# 7.1.2 Environmental Consciousness and Sustainability

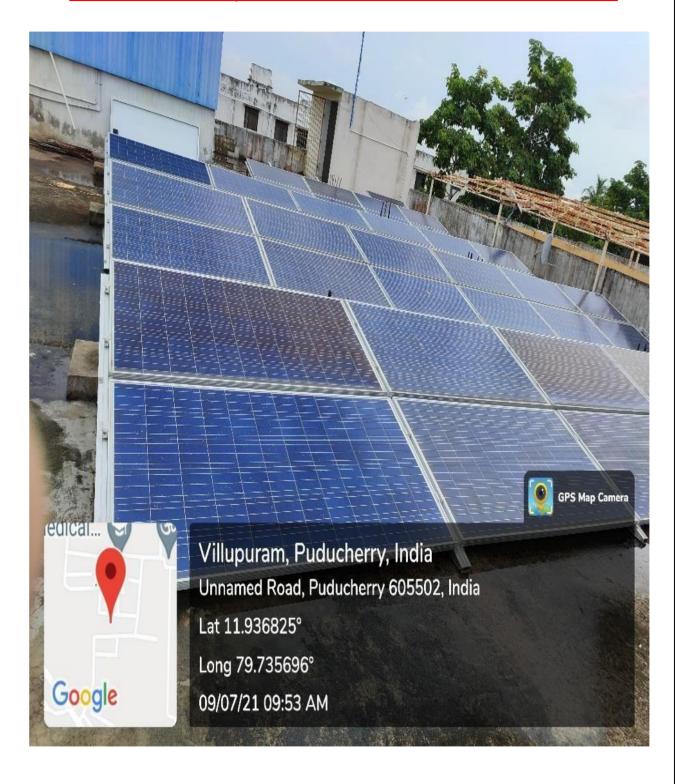
7.1.2 The Institution has Facilities for Alternate
Sources of Energy and Energy Conservation
Measures

- 1.Solar energy
- 2.Biogas plant
- 3. Wheeling to the Grid
- 4.Sensor-based energy conservation
- 5.Use of LED bulbs/ Power Efficient Equipment

