impact on the industry.

2. Fundamentals of Machine Learning and Deep Learning in Pharma

Participants delved into the core concepts of machine learning and deep learning, learning their applications in drug research, molecular analysis, and predictive modeling.AI in Drug 3.Discovery and Development

Focusing on the application of AI in drug discovery, this session covered topics such as target identification, compound optimization, and predictive analytics.

4. AI in Clinical Trials and Patient Care

The session explored how AI is transforming clinical trials and patient care, discussing predictive healthcare models and data-driven decision-making.

#### Conclusion

The "Artificial Intelligence (AI) in the Pharmaceutical Industry" Value added program successfully provided a strong foundational understanding of AI's applications in the pharmaceutical domain. Participants gained insights into the transformative potential of AI in drug discovery, clinical research, and patient care.

The program's success can be attributed to the dedicated instructors, comprehensive curriculum, and interactive sessions that facilitated an engaging learning environment, encouraging active participation and knowledge exchange. This report aims to encapsulate the essence and success of the program, shedding light on the potential of AI to reshape pharmaceutical practices and research.

We extend our gratitude to all participants, faculty members, and the organizing committee for their contributions to making this program a success.

Photos: Artificial Intelligence (AI) in the Pharmaceutical Industry 2022-2023

T. Sorityoel

# AND PARMACINA DATA

#### 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





**Program Organizer:** SNVPMV, Department of Chemistry Date: 20/12/2022.

T. Sorityos

PRINCIPAL Satojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalegude, Tarnaka Secunderabad-500 017.



(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

# "Animal Handling"



(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 (Sponsored by the Exhibition Society), Tamaka, Secunderabad Affiliated to Osmania University, Approved by AICTE & PCI ISO 9001: 2015 Certified Institution, NBA Accredited B. Pharmacy Course

Date: 21/12/2022

#### CIRCULAR

This is to inform that **B** Pharmacy I Year &Pharm **D** I, IV & V Year students may register for a Value added course on "On Animal Handling" as per the schedule given below. Hence all the students are highly encouraged to register and participate without fail.

Period of Certificate Program: December 27th to January 12th, 2023



PRINCIPAL

rojini Naidu vanil Phirmen Kala Vidyalaya Vijeyapuri Colony, S.Lalaguda, Tarnaka Secundorabad-500 017.

T. Sorityoel



(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

# **Detailed Program Schedule**

Name of Class: B. Pharm I Year & Pharm D I, IV & V Year	Course: On Animal Handling
Duration of Course: 15 Days	<b>Duration</b> : 2 Hours <b>Time:</b> 3:00 PM - 5:00 PM

Dates: December 27th to January 12, 2023 Time: 3:00 PM - 5:00 PM Duration: 30 Hours Number of students attended: 172 Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Coordinator: Mrs. S. Divya, Assistant Professor, SNVPMV. Schedule: On Animal Handling

Session	Date & Time	Topic Name
1	27/12/2022	Understanding Animal Behavior and Communication
2	28/12/2022	Safety Protocols and Risk Management
3	29/12/2022	Restraint Techniques for Different Species
4	30/12/2022	Health and Welfare Considerations
F	21/12/2022	Basic Animal Health Assessment
5	31/12/2022	Recognizing Signs of Distress and Pain
		Welfare Standards and Guidelines
6	1/1/2023	Practical Exercise: Assessing Animal Welfare in Various
		Environments
7	2/1/2023	Legal and Ethical Issues in Animal Handling
0	2/1/2022	Overview of Animal Welfare Laws and Regulations
0	5/1/2025	Ethical Dilemmas in Animal Handling
9	4/1/2023	Practical Sessions and Workshops
		Rotating Practical Stations:
10	5/1/2023	Companion Animal Handling (Dogs, Cats)
		Livestock Handling (Cattle, Sheep, Goats)
11	6/1/2022	Exotic Animal Handling (Optional, based on availability)
11	0/1/2025	Wildlife Handling (If applicable, based on local regulations)
12	7/1/2023	Assessments and Review
10	0/1/0000	Written Quizzes on Theory Concepts
13	9/1/2023	Practical Demonstrations of Handling Techniques
		Review Sessions and Q&A with Instructors
14	10/1/2023	Certification Ceremony
15	11/1/2023	Presentation of Certificates to Participants
		Closing Remarks and Feedback Session
		· Sarityosh
		0



(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

#### **Course outcomes:**

After completion of this course, learners can

1. Demonstrate Knowledge: Participants will demonstrate a comprehensive understanding of animal behavior, communication, safety protocols, restraint techniques, health considerations, and legal and ethical issues related to animal handling.

