

Criterion - 4

Infrastructure and Learning Resources

NAAC- SSR (2nd Cycle)



ETERNAL UNIVERSITY

BARU SAHIB, SIRMOUR-173101
HIMACHAL PRADESH

4.3.3(2)

Structure of Facilities



ETERNAL UNIVERSITY

BARU SAHIB, SIRMOUR-173101
HIMACHAL PRADESH

**1. Audio Visual Centre, Mixing
Equipment, Editing Facilities and
Media Studio**

&

2. LCS (Lecture Capturing System)

Audio Visual Centre, Mixing Equipment, Editing Facilities and Media Studio & LCS (Lecture Capturing System)

Introduction: Eternal University has integrated an Audio Visual Centre, Mixing Equipment, Editing Facilities and Media Studio and Lecture Capturing System (LCS) to enhance its educational offerings by facilitating live classes and recording lectures, thereby making them accessible to students anytime and anywhere. This documentation outlines the equipment, software, and functionalities of the media studio and LCS implemented at Eternal University.

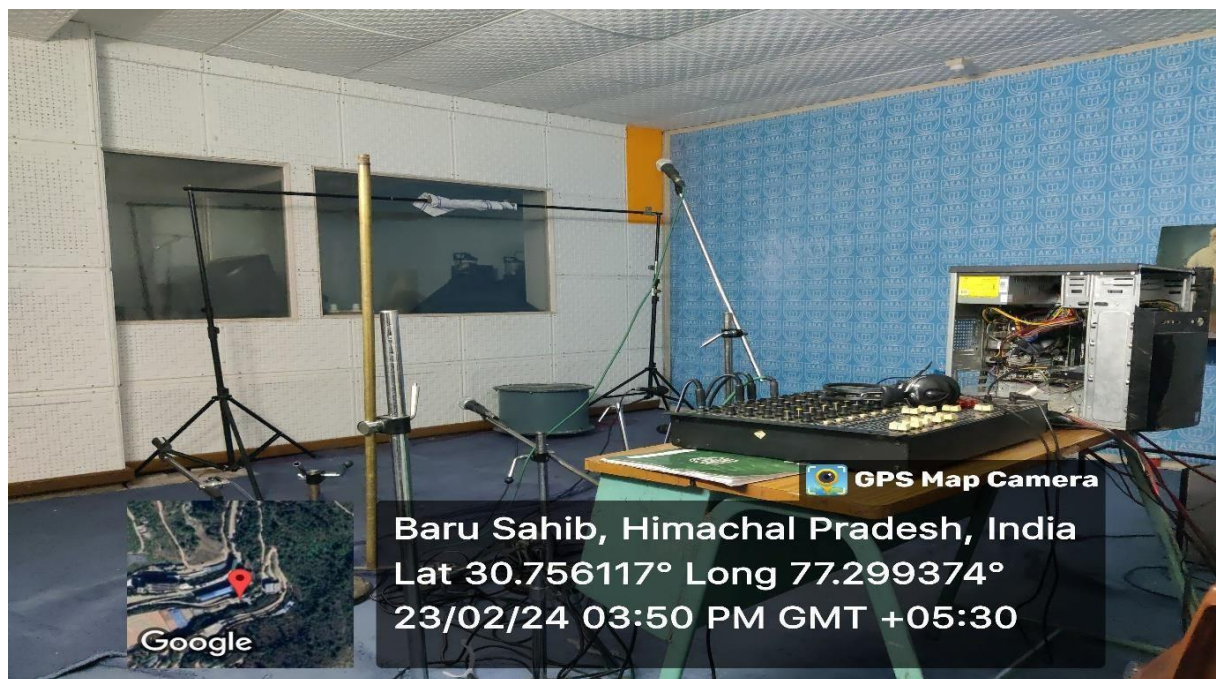
Equipment & Software Utilized:

- Sony video Camera
- Samsung galaxy A8 tab
- Hybrid Tripod
- Lights tripod
- Backdrop stand
- WD Hard disk 2TB
- Rode Mic
- SanDisk 128GB 200mb/s card
- Headphones
- LCD
- Editing PC
- Power Backup
- Learning Management System (LMS) - Moodle
- Cloud Storage (Amazon Web Services)

Implementation Overview: The LCS at Eternal University encompasses a comprehensive solution across its campus, involving the integration of various hardware and software components. High-quality cameras, microphones, and recording hardware are installed in studios to ensure optimal audio and video capture during lectures.

Benefits:

- **Enhanced Learning Experience:** The LCS enhances the learning experience by providing flexibility, accessibility, and inclusivity to students.
- **Improved Retention:** Students can review lectures multiple times, reinforcing their understanding of complex topics and improving retention.
- **Active Participation:** Interactive features promote active participation among students, fostering a sense of community and collaboration.
- **Efficient Resource Utilization:** With lectures recorded and archived, instructors can devote more time to interactive discussions, hands-on activities, and personalized student support.