Bharath Institute of Higher Education & Research

# 1.Solar Energy

# Sri Lakshmi Narayana Institute of Medical Sciences-SLIMS



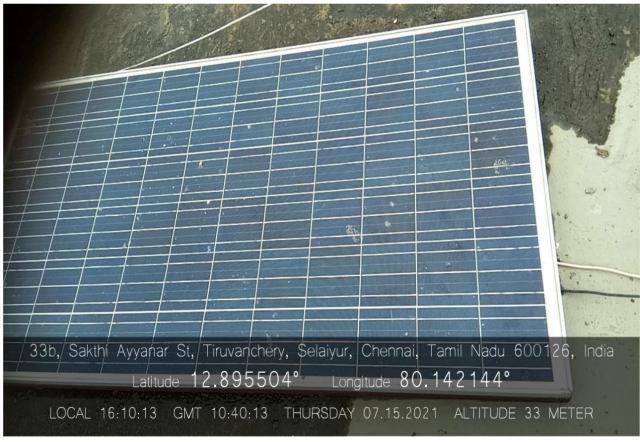
# **SOLAR ENERGY - Solar Panel @ BIST**

## **Bharath Institute of Science & Technology**



#### **SOLAR ENERGY @ SCHOOL OF ARTS AND SCIENCE**





# Energy Conservation Automatic Solar Street Lamps @ SLIMS-Sri Lakshmi Narayana Institute of Medical Sciences



# Power Efficient & Sensor Based Solar Street Lamps @ SLIMS Campus

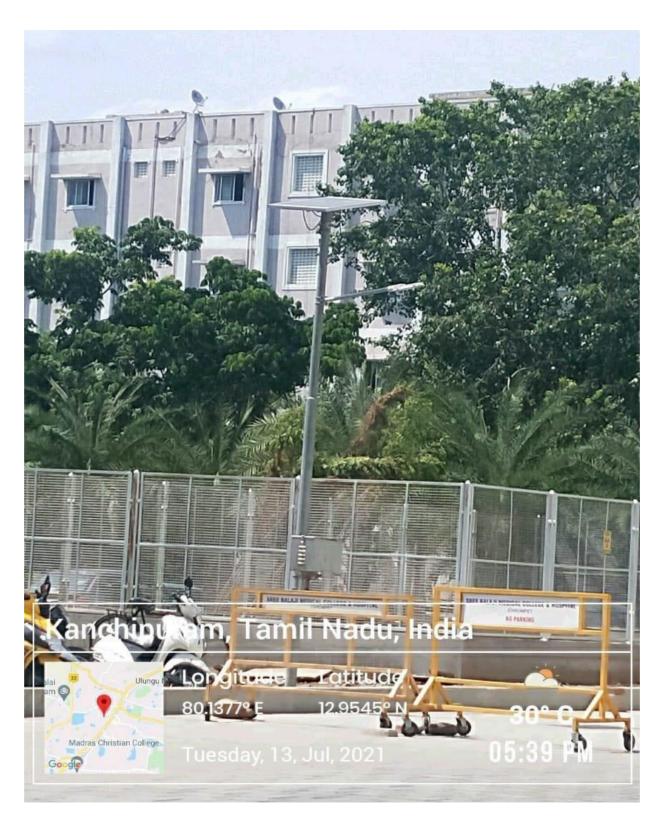






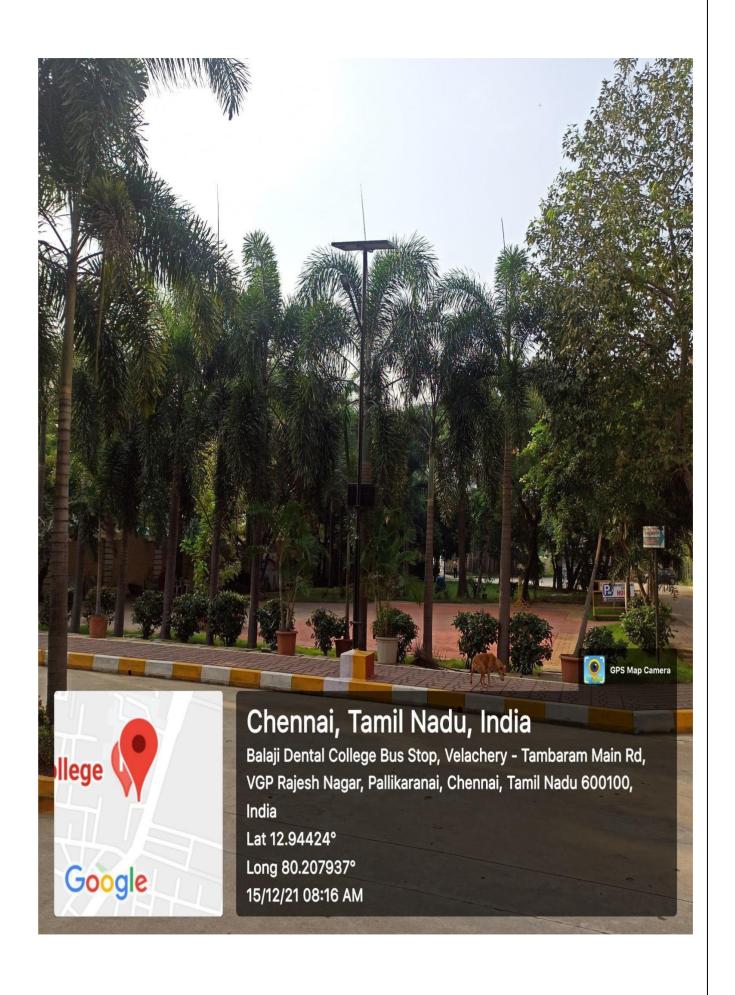


# Power Efficient Solar Campus Lamps & Sensor Based @Sree Balaji Medical College & Hospital-SBMCH



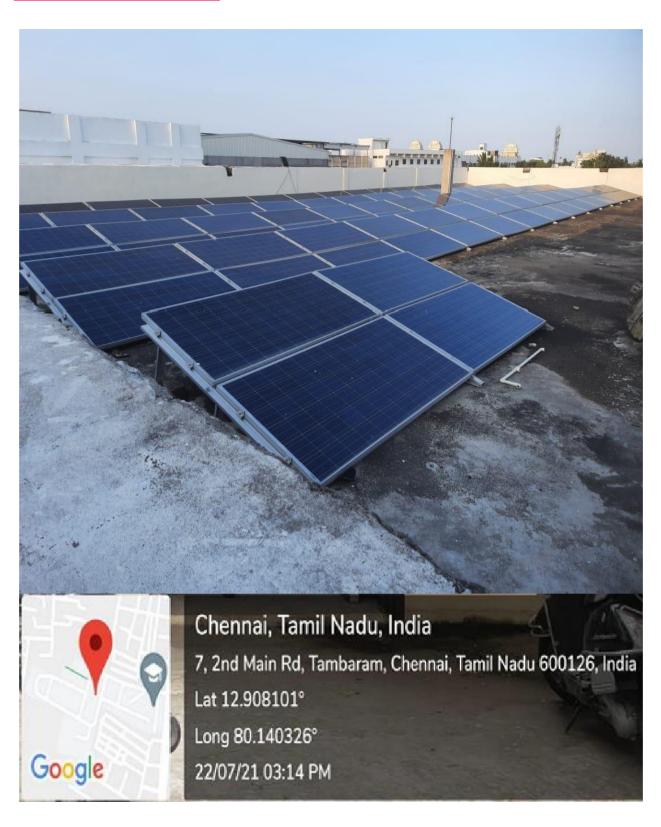
# Energy Conservation Automatic Solar Street Lamps @Sree Balaji Dental College & Hospital-SBDCH







# Solar Energy-Solar Panels @ BIHER Bharath Institute of Higher Education & Research

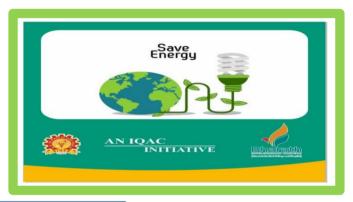


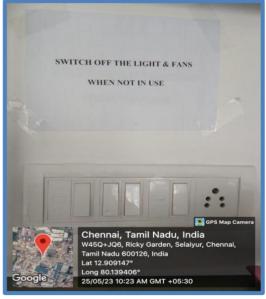
### Solar Energy @ Bhaarath medical college and hospital

### Automated water level controllers



## Sign Boards on Save Energy and Save Water Displayed in the Campus







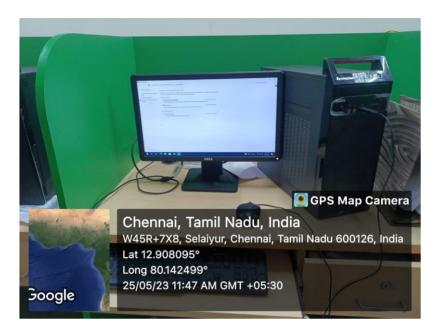
# Solar Energy @Sree Balaji College of Nursing



# **BATTERY OPERATED VEHICLES**



# POWER SAVING MODE OPERATION OF COMPUTERS

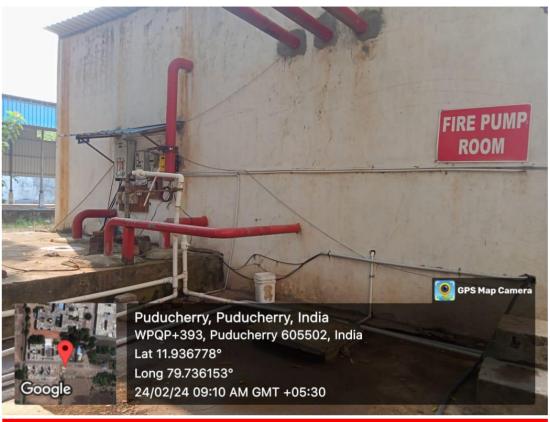


# **2.BIOGAS PLANT**

# Sri Lakshmi Narayana Institute of Medical Sciences-SLIMS









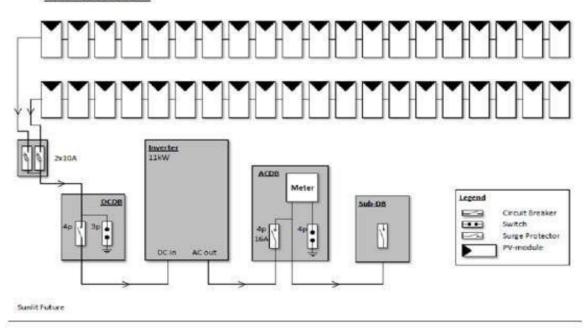




# **3.WHEELING THE GRID**

# **Electrical Panel Room**

#### 11kw On-Grid





Wheeling to the Grid Geo-tagged photographs of Wheeling to the Grid @ Bharath Institute of
Higher Education & Research









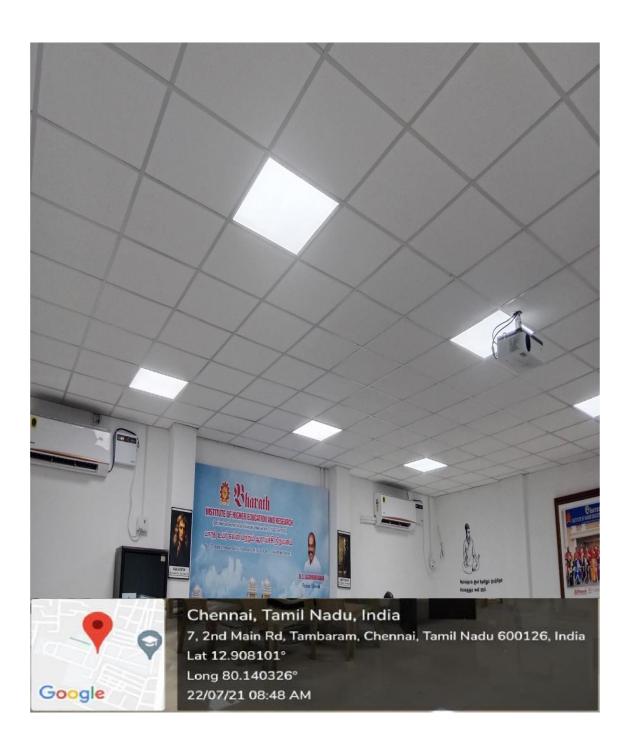
# 4.Sensor-Based Energy Conservation & Power Efficient Equipment

Sensor-Based Energy Conservation & Power

<u>Efficient Equipment</u>

Smart Sensor Based Projectors & 5-star ACs & LEDsEnergy Efficient Equipment

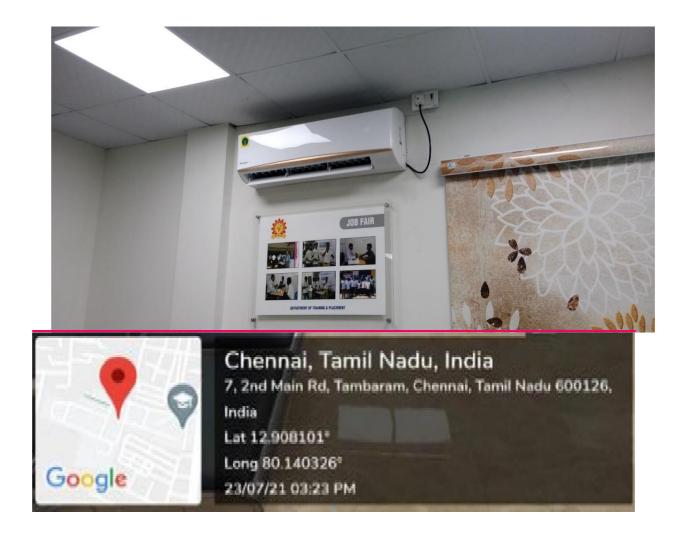
@ Pro Vice-Chancellor Academics Office BIHER



