



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

Report on Educational Visit to ICMR-NIN

Institution: Sarojini Naidu Vanita Pharmacy Maha Vidyalaya (Co-Ed)

Date of Visit: 22nd October 2026

Participants: B. Pharmacy 4th year Students (50)

Faculty Accompanied: (2)

Dr. P. Hyma, Professor & Dept of Pharmaceutical Quality Assurance.

Dr. P. Ravi Kumar, Associate Professor, Dept of Pharmacognosy.

Introduction

An educational visit was organized to the **Indian Council of Medical Research (ICMR) – National Institute of Nutrition (NIN), Hyderabad**, on **22 October 2026**. The visit provided students with an opportunity to gain academic exposure to **nutrition science, microbiology, public health, nutritional deficiencies, food and dietary practices, and research-oriented activities**.

The visit combined a tour of nutrition-related educational exhibits, an informative academic presentation and exposure to the **microbiology laboratory environment**. It helped students relate theoretical concepts studied in their B.Pharm curriculum to their applications in nutrition, health and scientific research.

Details of the Visit:

The visit began with a warm welcome by **Dr. Prakash**. He gave us an Introductory session & overview of the Organisation. Then Dr. Jharna Puppala gave us session on Nutrition and Recommended Dietary allowance.

Objectives of the Visit

The major objectives of the visit were:

1. To understand the fundamental concepts of **human nutrition**.
2. To learn about macronutrients and micronutrients and their importance.
3. To understand the relationship between nutrition and health.
4. To observe educational exhibits related to nutritional deficiencies and food sources.
5. To gain exposure to **microbiology laboratory practices and research environments**.



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

6. To understand the importance of microorganisms in food, nutrition and public health.
7. To understand the role of laboratory investigations in identifying and studying microorganisms.
8. To learn about maternal, child and public-health nutrition.
9. To relate nutrition and microbiology concepts to the **B.Pharm curriculum**.
10. To develop awareness of research-oriented work conducted in a national scientific institution.

Visit to the Nutrition Exhibition

A major component of the visit was the tour of the nutrition-related educational exhibition.

The exhibition contained numerous displays dealing with:

- Food groups
- Nutrients and their sources
- Vitamin-rich foods
- Nutritional deficiencies
- Maternal and antenatal care
- Nutrition and brain development
- Nutritional status
- Healthy dietary practices
- Historical nutrition and public-health information

The exhibits helped students connect theoretical concepts with visual representations and real-world applications.

Understanding the Classification of Nutrients

One of the presentations explained the basic classification of nutrients.

Nutrients

Nutrients



Macronutrients + Micronutrients

Macronutrients

- Carbohydrates



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

- Proteins
- Fats

Micronutrients

- Vitamins
- Minerals

The session helped students understand the different nutritional requirements of the human body and the importance of maintaining an appropriate balance of nutrients.

Health Benefits of Protein

A presentation on “**Health Benefits of Protein**” was also observed.

The discussion highlighted the importance of protein in:

- Muscle development and maintenance
- Growth and tissue repair
- Supporting immune function
- Maintaining healthy body composition
- Supporting bone health
- Promoting satiety and dietary balance

This helped reinforce the physiological importance of proteins beyond their role as a source of energy.

Healthy Dietary and Lifestyle Practices

The educational session also focused on practical approaches to maintaining good health.

A major take-home message encouraged consumption of **at least five servings of fruits and vegetables daily**.

The importance of adequate sleep was also emphasized through the message:

“Good Night – Sleep Well.”

These recommendations demonstrated that health promotion depends on a combination of balanced nutrition, appropriate dietary habits and healthy lifestyle practices.

Visit to the Microbiology Laboratory

One of the important academic components of the visit was the opportunity to **observe the microbiology laboratory facilities at NIN**.



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

The laboratory visit provided students with exposure to a professional research environment where microbiological investigations can be carried out in a controlled setting.

Students were able to appreciate the importance of:

- Laboratory hygiene
- Aseptic practices
- Prevention of contamination
- Proper handling of biological materials
- Microbial investigation
- Laboratory safety
- Scientific documentation
- Controlled laboratory conditions

The visit helped students understand that microbiological research requires careful control of environmental and experimental conditions to obtain reliable results.