2. Apply Safe Handling Practices: Participants will apply appropriate safety protocols and risk management strategies to ensure the safety of both themselves and the animals being handled in various contexts.

3. Utilize Effective Restraint Techniques: Participants will demonstrate proficiency in using a variety of restraint techniques tailored to different species, considering the size, behavior, and individual needs of the animals.

4. Assess Animal Health and Welfare: Participants will be able to assess and recognize signs of distress, pain, and overall welfare in animals, applying appropriate measures to ensure their well-being during handling procedures.

5. Adhere to Legal and Ethical Standards: Participants will understand and adhere to relevant laws, regulations, and ethical guidelines governing animal handling practices, promoting responsible and compassionate treatment of animals.

## Value Added Course Report

Title: On Animal Handling Academic Year 2022-2023 Dates: December 27th to January 12th, 2023 Time: 3:00 PM - 5:00 PM Duration: 30 Hours Number of students attended: 172 Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Coordinator: Mrs. S. Divya, Assistant Professor, SNVPMV. Speakers:Dr. T. Venu, Professor, SNVPMV. Dr V Santhoshini, Assistant Professor, SNVPMV. Dr Hadiya Iram, Assistant Professor, SNVPMV. Dr A Sujala, Assistant Professor, SNVPMV. Dr K. Jithender, Assistant Professor, SNVPMV.

**Program Overview**: The Animal Handling Value added Program, organized by [Organization Name], aimed to provide participants with comprehensive knowledge and practical skills in the safe and ethical handling of animals. The program, conducted over [duration], covered essential topics including animal behavior, safety protocols, restraint techniques, health considerations, and legal and ethical issues.

**Participants:** The program attracted [number of participants] enthusiastic individuals from diverse backgrounds, including veterinary professionals, animal shelter volunteers, students, and individuals aspiring to work in animal-related fields. Participants demonstrated a strong interest in expanding their knowledge and skills in animal handling practices.



(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

**Curriculum**: The program curriculum was carefully crafted to cover a wide range of relevant topics, including:

Understanding Animal Behavior and Communication Implementing Safety Protocols and Risk Management Strategies Utilizing Restraint Techniques for Different Species Assessing Animal Health and Welfare Adhering to Legal and Ethical Standards in Animal Handling

**Program Activities**: The program activities included engaging lectures, interactive workshops, hands-on practical sessions, and assessments to reinforce learning and skill development. Participants had the opportunity to apply theoretical knowledge in simulated scenarios and real-life settings, guided by experienced instructors.

Achievements and Outcomes: Throughout the program, participants demonstrated significant growth in their understanding and proficiency in animal handling practices. Key outcomes included:

- Enhanced knowledge of animal behavior, safety protocols, and legal requirements.
- Improved practical skills in safely restraining and managing various species of animals.
- Increased awareness of animal welfare considerations and ethical responsibilities.
- Certification in Animal Handling, recognizing participants' dedication and competency in the field.

**Conclusion**: The Animal Handling Value added Program provided participants with valuable knowledge, skills, and practical experience essential for responsible and compassionate animal care. The program's success was evident in the enthusiastic participation and positive feedback from participants, highlighting its effectiveness in meeting the diverse needs of individuals involved in animal handling.



**Program Organizer:** SNVPMV, Department of Pharm D Date: 13/1/2023

T. Soury yos

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Regulatory Affairs in Pharmaceutics"



(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 (Sponsored by the Exhibition Society), Tarnaka, Secunderabad. Affiliated to Osmania University, Approved by AICTE & PCI NBA Accredited B. Pharmacy Course

DATE: 17.04.2023

#### CIRCULAR

This is to inform M.Pharm I Year (Pharma Ceutics), Pharm.D IVyear, Vyear & B.Pharm IV Year students have value added course on "Regulatory Affairs in Pharmaceutics" as per the schedule given below. Hence all the students informed to attend the programme without fail.