Audio Visual Centre



Lecture Capturing System (LCS)

3. Central Instrumentation Centre

Central Instrumentation Centre

The instruments are vital tools in various scientific disciplines, including Analytical Chemistry, Biotechnology, Microbiology, Food Technology, Environmental Science, and Life Science. The facility is stretched in an area of 943.35 sq. ft., with various amenities.

Here are some common Instruments of Central Instrumentation Centre and their applications

- Digital Balance is used for accurate measurement of mass, weight and density of various samples and chemicals
- Laminar Air Flow (LAF) and Bio Safety Cabinet systems are used in many industries to create a sterile environment
- Biochemical Oxygen Demand (BOD) incubator provide controlled environment of temperature, humidity and agitation for culturing microorganisms, cells and biological samples
- Autoclave uses high pressure steam to kill microorganisms, and viruses
- Centrifugation can be employed to separate a mixture of two different miscible liquids
- Water Distillation Assembly is used to purify water by separating impurities through the process of distillation
- Phase Contrast Microscope is used for observation of cellular behavior and morphology
- Microscope used for biochemical characterization of microbes and cytology
- Bioinocular Microscope design with dual eyepieces enabling users to observe 3D view of specimen
- Polymerase Chain Reaction (PCR) use to amplify specific DNA sequences, generating million of copies from initial template
- Electrophoresis Unit is used to separates DNA, RNA, protein molecules based on size and charge by applying electric field
- Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis (SDS PAGE) Unit is used to separates proteins based on molecular weight
- Gel Documentation Unit is used to capture, analyze and document high-resolution image of electrophoresed DNA, RNA and protein gels

Instruments

1. Digital Balance
2. Laminar Air-Flow
3. Bio Safety Cabinet
4. BOD Incubator Shaker
5. Autoclave
6. Centrifuge
7. Water distillation Assembly
8. Phase Contrast Microscope
9. Bioinocular Microscope
10. Polymerase Chain Reaction
11. Electrophoresis Unit
12. SDS PAGE Unit
13. Gel Documentation Unit

Lab-SOP

1. Before coming in lab, students have to read lab rules.
2. Students come with samples have to discuss with lab in-charge about their studies
3. Students have to make entry in Logbook for a particular instrument that they are using and they have to enter their contact number and email id for result purpose.
4. Analysis done according to SOPs.
5. Results are sending through email id.