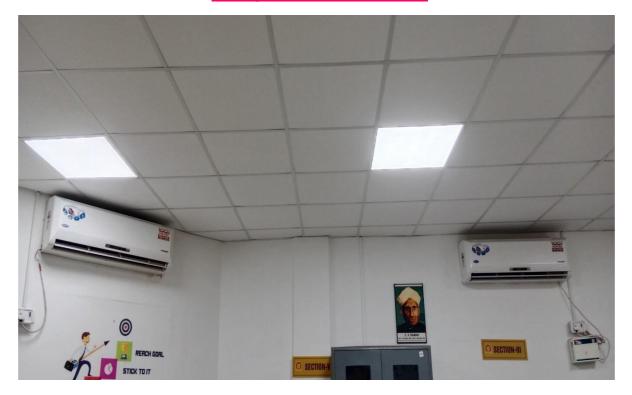
# Smart Sensor based Energy-Efficient 5-star ACs & LEDs



@ Placement Office – BIHER



# @ IQAC Office BIHER

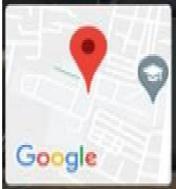


# Automatic Energy Efficient Room Freshener with LED Sensor & Moisture Sensor @ BIHER









# Chennai, Tamil Nadu, India

7, 2nd Main Rd, Tambaram, Chennai, Tamil Nadu 600126,

India

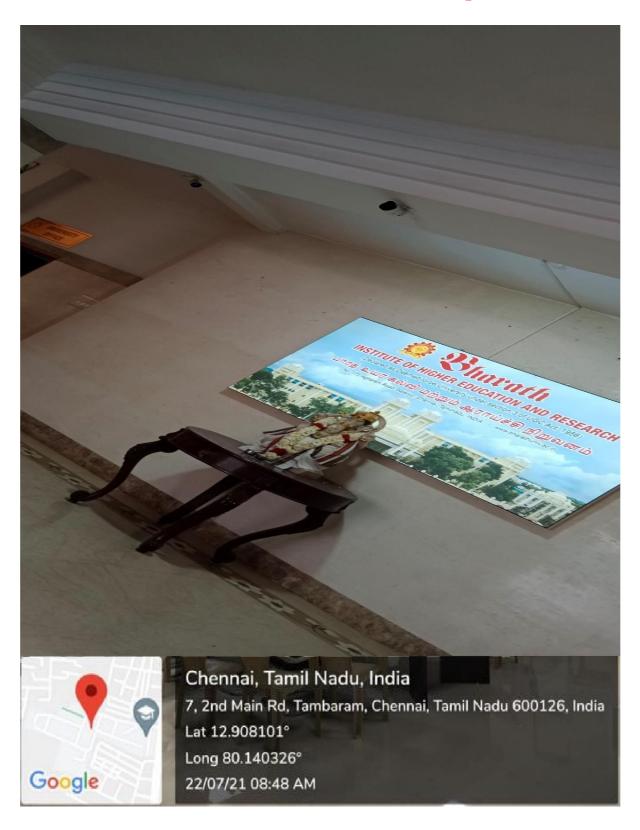
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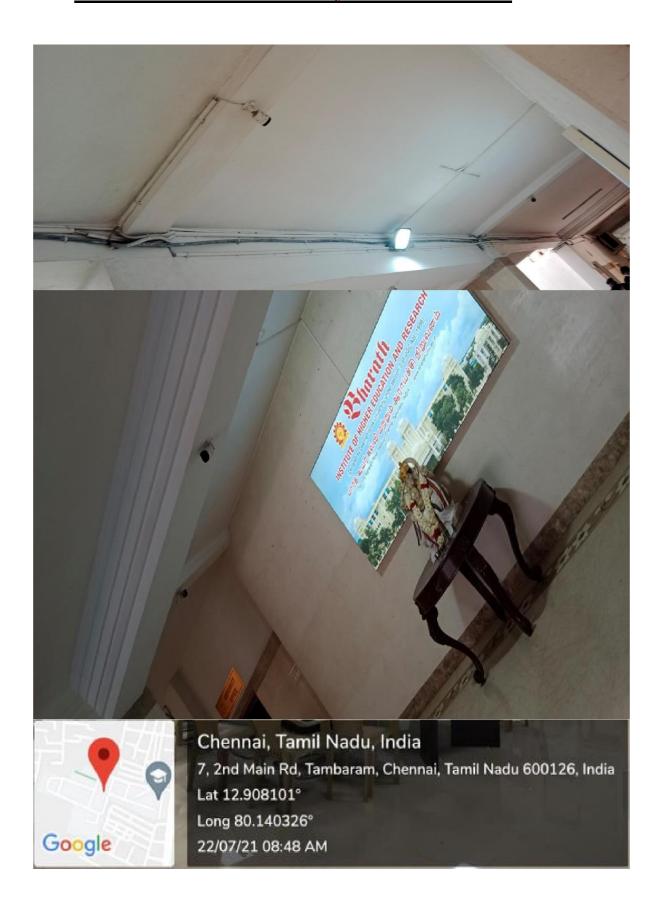
23/07/21 03:23 PM

# <u>A Passive Infrared Sensor - PIR Motion Sensor Based Smart</u> <u>Security Cameras to Detect Movement and Day & Night Capture</u>

### @ BIHER Entrance & Entire Campus



### **Sensor Based Smart Security Cameras @ BIST**



# **Security Camera Capture @ Entire BIHER Campus**





# A Passive Infrared Sensor - PIR Motion Sensor Based Smart Security Cameras to Detect Movement and Day & Night capture @ Entire BIHER Campus & Virtual Monitoring cum Security Tracking System



### Physiological & Behavioural Smart Biometrics - Face Recognition, Fingerprint, Hand Geometry, Iris Recognition

@ Pro Vice-Chancellor Academics Office -BIHER



# Sensor Based-Energy Efficient Physiological & Behavioural Smart Biometrics @ BIHER Entrance





# Sensor Based-Energy Efficient Physiological & Behavioural Smart Biometrics @ BIHER Office



Sensor Based Physiological & Behavioural SmartBiometrics @ BIHER Finance Office



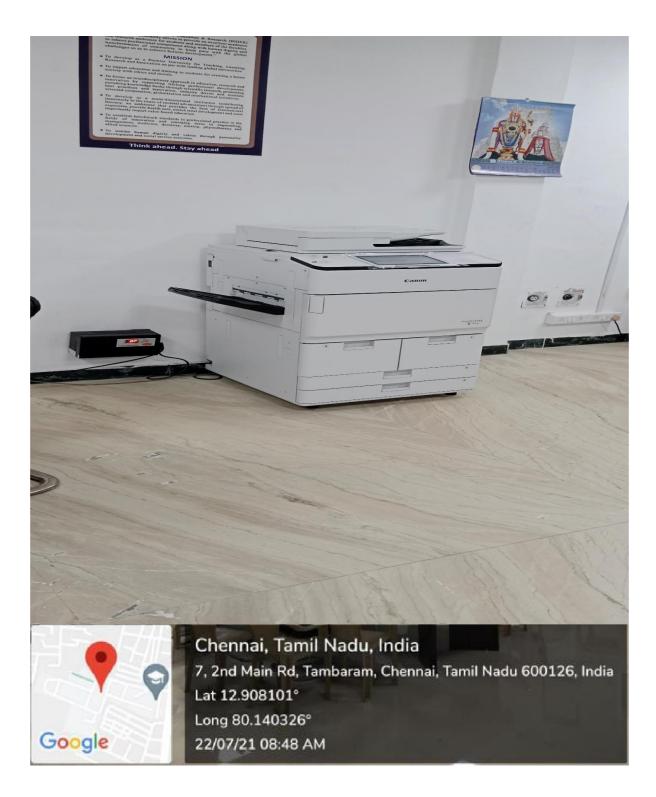
Multi-function all in one Priter cum Scanner [IR AVD DX 6755]