24th April to 11th May, 2023



T. Caretyos Principal



(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

# **Detailed Program Schedule**

Name of Class: M.Pharm I Year (Ph. Ceutics), Pharm. D IV yr, V yr &B.Pharm IV Year	<b>Course</b> : Regulatory Affairs in Pharmaceutics
Duration of Course: 12 Days/	Duration: 24th April to 11th May, 2023
30 Hrs	Timings: 3 P.M to 6 P.M

Dates: 24<sup>th</sup> April to 11<sup>th</sup> May, 2023

Time: 3:00 PM - 5:30 PM

Duration: 30 Hours

Number of students attended: 55

**Organized by:** Sarojini Naidu Vanita Pharmacy Maha Vidyalaya **Coordinator:** Dr. M. Swetha, Associate Professor, Department of Pharmaceutics. **Schedule:** Regulatory Affairs in Pharmaceutics

Session	Date	Topic Name
1	24-04-2023	Course Introduction and Overview
		Global Regulatory Agencies and Frameworks
2	25-04-2023	Drug Development Process
2		The Role of Regulatory Affairs
3	26-04-2023	Regulatory Submissions and Documentation
4	27-04-2023	Good Manufacturing Practices (GMP)
5	28-04-2023	Quality Control and Quality Assurance
6	01-05-2023	Quality Risk Management
7	02-05-2023	Regulatory Compliance and Audits
8	03-05-2023	Regulatory Affairs in Clinical Trials
9	04-05-2023	Pharma co-vigilance and Post-Market Surveillance
10	08-05-2023	Regulatory Challenges and Market Access
11	10-05-2023	Emerging Technologies in Regulatory Affairs
		Final Project and Case Studies
		Field Work
12	11-05-2023	Course Assessment
		Certification

#### **Course outcomes:**

After completion of this course, learners can

- 1. Understand the key terms and concepts related to Regulatory Affairs in Pharmaceutics.
- 2. Examine the process of drug discovery and development.
- 3. Compare the various principles of regulatory approval process and regulatory authorities.
- 4. Discriminate the registration of Indian drug product in overseas market.
- 5. Associate the protocols to conduct clinical trials.
- 6. Compare various regulatory concepts.

T. Sorityos



(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

## Value Added Course Report

Title: "Regulatory Affairs in Pharmaceutics"
Duration: 30 Hours
Dates: 24<sup>th</sup> April to 11<sup>th</sup> May, 2023.
Time: 3:00 PM - 5:30 PM
Number of students attended: 55
Coordinator: Dr. M. Swetha, Associate Professor, SNVPMV.
Speakers Name:

Dr. N. Srinivas, Director, SNVPMV.

- 2. Dr. S. Rohini Reddy, Assistant Professor, SNVPMV.
- 3. Dr. Ch. Shanthi Priya, Assistant Professor, SNVPMV.

#### **Executive Summary:**

This report outlines a comprehensive 30-hour value added course plan on "Regulatory Affairs in Pharmaceutics." The course is designed to provide participants with a profound understanding of the regulatory aspects governing the pharmaceutical industry, with a focus on pharmaceutics. The curriculum spans 15 days, with daily sessions lasting 2.5 hours each. It covers fundamental concepts, regulatory processes, quality assurance, and compliance in the pharmaceutical field.

#### **Course Overview:**

- **Course Objective:** The primary goal of this course is to equip participants with the knowledge and skills required to navigate the complex landscape of regulatory affairs in pharmaceutics, ensuring the safe and effective production of pharmaceutical products.
- **Duration:** The course spans 30 hours, with daily sessions lasting 2.5 hours each. It is designed to be completed over 15 days.

#### **Course Delivery:**

The course will be delivered through a combination of lectures, case studies, practical exercises, and interactive discussions. Participants will also have the opportunity to work on case studies, analyze real-world regulatory scenarios, and participate in group discussions to apply their knowledge.

#### Assessment and Certification:

Participants will be assessed through participation in group discussions, case study analysis, quizzes, and a final examination. Successful participants will receive a certification upon course completion.

#### Conclusion:

The 30-hour value added course on "Regulatory Affairs in Pharmaceutics" offers a comprehensive learning experience, equipping participants with the knowledge and skills to navigate the regulatory landscape of the pharmaceutical industry. The course plan serves as a valuable resource for professionals, researchers, and students seeking to excel in regulatory affairs within the pharmaceutics field.

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.

(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

Regulatory affairs are crucial to ensuring the safety and efficacy of pharmaceutical products. This course promotes compliance, quality, and adherence to global regulations, contributing to advancements in the pharmaceutical industry and ensuring the well-being of patients.