Lab In-charge

Dr. Ajar Nath Yadav

Contact No:- 9882545085

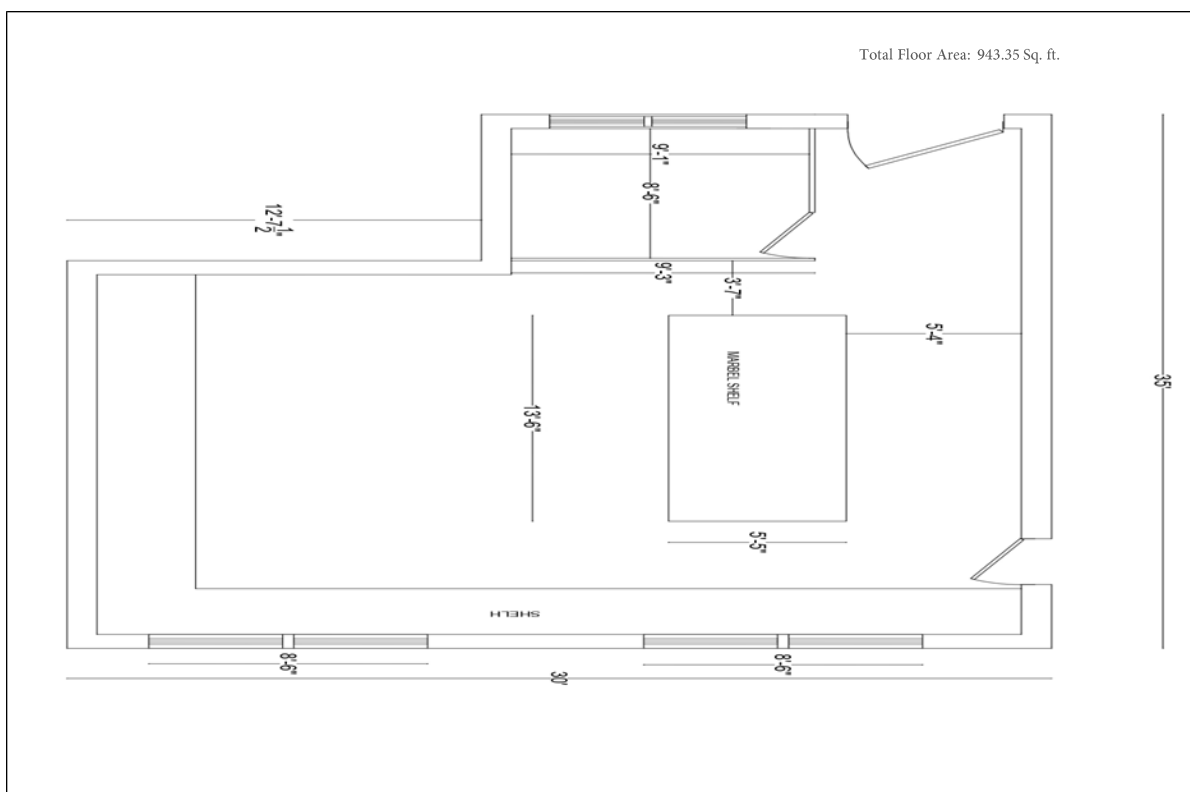
Scholars (2023-24):-

Ms. Rajeshwari Negi (Ph.D.
Biotechnology)

Ms. Babita Sharma (Ph.D.
Microbiology)



Central Instrumentation Centre



Layout of Central Instrumentation Centre

4. Museum

Museum

The Eternal University Museum stands as a testament to the profound connection between humanity and the land, a connection deeply rooted in the values of sustainability, respect for nature, and the preservation of traditional wisdom. The museum is stretched in 948.31 Sq. ft. area.

A Celebration of Agricultural Wisdom:

- **Preserving Traditional Practices:**

- ❖ The museum meticulously documents and showcases the rich agricultural heritage of the region, emphasizing traditional farming techniques, indigenous knowledge, and sustainable practices that have sustained communities for generations.
- ❖ It serves as a living archive, safeguarding the wisdom of our ancestors and ensuring its transmission to future generations.

- **Highlighting Regional Diversity:**

- ❖ The museum celebrates the diverse agricultural practices and crops of the surrounding region, highlighting the unique adaptations and innovations developed by local communities.
- ❖ It fosters an appreciation for the rich tapestry of agricultural traditions that have shaped the cultural landscape.

- **Promoting Sustainable Agriculture:**

- ❖ In alignment with University's values, the museum emphasizes the importance of sustainable agriculture, showcasing practices that protect the environment and promote long-term food security.
- ❖ It serves as an educational resource, inspiring visitors to adopt environmentally responsible agricultural practices.

A Hub for Education and Research:

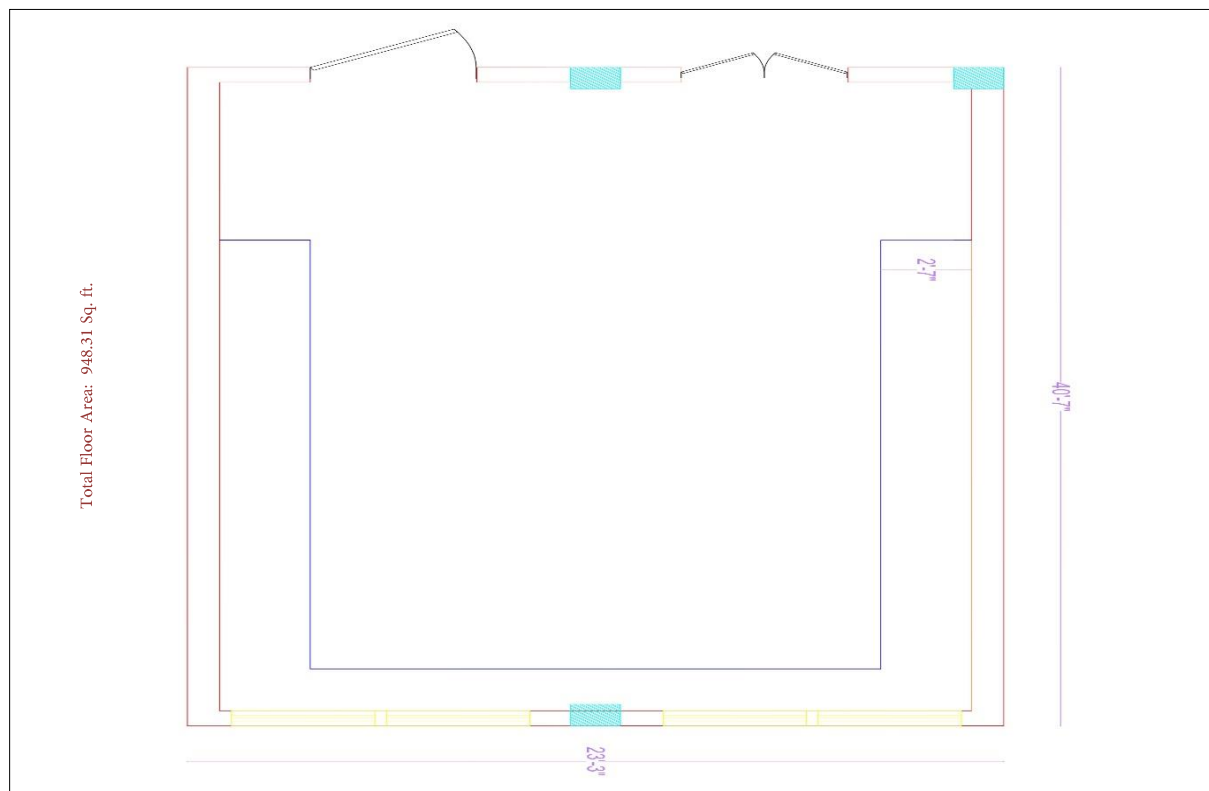
- **Educational Exhibits:**

- The museum features interactive exhibits that engage visitors of all ages, providing insights into the history, science, and cultural significance of agriculture.
- It serves as a valuable educational resource for students, researchers, and the wider community.
- It serves as a platform for knowledge exchange and collaboration, promoting sustainable agricultural practices and rural development.

The Eternal University Museum of Agricultural Heritage is more than just a repository of artifacts; it is a living testament to the enduring relationship between humanity and the land. It serves as a beacon of knowledge, inspiration, and hope, reminding us of the importance of preserving our agricultural heritage and fostering a sustainable future.



Picture of Museum



Detailed layout of Museum

5. Open Air Theatre / Theatre

Open-Air Theater

The Open-Air Theatre (OAT) at Eternal University stands as a remarkable venue, seamlessly integrating art, culture, and nature in the divine valley of peace. Nestled amidst the serene and picturesque surroundings of the university campus, the OAT serves as a central hub for students, faculty, and esteemed guests, fostering a vibrant environment that promotes holistic development and value-based education.

With a plinth area of 11526.8 Sq. Ft. and a covered area of the same dimensions, the OAT provides ample space to host a diverse array of cultural and academic events. Whether it is soul-stirring musical performances, thought-provoking theatrical productions, or cultural festivities, this versatile venue offers an inspiring platform for artistic expression and intellectual engagement.

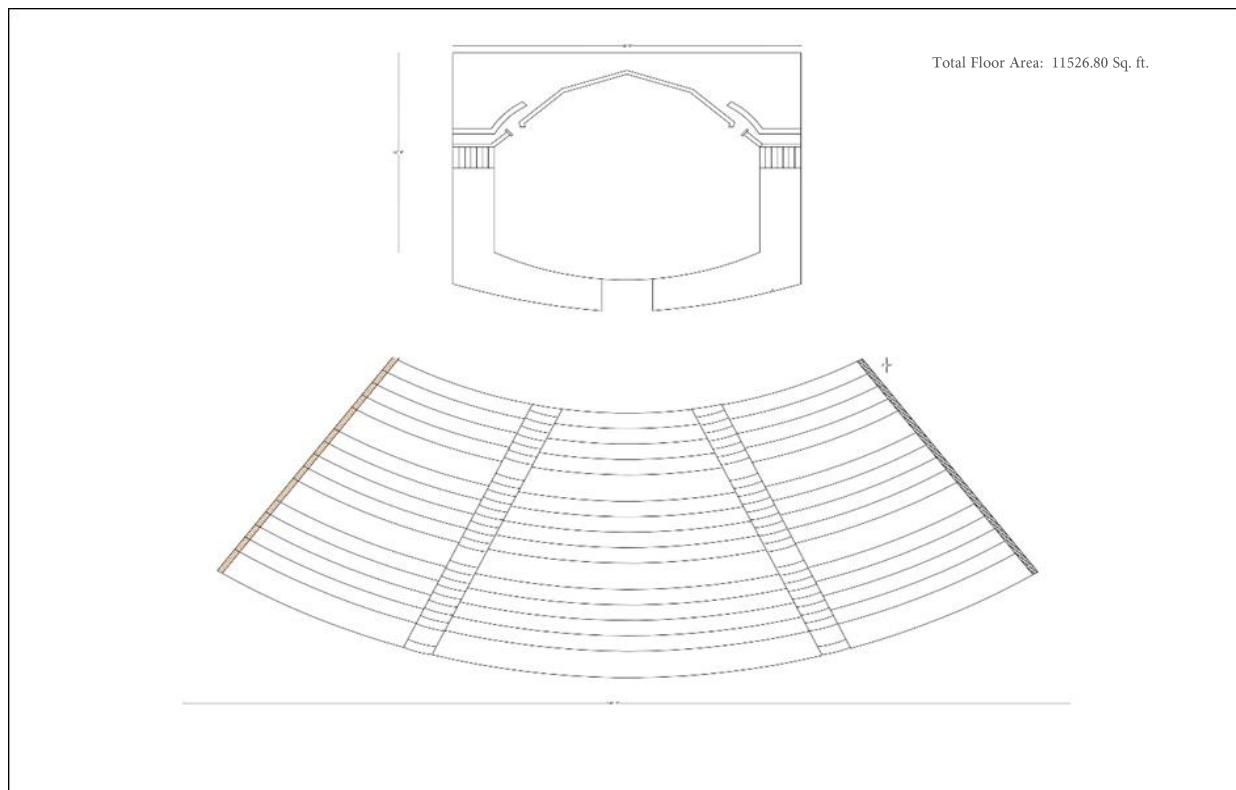
One of the key attributes of the OAT is its capacity to accommodate up to 1000 individuals, making it an ideal space for both intimate gatherings and large-scale events. This inclusivity reinforces Eternal University's commitment to fostering a sense of community, collaboration, and shared learning experiences. The open-air setting further elevates the ambiance, allowing attendees to immerse themselves in the beauty of nature while engaging in meaningful interactions and enriching performances.