An Infrared-IR Sensor Based ON when Touch & OFF when Not
in Use @ Bharath Institute of Higher Education & Research

Office



# Multi-function all in one Priter cum Scanner [IR AVD DX 6755] An Infrared-IR Sensor Based ON when Touch & OFF when Not in Use @ Pro Vice-Chancellor Academics Office -BIHER



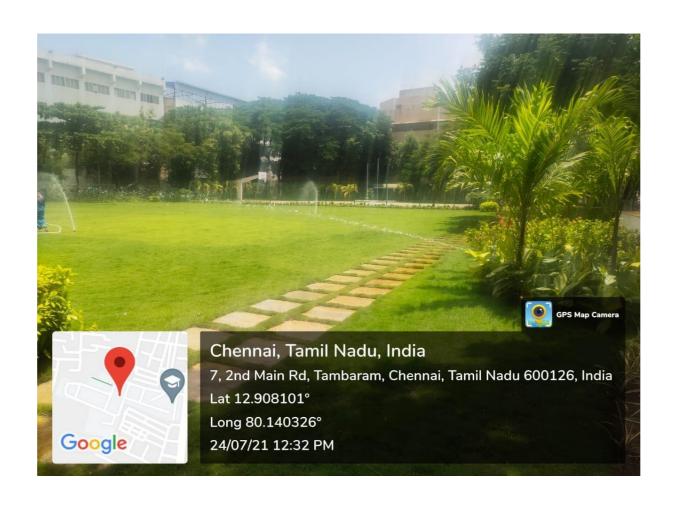
#### Moiture Sensor Based Watering the Garden by Recycling water @BIHER



#### Moiture Sensor Based Watering the Garden by Recycling water @SLIMS



#### Moiture Sensor Based Watering the Garden by Recycling water @BIST



## Water Level Sensor based Auto Filling Water Tanks @ SCHOOL OF ARTS AND SCIENCE



#### Water Level Sensor based Auto Filling Water Tanks @ BIST

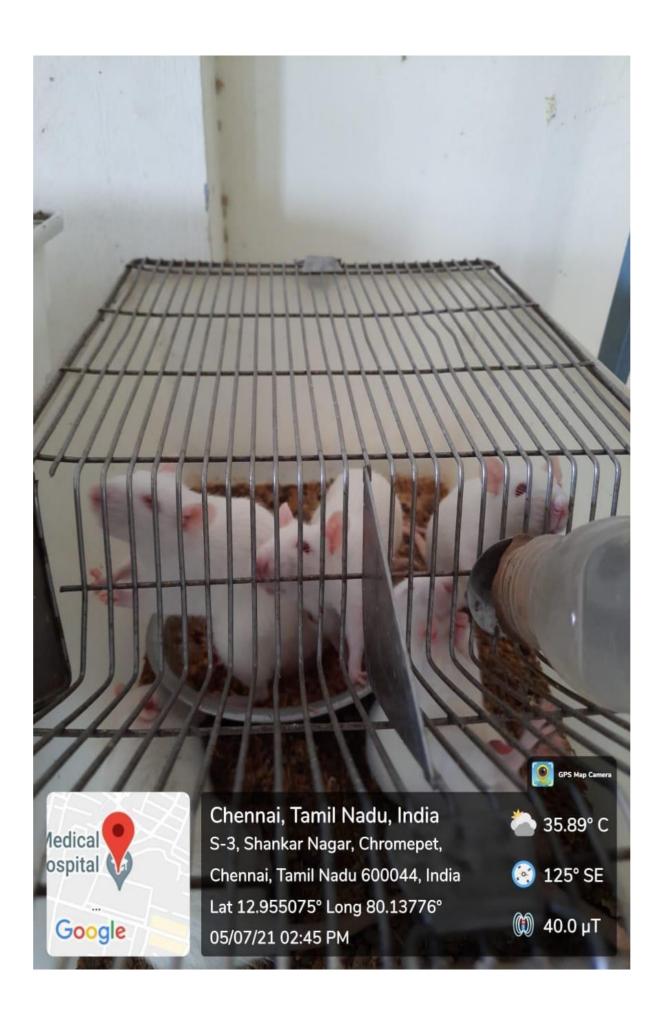


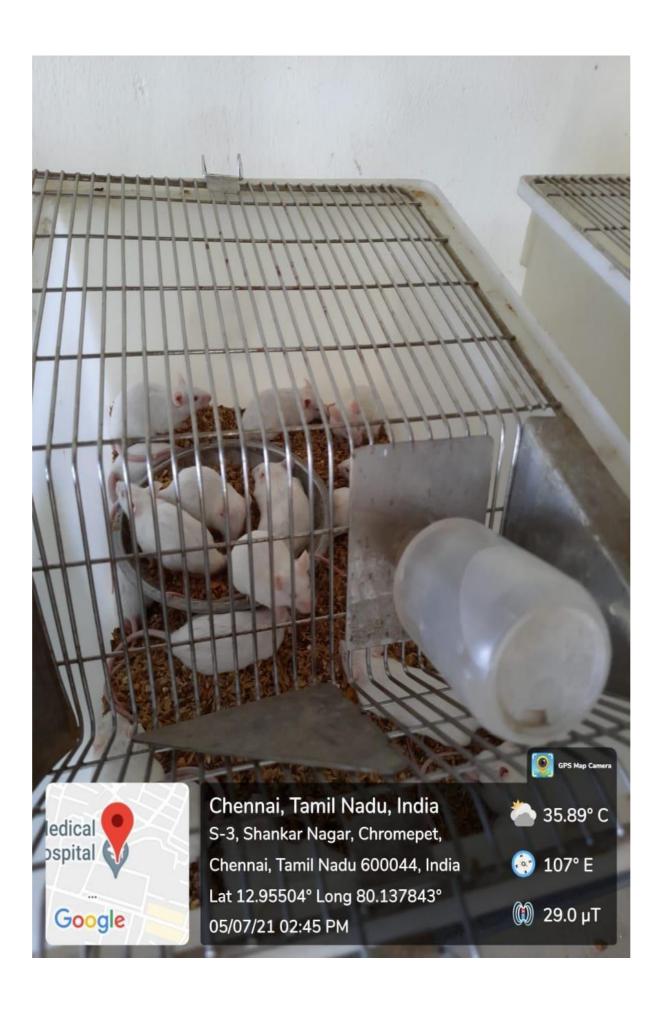
#### Water Level Sensor based Auto Filling Water Tanks @ SLIMS



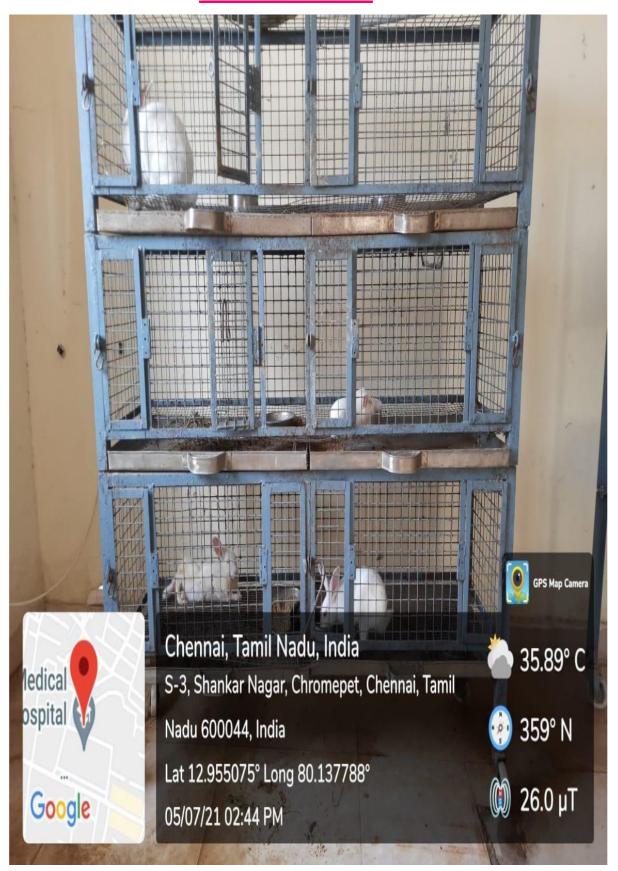
## Medical College Animal House Automatic Feeding Sensor@ Animal House & Research LAB