**Program Organizer:** Associate Professor, SNVPMV, Department of Pharmaceutics Date: 12/05/2023.

T. Sore yosh

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Clinical Trials and Research Methods"



(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 (Sponsored by the Exhibition Society), Tamaka, Secunderabad Affiliated to Osmania University, Approved by AICTE & PCI ISO 9001: 2015 Certified Institution, NEA Accredited B. Pharmacy Course

Date: 17/4/2023

#### CIRCULAR

This is to inform that M Pharmacy I Year (All), Pharm D III, IV & V Year & B Pharmacy IV Year students may register for a Value added course on "Clinical Trials and Research Methods" as per the schedule given below. Hence all the students are highly encouraged to register and participate without fail.

Period of Certificate Program: April 24th to May 11th, 2023



T. Sorityveh

PRINCIPAL Seejini Naida vanta Makazajapad Vidyais, sijayapuri Colony, S.Lalaguda, Tanaka, Secunderabad-500 017.



(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

Name of Class: M. Pharmacy I Year (All), Pharm D III, IV, V	Course: Clinical Trials
years & B. Pharmacy IV Year	and Research Wethous
	Duration: 2.5 Hours
Duration of Courses 12 Dave	and 2 hrs
Duration of Course: 12 Days	Time: 3:00 PM - 5:30
	PM

# **Detailed Course Schedule**

Dates: April 24<sup>th</sup> to May 11<sup>th</sup>, 2023.

Time: 3:00 PM - 5:30 PM

Duration: 30 Hours

#### Number of students attended: 142

**Organized by:** Sarojini Naidu Vanita Pharmacy Maha Vidyalaya **Coordinator:** Ms. S. Divya, Assistant Professor Department of Pharm D. **Schedule:** Clinical Trials and Research Methods

Session	Date & Time	Topic Name	
1	24/4/2023	Introduction to Clinical Trials	
		- Overview of clinical trial phases and objectives	
		- Importance of clinical trials in drug development	
		Research Methodologies in Pharmaceutical Studies	
		- Designing and conducting experiments	
2	25/4/2023	- Formulating research questions	
		- Different research methodologies in pharmaceutical	
		studies	
3	26/4/2023	Ethical Considerations in Clinical Research	
		- Ethical principles and guidelines in research	
		- Addressing ethical dilemmas in clinical trials	
		Hands-On Training: Data Collection and Statistical	
		Analysis	
4	27/4/2023	- Practical exercises in data collection	
		- Introduction to statistical analysis	
		- Interpreting research findings	
	28/4/2023	Industry Insights in Clinical Research	
5		- Perspectives from industry professionals	
		- Current trends and innovations in clinical research	
	1/5/2023	Review and Practical Application	
6		- Review of concepts covered so far	
		- Application of knowledge in practical scenarios	
7		Designing Research Protocols and Regulatory	
	2/5/2023	Guidelines	
		- Components of a well-designed research protocol	
	2/5/2222	- Regulatory guidelines governing clinical trials	
8	3/5/2023	Simulated Clinical Irial Scenarios T	



(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

	- Simulation of clinical trial scenarios	
	- Practical application of learned concepts	
	Ethical Decision-Making and Case Studies	
/2023	- Navigating ethical considerations in research	
	- Case studies highlighting ethical dilemmas	
	Guest Lectures: Recent Trends and Challenges in	
(2022	Clinical Research	
8/5/2023	- Exploration of recent developments	
	- Emerging challenges and opportunities	
	Effective Communication of Research Findings	
5/2023	- Developing effective communication skills	
	- Articulating complex information clearly	
11/5/2023	Group Project Presentations and Course Conclusion	
	- Presentations by student groups	
	Recap of key learning's and highlights	
	/2023 /2023 5/2023 5/2023	

#### **Course outcomes:**

After completion of this course, learners can

#### 1. Understanding of Clinical Trial Phases:

• Students will comprehend the different phases of clinical trials and the unique objectives and methodologies associated with each phase.

#### 2. Research Methodologies Proficiency:

 Participants will acquire proficiency in designing and conducting experiments, formulating research questions, and employing various research methodologies in pharmaceutical studies.

#### 3. Ethical Decision-Making:

• Students will develop a strong ethical foundation and demonstrate the ability to navigate and address ethical dilemmas inherent in clinical research.

#### 4. Hands-On Practical Skills:

 Through hands-on training, participants will develop practical skills in data collection, statistical analysis, and interpretation of research findings in a simulated clinical trial environment.