The tranquil atmosphere of the OAT, complemented by the gentle whisper of the breeze and the panoramic view of the surrounding mountains, creates a spiritually uplifting environment. Whether under the golden hues of sunrise or the celestial glow of a starlit sky, every event held in this space becomes a memorable experience, resonating deeply with the values of harmony, peace, and enlightenment that define Eternal University.

More than just an event space, the Open-Air Theatre at Eternal University is a symbol of the institution's unwavering dedication to holistic education, cultural enrichment, and personal growth. It stands as a testament to the university's mission of nurturing compassionate, knowledgeable, and ethical individuals who contribute positively to society. By blending the performing arts with the natural beauty of its surroundings, the OAT continues to serve as a cherished landmark that embodies the spirit of Eternal University.



Picture of Open-Air Theatre



Layout diagram of Open-Air Theatre

University Theater

The University Theatre provides a space for immersive cinematic and theatrical experiences. Equipped with advanced audiovisual technology and comfortable seating, it transforms into a haven where students and faculty can engage with stories that inspire, educate, and uplift, aligning with the university's commitment to holistic development. The theater is starched in area of 2263 sq. ft., with 200 individuals seating capacity.

However, its significance extends far beyond entertainment. The University Theatre is a versatile platform, adaptable to a wide range of events and programs. It hosts value-driven films premiere, insightful academic seminars, thought-provoking documentaries, and spiritually enriching cultural performances. This adaptability allows the theatre to become a vibrant hub where creativity flourishes, thoughtful dialogues are exchanged and strong bonds are forged within the Eternal University community.

It acts as a catalyst for cultural enrichment, promoting understanding and empathy through the power of storytelling. It provides a platform for showcasing diverse perspectives, fostering respect, and celebrating the richness of human experience, all within the framework of the university's value-based education. Through film screenings, panel discussions, and interactive sessions, it sparks conversations that transcend cultural boundaries, promoting inclusivity and enlightenment in alignment with the university's mission of peace and harmony.

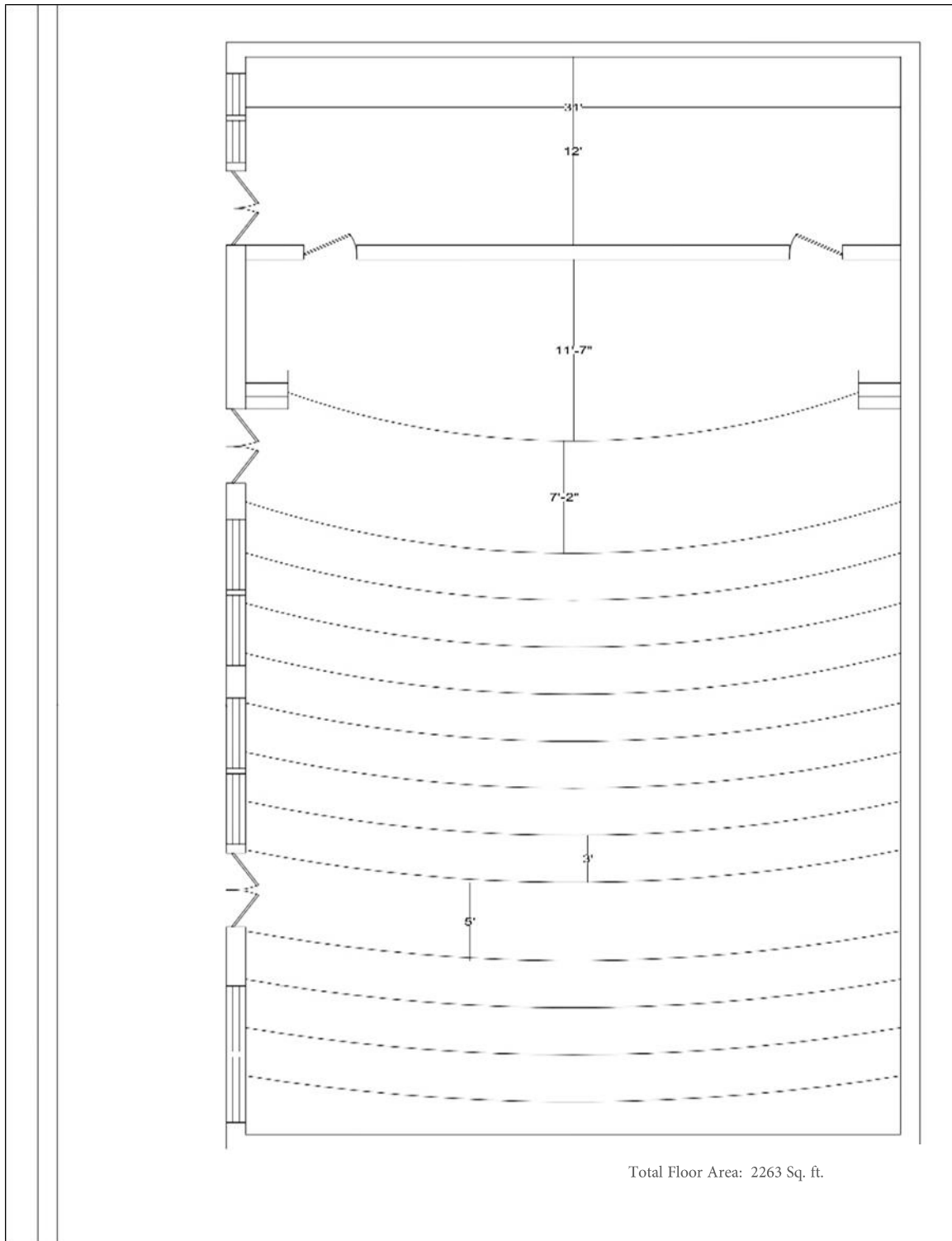
Beyond its physical attributes, the University Theatre embodies intangible qualities that make it a cherished cornerstone of campus life. It is a space where meaningful memories are created, virtuous friendships are nurtured, and noble dreams are kindled.