### <u>Using IoT Sensors to Monitor & Caring Animal House@</u> School of Medicine



School of Medicine - Central Instrumentation Centre Pathology, Cytology, Hematology, Histology, Botany, Zoology, Forensics and Pharmacology Research Sensor Based Energy Saving Equipment Using IoT Sensors to Monitor Preclinical Research Facilities





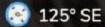
#### **Using IoT Sensors to Monitor Preclinical Research Facilities**





Chennai, Tamil Nadu, India S-3, Shankar Nagar, Chromepet, Chennai, Tamil Nadu 600044, India Lat 12.955075° Long 80.13776° 05/07/21 02:45 PM







# Pathology, Cytology, Hematology, Histology, Botany, Zoology, Forensics and Pharmacology Research SensorBased Energy Saving Microscope @ SBMCH



# Power Efficient & Sensor Based Automatic SolarStreet Lamps @ SLIMS Campus Sri Lakshmi Narayana Institute of Medical Sciences

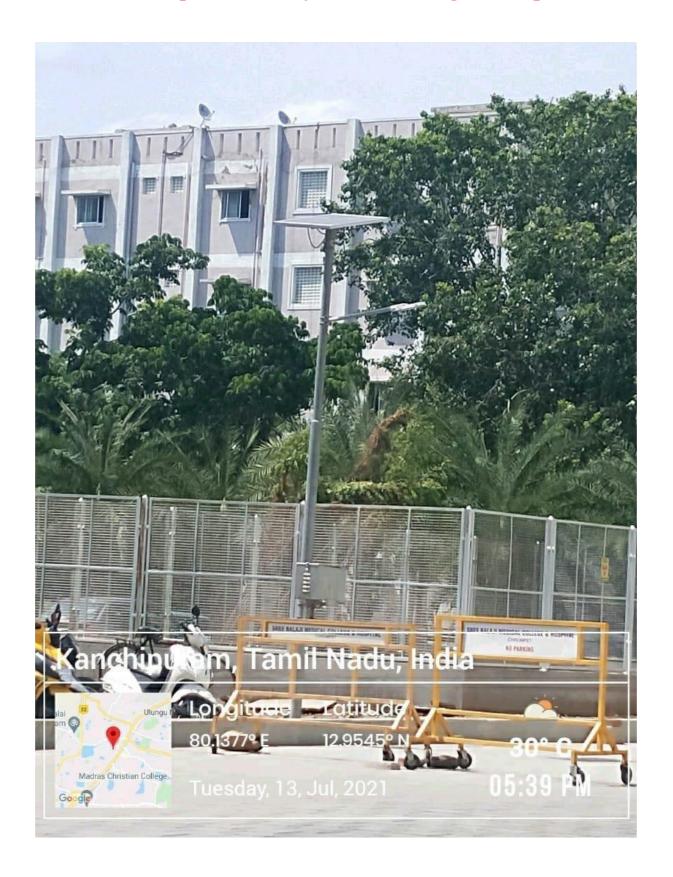








## Power Efficient Solar Street Lamps & Sensor Based @ SBMCHCampus Sree Balaji Medical College & Hospital



## Power Efficient Solar Street Lamps & Sensor Based @SBDCH Campus Sree Balaji Dental College & Hospital



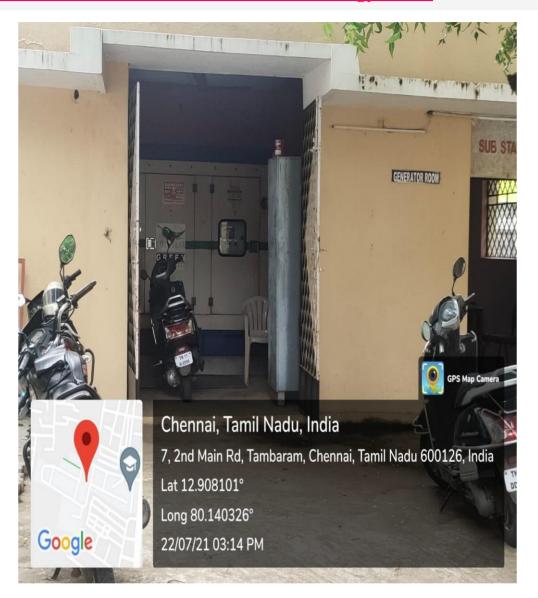




#### **Energy Conservation-Generators @ School of Pharmacy Generator**



#### Automatic Sensor based Panel Boards & Generators@ Bharath Institute of Science & Technology-BIST



## Purchasing 5 Star Rated Energy Saving Equipments @Bhaarath Medical College And Hospital

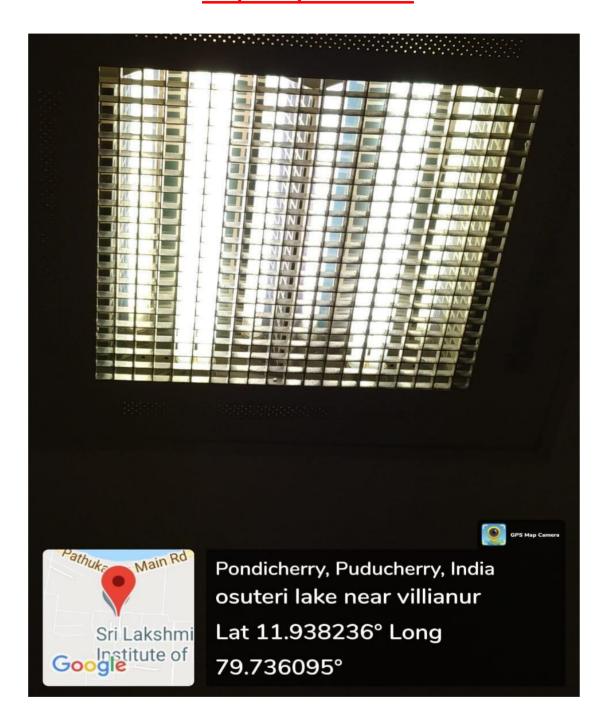




#### 5. Use of LED Bulbs/Power Efficient Equipment

- ✓ Smart Sensor based Projector
- ✓ Smart Sensor based Energy-Efficient 5-star ACs
- ✓ <u>Automatic Energy Efficient Room Freshener with LED</u> Sensor & Moisture Sensor
- ✓ <u>A Passive Infrared Sensor PIR Motion Sensor Based Smart</u> <u>Security Cameras to Detect Movement and Day & Night</u> <u>Capture</u>
- ✓ <u>Physiological & Behavioural Smart Biometrics Face</u> <u>Recognition, Fingerprint, Hand Geometry, Iris Recognition</u>
- ✓ Multi-function all in one Priter cum Scanner [IR AVD DX 6755] An Infrared-IR Sensor Based ON when Touch & OFF when Not in Use
- ✓ <u>Moiture Sensor Based Watering the Garden by Recycling</u> water
- **✓ Water Level Sensor based Auto Filling Water Tanks**
- **✓ Using IoT Sensors to Monitor Preclinical Research Facilities**
- **✓ Medical College Animal House Automatic Feeding Sensor**
- ✓ Energy Conservation Automatic Solar Street Lamps @ Campus
- **✓ Energy Conservation Generators**
- **✓ Automatic Sensor based Panel Boards**
- ✓ <u>LED Lights @ Campus</u>