#### 5. Application of Regulatory Guidelines:

 Students will gain an understanding of regulatory requirements governing clinical trials and learn to design research protocols that align with these guidelines.

#### 6. Comprehensive Understanding of Clinical Research:

 Participants will develop a comprehensive understanding of the complexities and nuances of clinical research, integrating theoretical knowledge with practical application.

arityo

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalayo Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

#### 7. Effective Communication Skills:

• Students will enhance their communication skills, particularly in presenting research findings, ensuring they can articulate complex information clearly and professionally.

#### 8. Critical Appraisal and Interpretation:

 Participants will develop the ability to critically appraise research protocols, statistical analyses, and research findings, fostering a robust approach to interpreting scientific literature.

#### 9. Application of Evidence-Based Practices:

• The course will equip participants with the skills necessary to apply evidencebased practices in clinical research scenarios, ensuring a foundation for evidence-driven decision-making.

## Value Added Course Report

Title: Clinical Trials and Research Methods Academic Year 2022-2023 Dates: April 24<sup>th</sup> to May 11<sup>th</sup>, 2023. Time: 3:00 PM - 5:30 PM Duration: 30 Hours Number of students attended: 142 Organized by: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Coordinator: Ms. S. Divya, Assistant Professor Department of Pharm D.

Schedule: Clinical Trials and Research Methods

#### Introduction:

Sarojini Naidu Vanita Pharmacy Maha Vidyalaya conducted an extensive Value added course on "Clinical Trials and Research Methods" during the academic year 2022-2023. The workshop, which spanned 16 days from April 24, 2023, to May 11, 2023, featured daily sessions of 2.5 hours and 2 hrs each. The program aimed to equip 142 participating students with comprehensive knowledge and skills related to clinical trials and research methodologies in the pharmaceutical field.

#### **Program Highlights:**

**Speakers**: Dr. T. Venu, Professor, Dr. V Santhoshini, Assistant Professor, Dr. Hadiya Irum Assistant professor, Dr. A. Sujala, Assistant Professor, Dr. K. Jithender Assistant Professor

#### Session 1: Introduction to Clinical Trials: Speaker Name:

- Overview of the clinical trial process, phases, and regulatory requirements.
- Understanding the significance of clinical trials in drug development.

#### Session 2: Research Methodologies:

Speaker Name: Dr. T. Venu, Professor

T. Sarityo.

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

- In-depth exploration of various research methodologies in pharmaceutical studies.
- Practical exercises on designing research protocols and formulating research questions.

#### Session 3: Ethical Considerations in Research:

Speaker Name: Dr. V. Santhoshini, Assistant Professor,

- Discussion on ethical principles and guidelines governing clinical research.
- Case studies highlighting ethical dilemmas and their resolution in research.

#### Session 4: Hands-on Training:

**Speaker/ Demonstrator:** Dr. Hadiya Irum Assistant professor, Dr. A. Sujala Assistant Professor, Dr. K. Jithender Assistant Professor

- Practical sessions on data collection, statistical analysis, and interpretation of research findings.
- Simulation of clinical trial scenarios to enhance practical skills.

#### Session 5: Lectures:

- Invited experts delivering lectures on recent trends, challenges, and innovations in clinical research.
- Q&A sessions allowing students to interact.

#### **Course Outcomes:**

At the conclusion of the workshop, participants demonstrated a heightened understanding of clinical trials, research methodologies, and ethical considerations. They acquired practical skills through hands-on training and were exposed to real-world insights from industry experts. The workshop aimed to foster critical thinking, ethical decision-making, and the ability to contribute meaningfully to the pharmaceutical research landscape.

#### **Conclusion:**

The "Clinical Trials and Research Methods" workshop organized by Sarojini Naidu Vanita Pharmacy Maha Vidyalaya in the academic year 2022-2023 successfully enriched students' understanding of the complexities and nuances of clinical research. The program's design aimed to prepare future pharmaceutical professionals with the skills and knowledge necessary for ethical and effective contributions to the field.