Learning from the Microbiology Laboratory

The laboratory exposure helped reinforce several concepts studied in pharmaceutical microbiology.

Aseptic Techniques

Students gained an understanding of the importance of maintaining **aseptic conditions** during microbiological work.

Aseptic practices are essential for preventing unwanted contamination of samples, media and experimental materials.

Microbial Contamination

The visit helped students appreciate that microorganisms can contaminate:

- Food
- Water
- Pharmaceutical products
- Biological samples
- Laboratory materials
- Environmental surfaces



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

Therefore, controlling microbial contamination is important for both **public health and pharmaceutical quality**.

Microbiology and Food Safety

The connection between microbiology and nutrition was particularly relevant during the visit.

Microorganisms can influence food in different ways:

Microorganisms → Food contamination → Spoilage / foodborne illness

At the same time, selected microorganisms can have beneficial roles in food processing and fermentation.

This helped students understand that microbiology is closely associated with **food safety, nutrition and public health**.

Laboratory Identification of Microorganisms

The laboratory visit also reinforced the general principle that microorganisms can be investigated through appropriate laboratory methods involving:

Sample → Culture/processing → Observation → Identification → Interpretation

Although students did not necessarily perform these procedures themselves, observing the laboratory environment helped them understand how microbiological investigations are conducted in research settings.

Importance of Sterility and Contamination Control

Students also gained an appreciation of why laboratories working with microorganisms require strict attention to:

- Cleanliness
- Sterility
- Proper handling
- Appropriate disposal
- Controlled working conditions
- Personal protective practices



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

These principles are directly relevant to pharmaceutical microbiology and pharmaceutical manufacturing.

Relevance of the Microbiology Visit to B.Pharm

The microbiology laboratory visit was particularly relevant to pharmaceutical education.

Pharmaceutical Microbiology

It reinforced concepts such as:

- Microorganisms
- Aseptic techniques
- Contamination
- Sterility
- Microbial culture and identification
- Laboratory safety

Quality Control

Microbiological testing is important in assessing the microbiological quality of pharmaceutical products and other health-related materials.

Food and Nutraceuticals

Microbiology has an important role in:

- Food safety
- Food spoilage
- Fermentation
- Probiotics
- Nutraceutical products

Public Health

Microbial contamination of food and water can contribute to disease, making microbiological surveillance important for public health.

Research

The visit provided students with an appreciation of how microbiology can support **research, disease prevention, food safety and nutrition-related investigations.**



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

Five Food Groups

Another important exhibit was labelled “**FIVE FOOD GROUPS.**”

The display demonstrated the classification of foods according to their nutritional contribution.

This helped students understand the relationship between:

Food groups → Nutrient sources → Dietary requirements → Health

The exhibit complemented the presentation on macronutrients and micronutrients by showing how nutrients are obtained through different foods.

Vitamin A and Vitamin A-Rich Foods

A dedicated display on “**VITAMIN A RICH FOODS**” was observed.

The exhibition also contained photographs illustrating manifestations associated with nutritional deficiency.

This helped students understand the relationship between:

Nutrient deficiency → Physiological effects → Clinical manifestations

It also emphasized the importance of adequate dietary intake and preventive nutrition.

Maternal and Antenatal Nutrition

An exhibit titled “**ANTE-NATAL CARE**” provided information related to maternal health and nutrition.

The displays highlighted the importance of adequate nutrition during pregnancy and its relationship with maternal and fetal well-being.

The visit therefore demonstrated that nutritional requirements vary according to different stages of life and physiological conditions.

Nutrition and Brain Development

Another educational display focused on **nutrition and brain development.**

This emphasized the importance of adequate nutrition during periods of growth and development and demonstrated the role of nutrition in supporting normal physiological and neurological development.



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

Nutritional Status and Public Health

The exhibition also contained information related to **nutritional status**, particularly among women and vulnerable populations.