## 5. <u>Use of LED Bulbs / Power Efficient EquipmentCeiling LED</u> <u>Strip Lamps @ SLIMS</u>



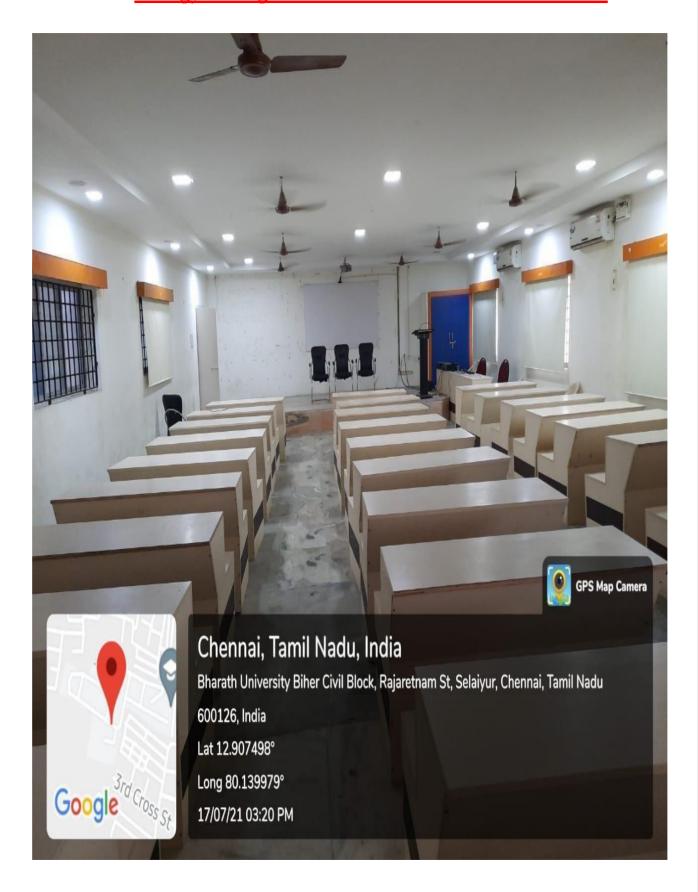
## SCHOOL OF ARTS and SCIENCE - Energy SavingLEDs Strip Lights in all Class Rooms



Bharath Institute of Science & Technology- Energy SavingLEDs in ECE Smart Rooms



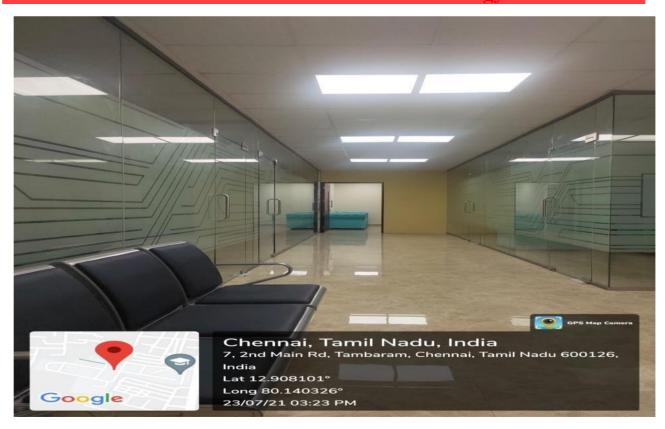
#### **Energy Saving LEDs in Civil Smart Rooms @ BIST**



#### **SMART ROOM @ BIST- IN CAD LABORATORY -LEDs**



#### SMART ROOMs @ BIST- In Placement Cell – Energy Efficient LEDs



## BIHER-Pro Vice-Chancellor Academics Office Conference Hall LED Strip Ceiling Lights



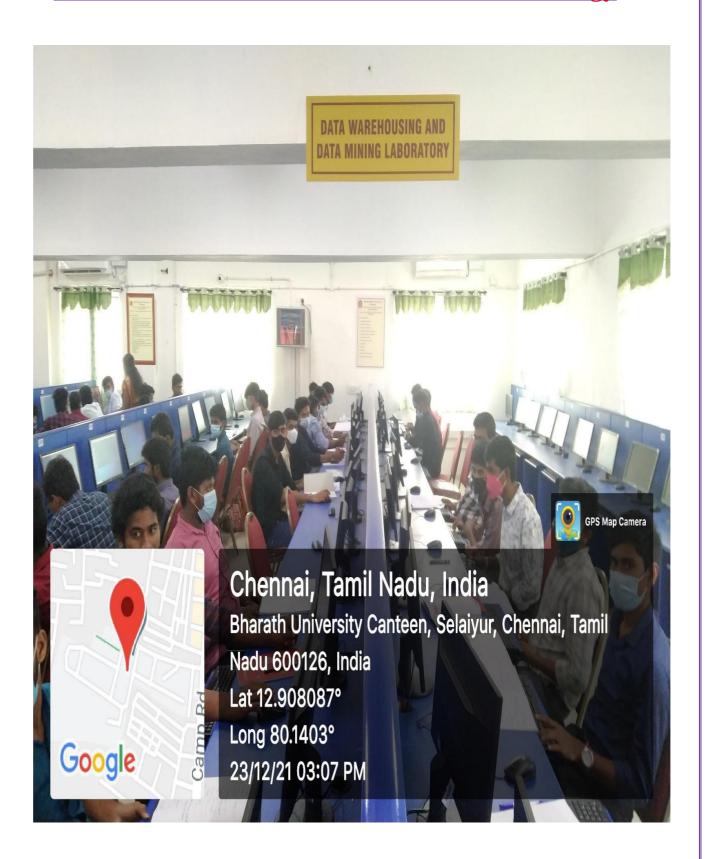
## BIST-PRO VICE-CHANCELLOR Academics Office Visitors Hall [LED Lamps]