In essence, the University Theatre at Eternal University transcends its physical dimensions to become a symbol of creativity, community, and value-based cultural enrichment. It stands as a testament to the power of art and entertainment to unite, inspire, and transform lives in accordance with the university's guiding principles. As students and faculty enter its doors, they step into not just a theatre, but a sacred space where imagination takes flight and the human spirit finds nourishment in an environment of peace and divine values.

Lat: 30.755924°
Long: 77.298557°
Date: 09/04/2024



Layout diagram of Open-Air Theatre



Layout diagram of Open-Air Theatre

6. Art Gallery

Art Gallery

University Art Gallery serves a unique and profound purpose. It's not merely a space for displaying art, but a sanctuary where creativity and spiritual values intertwine, enriching the university community and beyond. The gallery provides a calm and peaceful environment that allows for contemplation and inner peace. The art gallery is starched in 648 sq. ft. area, with adequate light and aeration.

Reflection of Eternal Values:

- **Spiritual Expression:**

- ❖ The gallery provides a platform for art that reflects and promotes the university's core values of peace, harmony, and spiritual growth.
- ❖ It showcases works that inspire contemplation, evoke positive emotions, and encourage a deeper understanding of the human spirit.
- ❖ The gallery serves as a space for students, faculty, and visitors to connect with art that resonates with their spiritual beliefs and values.

- **Value-Based Art:**

- ❖ The gallery prioritizes art that embodies ethical and moral principles, fostering a culture of compassion, empathy, and respect.
- ❖ It seeks to exhibit art that uplifts the soul and contributes to the overall well-being of the community.

- **Cultural Enrichment with a Purpose:**

- ❖ While providing cultural enrichment, the gallery also aims to educate and inspire, aligning with the university's mission of value-based education.
- ❖ Exhibitions and events are designed to foster dialogue and understanding, promoting a harmonious and inclusive campus environment.

A Hub for Community and Connection:

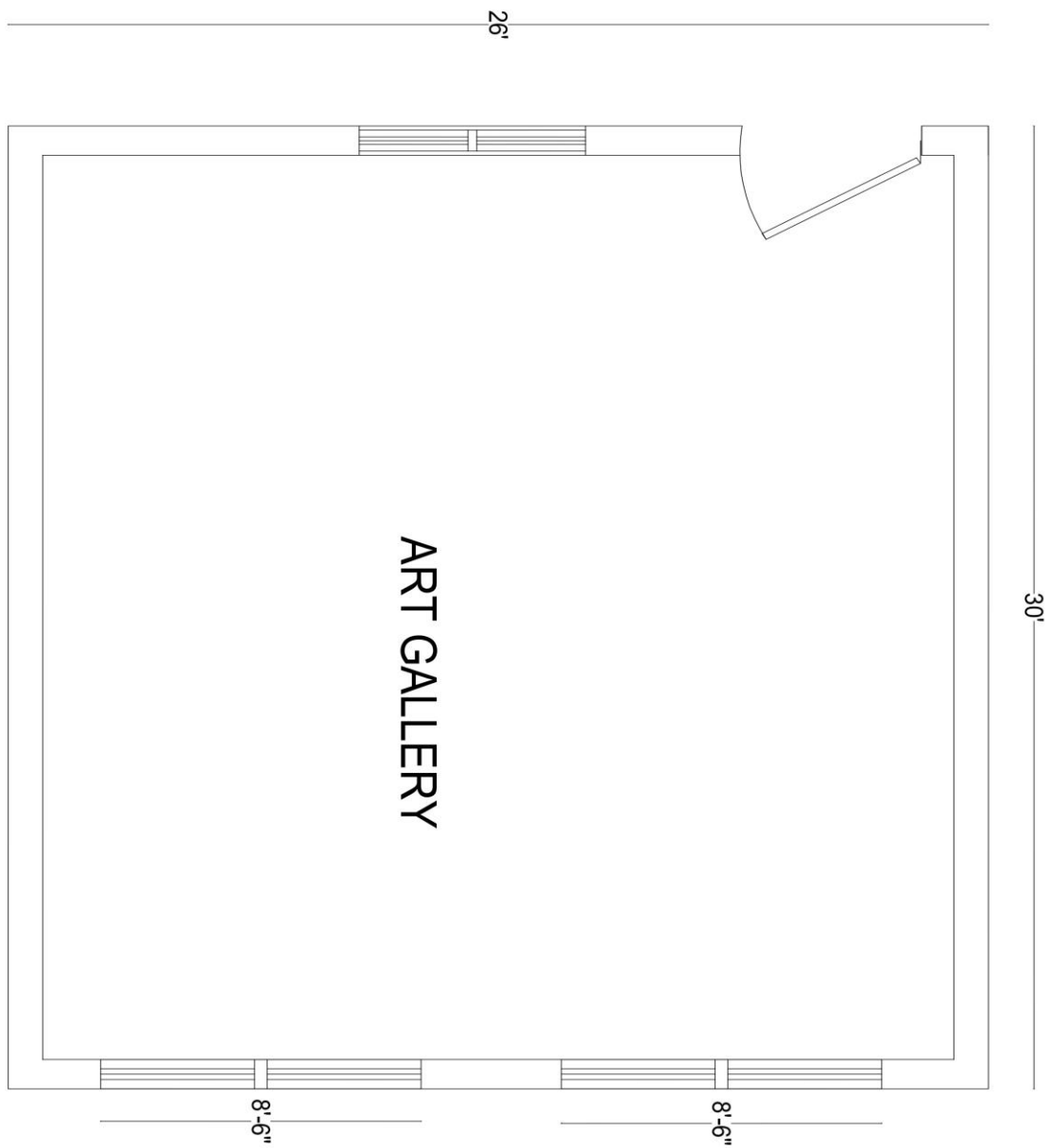
- **Educational Outreach:**

- ❖ The gallery hosts lectures, and interactive sessions that explore the intersection of art and spirituality.
- ❖ These programs provide opportunities for students and the wider community to deepen their understanding of art and its role in fostering personal and spiritual growth.

In essence, the Eternal University Art Gallery transcends the traditional role of an art gallery, becoming a sacred space where art and spirituality converge. It serves as a testament to the university's commitment to holistic development, fostering creativity, and promoting the values of peace and harmony.



Picture of Art Gallery



Layout of Art Gallery

7. Other Facilities to Support Research

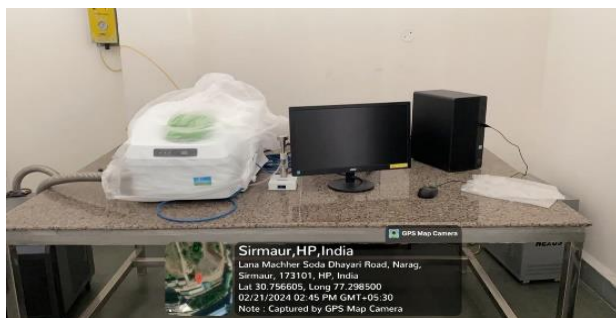
AKAL FOOD SAFETY AND QUALITY CONTROL LABORATORY



Gas Chromatography Mass Spectrophotometer (GCMS/MS)



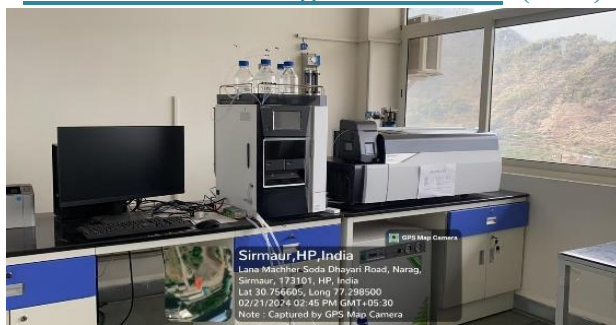
High Pressure Liquid Chromatography (HPLC)



Differential Scanning Calorimeters (DSC)