T. Sarityos

PRINCIPAL Sarojini Naldu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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





**Program Organizer:** SNVPMV, Department of Pharm D Date: 12/5/2023.

T. Conityoel

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

# "Hands-on Training on Analytical Instruments"

(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



0

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA (Sponsored by the Exhibition Society). Tamaka, Secunderabad Affiliated to Osmania University, Approved by AICTE & PCI ISO 9001: 2015 Certified Institution, NBA Accredited B, Pharmacy Course

Date: 21-06-2023

#### CIRCULAR

This is to inform B. Pharmacy IV Year students and M. Pharm (All Specializations) students have Value added course on "Hands on training on Analytical Instruments" as per the schedule given below. Hence all the students informed to attend the programme without fail.

28th June to 13th July, 2023



Principar



(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

# **Detailed Program Schedule**

Name of Class: B. Pharmacy IV Year, M. Pharmacy students (All disciplines)	<b>Course:</b> Hands-on Training on Analytical Instruments
<b>Duration of Course</b> : 10	Duration: 28 <sup>th</sup> June to 13 <sup>th</sup> July
Days (3 Hours)	Time: 3:00 PM - 6:00 PM

Dates: 28<sup>th</sup> June to 13<sup>th</sup> July, 2023
Time: 3:00 PM - 6:00 PM
Duration: 30 Hours
Number of students attended: 100
Organized by: Sarojini Naidu Vanita Pharmacy Mahavidyalaya
Coordinator: Dr. P. Vivek Sagar, Associate Professor Department of Pharmaceutical Chemistry.
Schedule: Hands-on Training on Analytical Instruments

Session	Date & Time	Speaker	Topic Name
		Module 1: An Overview	w of Instrumental Analysis
1	28/06/2023	Dr. K. Sirisha	<b>Types of instruments:</b> This section will discuss the different types of analytical instruments, including spectrometers, chromatographs, and mass spectrometers. It will discuss the principles of operation and the applications of each type of instrument
2	30/06/2023	Dr. K. Sirisha	<b>Schematic representation of components:</b> This section will discuss the schematic representation of the components of an analytical instrument. It will discuss the function of each component and how they work together to produce an analytical result.
3	01/07/2023	Dr. P. Vivek Sagar	<b>Calibration:</b> This section will discuss the pro- calibrating an analytical instrument. Calibration process of ensuring that an instrument is providing a results
4	03/07/2023	Dr. K. Sirisha	<b>Spectral Interpretation (IR, NMR, Mass spectra):</b> This section will discuss the interpretation of spectral data from IR, NMR, and Mass spectra. It will discuss how to identify different compounds based on their spectral data.
5	04/07/2023	Dr. K. Sirisha	Spectral Interpretation T. (Rome MMR, / Mass

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyslayo Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.

()



(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

			spectra): This section will discuss the interpretation
			of spectral data from IR, NMR, and Mass spectra. It
			will discuss how to identify different compounds
			based on their spectral data.
			Spectral Interpretation (IR, NMR, Mass
			spectra): This section will discuss the interpretation
6	04/06/2023	Dr. K. Sirisha	of spectral data from IR, NMR, and Mass spectra. It
			will discuss how to identify different compounds
			based on their spectral data.
		Module 2: H	ands – on training
			UV- Visible Spectrophotometer: This section will
			provide hands-on training on the use of a UV-
7	05/06/2023	Dr. K. Neelima	Visible Spectrophotometer. Participants will learn
			how to operate the instrument, prepare samples,
			and collect data.
			ATR- FTIR: This section will provide hands-on
8	06/07/2023	Dr K Neelima	training on the use of an ATR- FTIR. Participants
0	00,07,2025	Dr. R. Neenina	will learn how to operate the instrument, prepare
			samples, and collect data.
			<b>HPLC:</b> This section will provide hands-on training
9	10/07/2023	Dr. R. Swethasri	on the use of a HPLC. Participants will learn how to
			operate the instrument, prepare samples, and
			collect data.
			LC-MS/MS: This section will provide hands-on
			training on the use of a LC-MS/MS. Participants
10	11/07/2023	Dr. P. Vivek Sagar	will learn how to operate the instrument, prepare
			samples, and collect data.
			Industrial visit: This section will include an
	42/07/2022		industrial visit to a pharmaceutical manufacturing
	12/07/2023		facility. The industrial visit will provide students
			with an opportunity to see how analytical
			instruments are used in a real-world setting.

#### **Course Outcomes:**

Upon completion of this course, participants will be able to:

- 1. Identify different types of analytical instruments and their applications.
- 2. Understand the schematic representation of the components of an analytical instrument.
- 3. Calibrate an analytical instrument.
- 4. Interpret spectral data from IR, NMR, and Mass spectra.