**SMART ROOM @ BIST- IN Mechanical LABORATORY -LEDs** 



# School Of Computing -LAB Photos BIST- Bharath Institute of Science & Technology









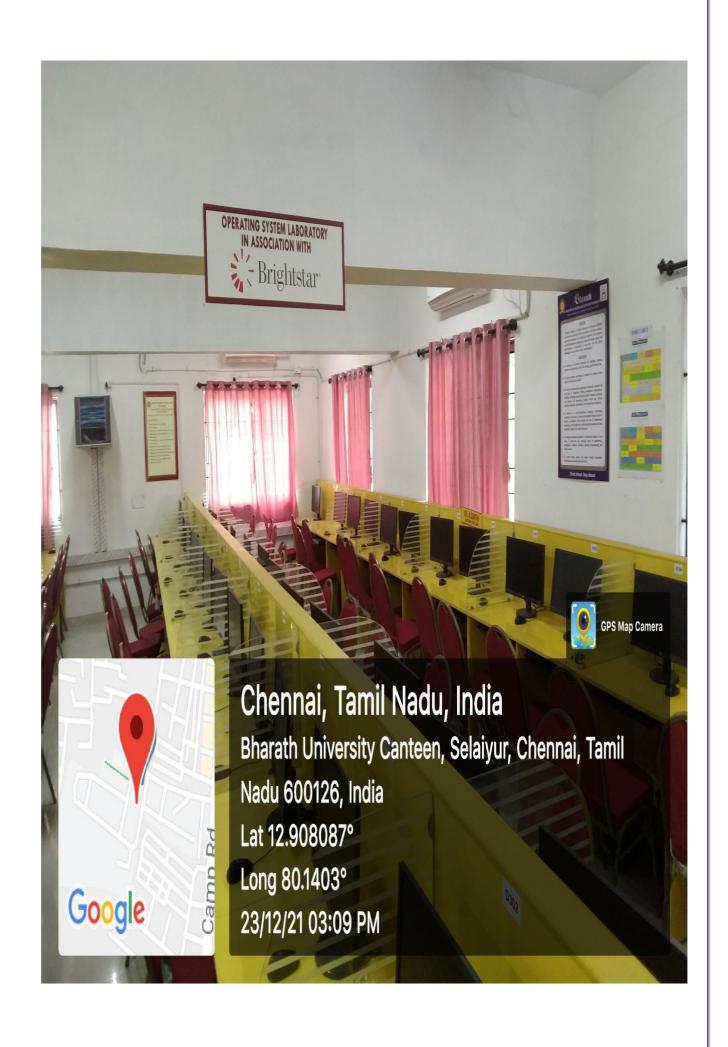
**School of Computing LAB Photos** 



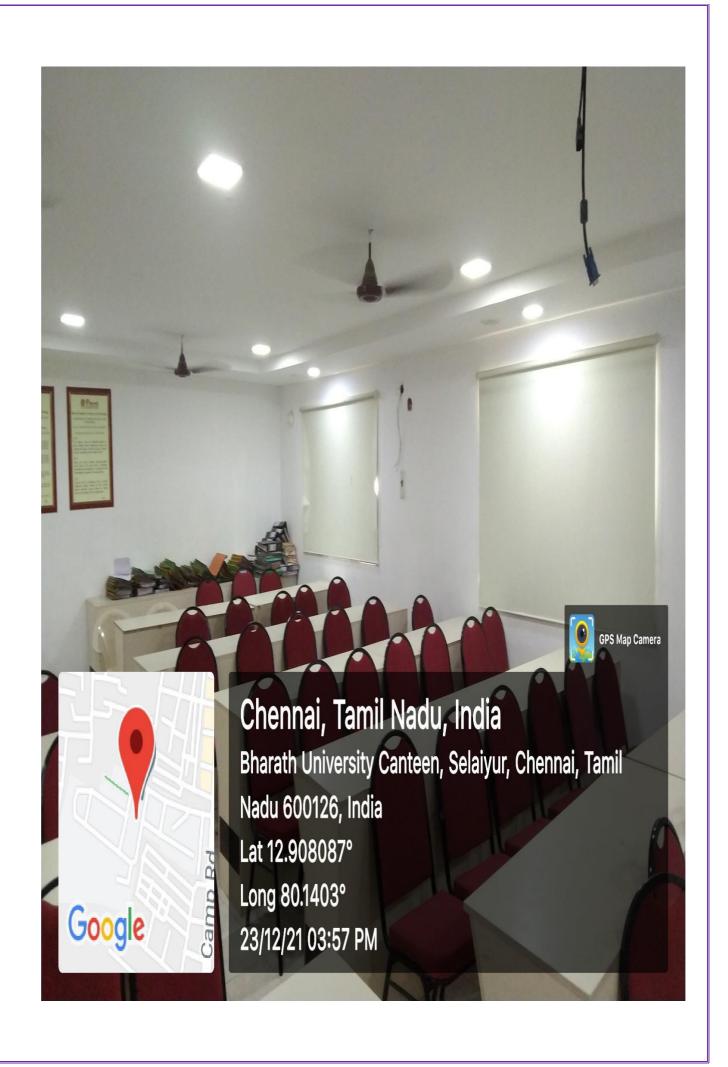