This demonstrated that nutritional health is influenced by multiple factors, including:

- Dietary intake
- Socioeconomic conditions
- Awareness
- Accessibility of nutritious food
- Physiological requirements
- Public-health interventions

Therefore, nutrition is not only an individual health issue but also an important **public-health concern**.

Impact

- Enhanced students' understanding of nutrition science, dietary requirements, and the importance of a balanced diet in maintaining health.
- Helped students relate theoretical concepts learned in classrooms to practical applications in nutrition research and public health.
- Improved students' awareness of scientific research methodologies, nutritional assessment, and laboratory practices followed at ICMR–NIN.
- Motivated students to explore career opportunities in nutrition research, public health, food science, and clinical nutrition.
- Encouraged interaction between students and research professionals, enhancing their scientific knowledge, communication skills, and professional confidence.

Outcomes

The visit provided students with learning in several interconnected areas.

Nutrition

Students gained a better understanding of:

- Macronutrients
- Micronutrients
- Proteins



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

- Vitamins
- Minerals
- Food groups
- Dietary sources
- Healthy eating practices

Microbiology

Students developed greater awareness of:

- Aseptic practices
- Microbial contamination
- Laboratory safety
- Microbiological investigations
- Food microbiology
- Importance of contamination control

Public Health

The visit demonstrated the importance of:

- Nutrition education
- Prevention of nutritional deficiencies
- Food safety
- Maternal nutrition
- Child nutrition
- Healthy lifestyle practices

Research

The exposure to the institutional and laboratory environment helped students appreciate:

- Scientific methodology
- Laboratory-based investigation
- Controlled experimental conditions
- Research documentation



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

- Interdisciplinary scientific work

Relevance to B.Pharm Education

The visit had strong relevance to several areas of the B.Pharm curriculum.

B.Pharm Area	Relevance of the Visit
Pharmaceutical Microbiology	Microorganisms, contamination, aseptic practices and laboratory safety
Biochemistry	Nutrient metabolism and physiological roles of nutrients
Pharmacology	Relationship between nutritional status and physiological functions
Pharmacognosy	Natural sources of nutrients and bioactive compounds
Nutraceuticals	Food-derived health-promoting substances and nutritional products
Community Pharmacy	Health education and preventive healthcare
Pharmaceutical Quality Control	Importance of microbial quality and contamination control
Research Methodology	Exposure to a professional scientific research environment

Overall Experience

The visit to ICMR–NIN was an informative and academically valuable experience. It provided students with exposure to both **nutrition education and laboratory-based scientific work**.

The nutrition exhibition helped students understand concepts such as food groups, vitamins, nutritional deficiencies, maternal nutrition and healthy dietary practices. The microbiology laboratory visit added a practical research perspective and helped students appreciate the importance of aseptic practices, contamination control, laboratory safety and microbiological investigation.

The combination of classroom concepts, visual exhibits, expert presentation and laboratory exposure made the visit an effective example of **experiential learning**.



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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy

Conclusion

The educational visit to **ICMR–National Institute of Nutrition, Hyderabad**, provided valuable exposure to the interconnected fields of **nutrition, microbiology, public health and scientific research**.

Students learned about macronutrients, micronutrients, proteins, vitamins, food groups, nutritional deficiencies, maternal nutrition, brain development and healthy lifestyle practices. The visit to the microbiology laboratory further enhanced understanding of aseptic practices, microbial contamination, laboratory safety, food microbiology and the importance of microbiological investigations.

For B.Pharm students, the visit helped bridge the gap between theoretical learning and practical exposure by connecting concepts from **pharmaceutical microbiology, biochemistry, pharmacology, pharmacognosy, nutraceuticals, quality control and community health**.

Overall, the visit was a meaningful academic experience that enhanced students' understanding of the role of **nutrition and microbiology in promoting health, preventing disease and supporting scientific research**.





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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy





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, Accredited A+ grade by NAAC
NABET-QCI Rated with A Grade-B.Pharmacy



Secunderabad, Telangana, India 🇮🇳
Vijayapuri Colony, Tarnaka, Secunderabad, Telangana
500017, India
Lat 17.428894, Long 78.527740
Thursday, 22/10/2026 11:48 AM GMT+05:30
Note : Captured by GPS Map Camera