UHPLC Amino acid analyzer



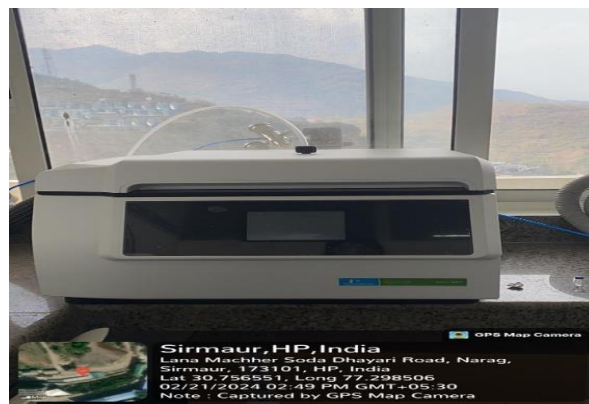
Liquid chromatography-mass spectrometry



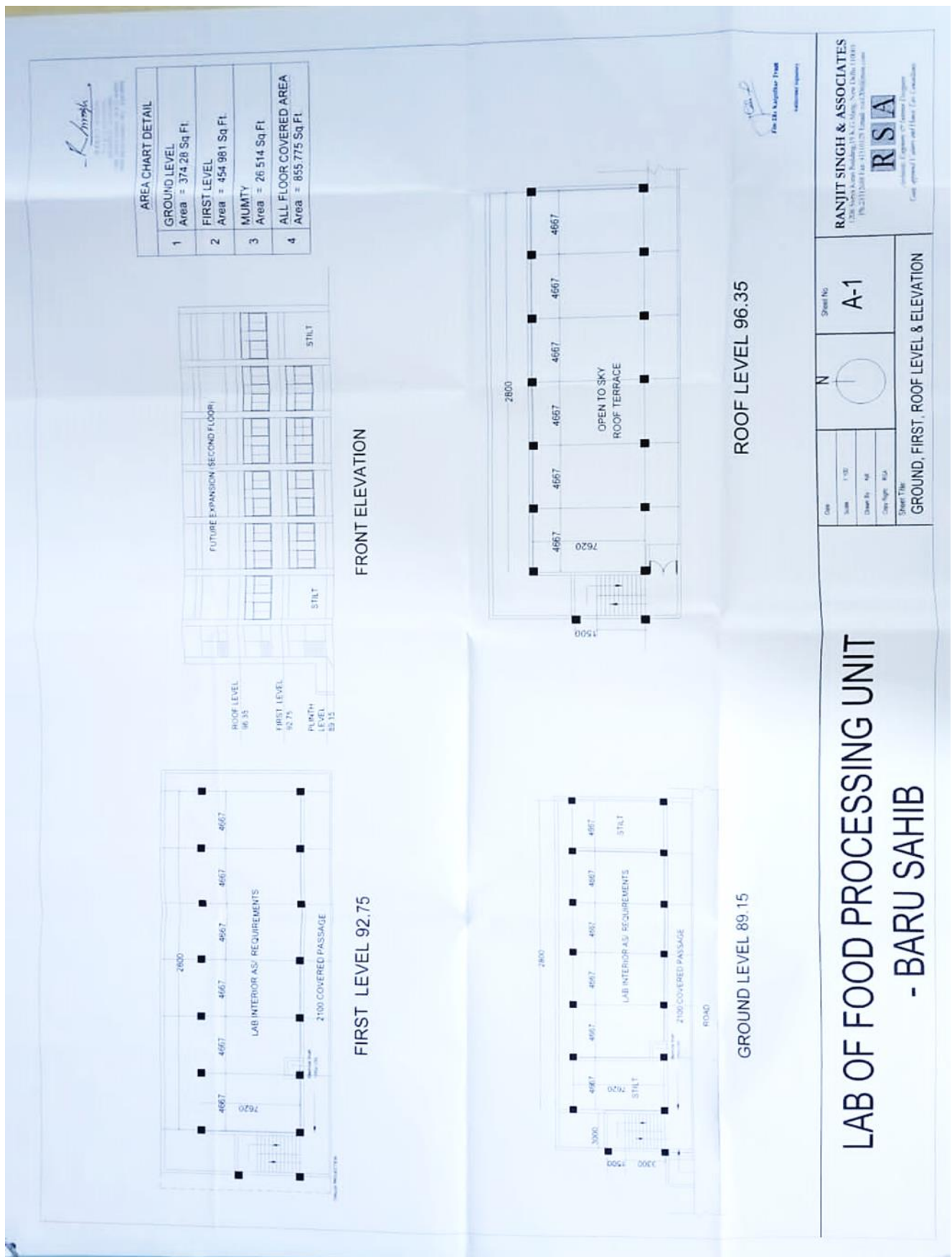
Spectrophotometer



Micro-digester



Micro-digester



Layout of Akal Food Safety and Quality Control Laboratory