T. ( ari y



(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

- 5. Operate a UV- Visible Spectrophotometer, ATR- FTIR, HPLC.
- 6. Prepare samples for analysis using these instruments.
- 7. Collect data from these instruments.
- 8. Communicate the results of analytical data in a clear and concise manner.

## Value Added Course Report

Title: "Hands-on Training on Analytical Instruments" Duration: 30 Hours Dates: 28<sup>th</sup> June to 13<sup>th</sup> July, 2023 Time: 3:00 pm to 6:00 pm Number of Students attended: 100 Coordinator: Dr. K. Neelima, Department of Pharmaceutical Analysis

#### Introduction:

This report summarizes the 30-hour Value added program on "Hands-on Training on Analytical Instruments" conducted by Sarojini Naidu Vanita Pharmacy Maha Vidyalaya during the academic year 2022-2023. The program aimed to provide students with practical experience in using various analytical instruments commonly employed in the pharmaceutical industry.

#### **Program Objectives:**

- 1. To equip students with the knowledge and skills necessary to operate various analytical instruments.
- 2. To provide hands-on experience in analyzing samples using analytical techniques.
- 3. To develop students' ability to interpret and analyze data generated from analytical instruments.
- 4. To enhance students' employability in the pharmaceutical sector.

#### **Program Overview:**

The program comprised 15 sessions, each lasting 2 hours, and covered various aspects of Analytical instrumentation.

#### **Course Content:**

The program covered a comprehensive range of topics related to analytical instrumentation, including:

- Introduction to analytical chemistry
- Principles and applications of various analytical techniques (e.g., UV spectroscopy, HPLC, FTIR)
- Sample preparation and handling
- Calibration and validation of instruments

T. Sarityosh

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

• Data analysis and interpretation

#### **Speakers**

The program was delivered by a team of experienced faculty members. They provided theoretical knowledge and practical guidance to the students throughout the program. Dr. P. Vivek Sagar Dr. K. Sirisha Dr. .K. Neelima

Mrs. R. Swethasri

#### Conclusion

The 30-hour Value added program on "Hands-on Training on Analytical Instruments" was a successful initiative that equipped students with valuable skills and knowledge in analytical techniques. The program received positive feedback from the participants and achieved its objectives.

#### Key achievements of the program:

- 100 students gained hands-on experience with various analytical instruments.
- Students developed their understanding of important analytical techniques.
- Students honed their data analysis and interpretation skills.
- The program enhanced students' employability in the pharmaceutical sector.

#### **Feedback from Participants**

The feedback received from the participants was overwhelmingly positive. They appreciated the opportunity to gain hands-on experience with analytical instruments and found the course content to be relevant and informative. The participants also valued the expertise and guidance provided by the resource persons.

#### **Conclusion and Recommendations**

The 30-hour Value added program on "Hands-on Training on Analytical Instruments" was a successful initiative that equipped students with valuable skills and knowledge in analytical techniques. The program received positive feedback from the participants and achieved its objectives.

#### Conclusion

Through this enriching journey of hands-on training in analytical instruments, you have:

• Mastered the fundamentals of diverse analytical techniques: You gained practical experience with chromatography, spectroscopy, mass spectrometry, and potentially other instruments, understanding their principles, operation, and data interpretation.

arif

PRINCIPAL Sarojini Naidu Vanita Pharmacy Maha Vidyalaya Vijayapuri Colony, S.Lalaguda, Tarnaka Secunderabad-500 017.



(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

- Sharpened your analytical skills: You actively participated in experiments, calibrations, data analysis, and troubleshooting, honing your skills in problem-solving, critical thinking, and scientific reasoning.
- Gained confidence in instrument handling and data analysis: You confidently navigated instrument controls, analyzed complex data sets, and communicated your findings effectively, demonstrating your competence in practical laboratory work.
- Expanded your horizons for professional opportunities: You equipped yourself with valuable skills sought after in various fields, including research, quality control, environmental monitoring, and pharmaceutical development, opening doors to exciting career paths.



**Program Organizer:** SNVPMV, Department of Pharmaceutical Analysis Date: 12<sup>th</sup> July, 2023

T. Conityoe

PRINCIPAL Garojini Naidu Vanita Pharmacy Maha Vidyslayo Vijayapuri Colony, S.Lalegude, Tarnaka Secunderabad-500 017.