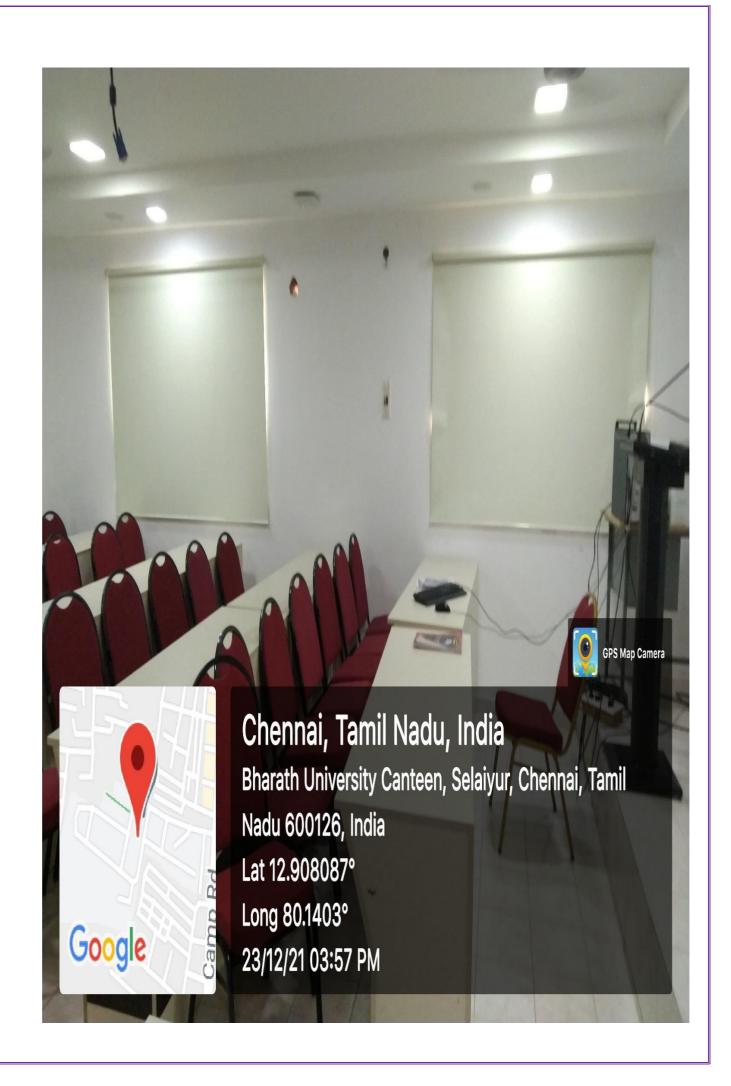


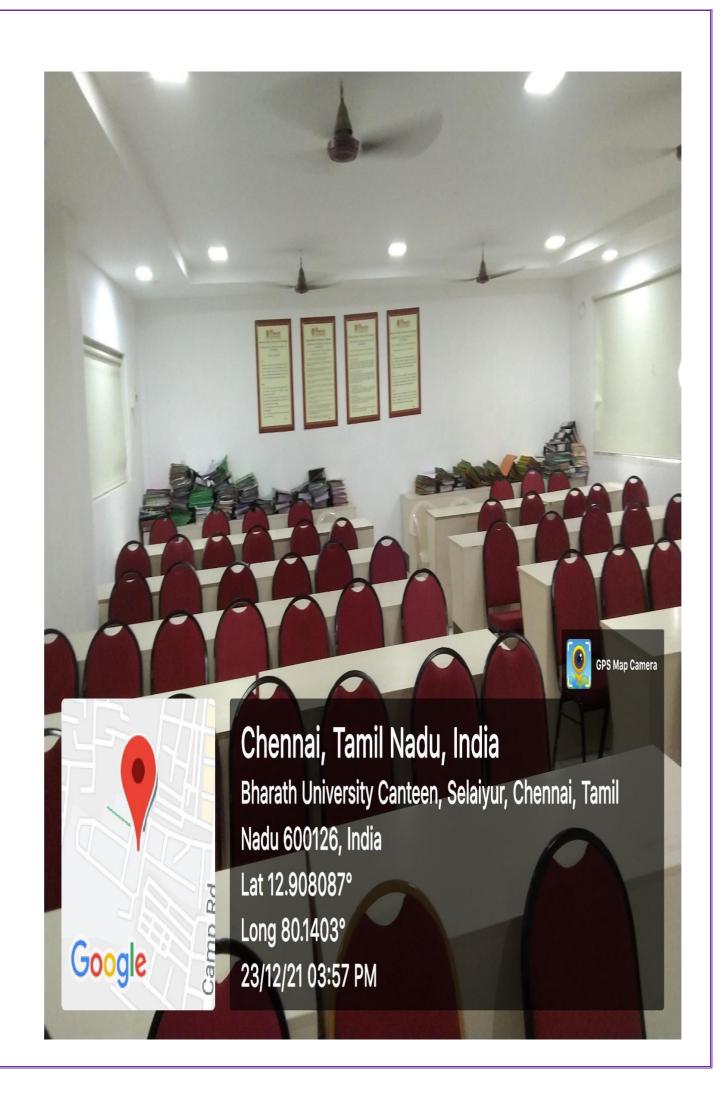


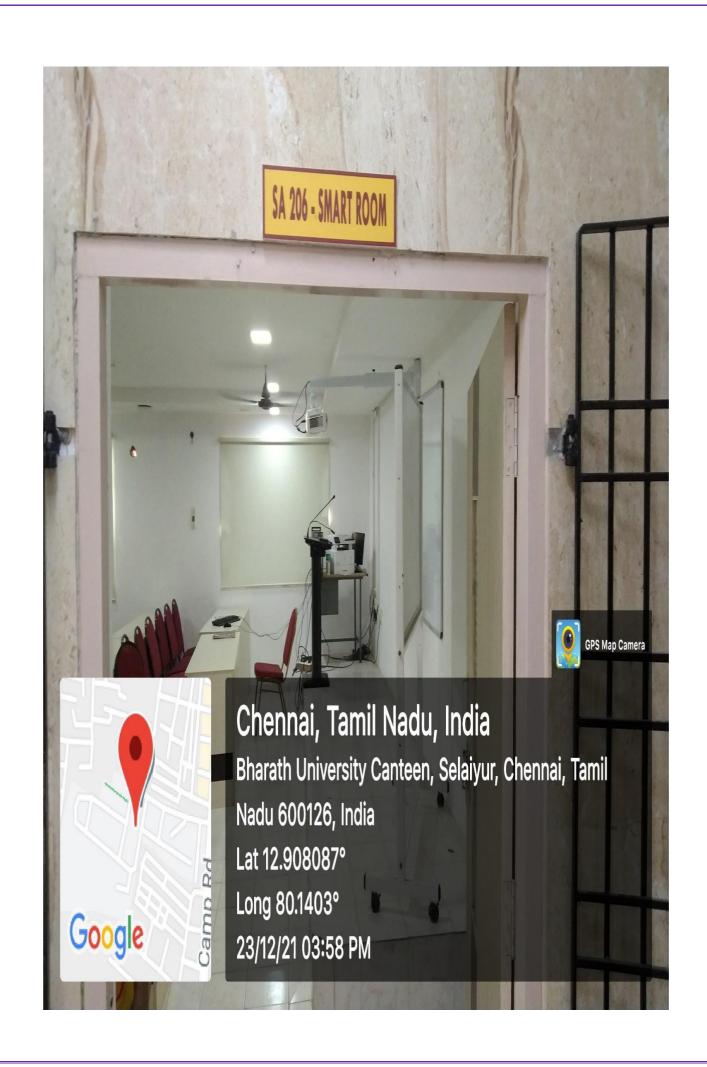


#### **Smart Room & Seminar Hall**





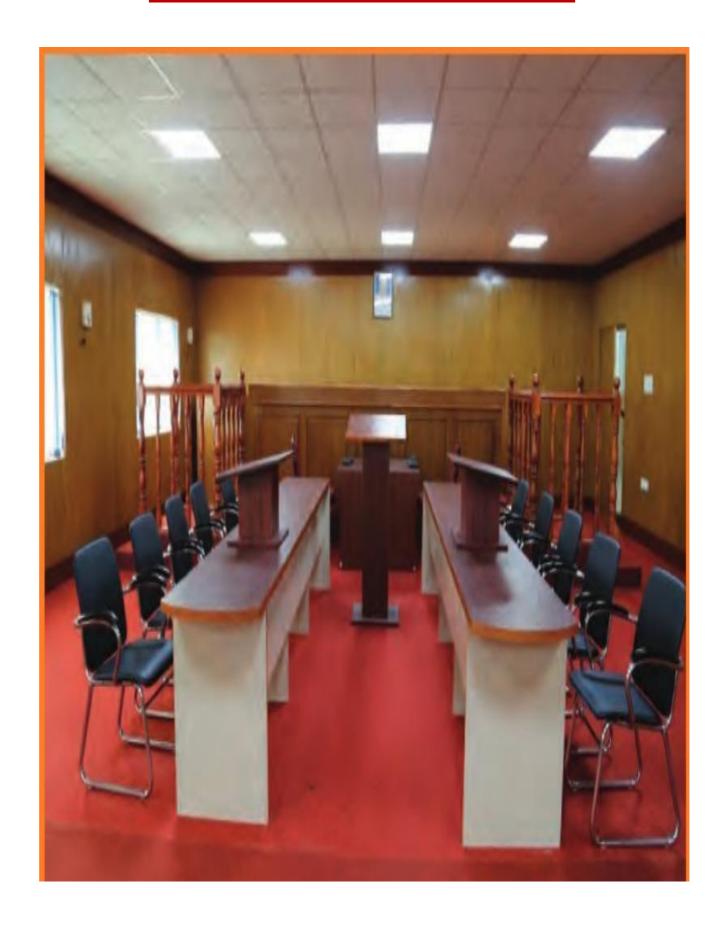




# **Moot Court - School of LAW -BIHER**

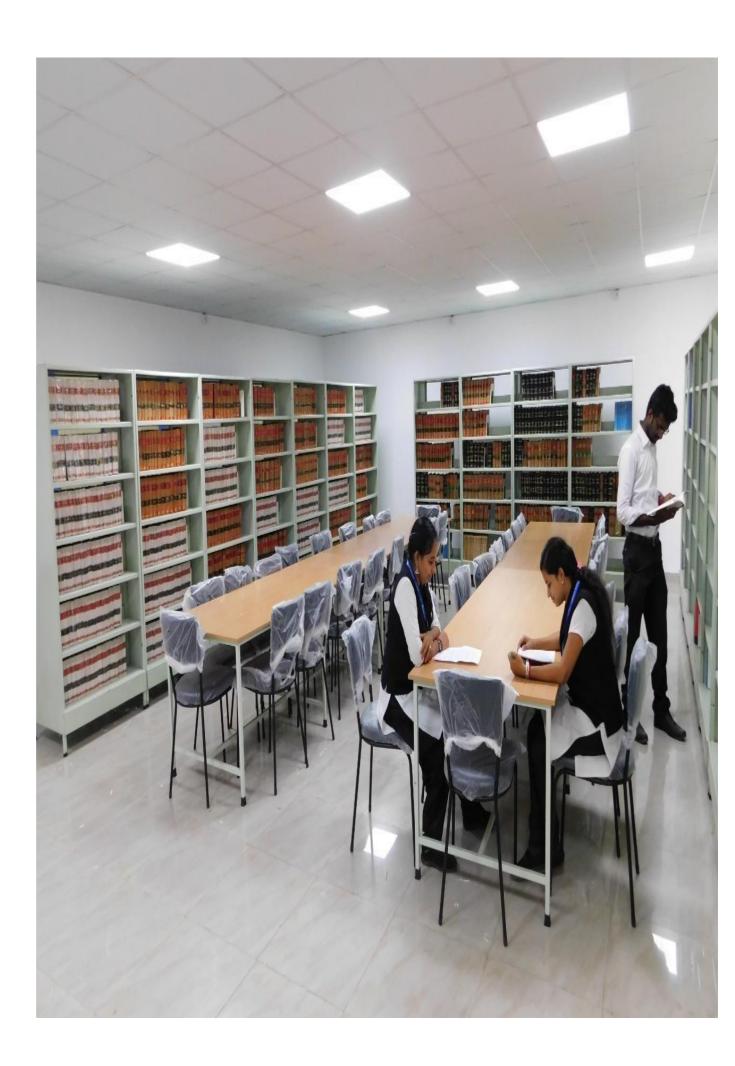


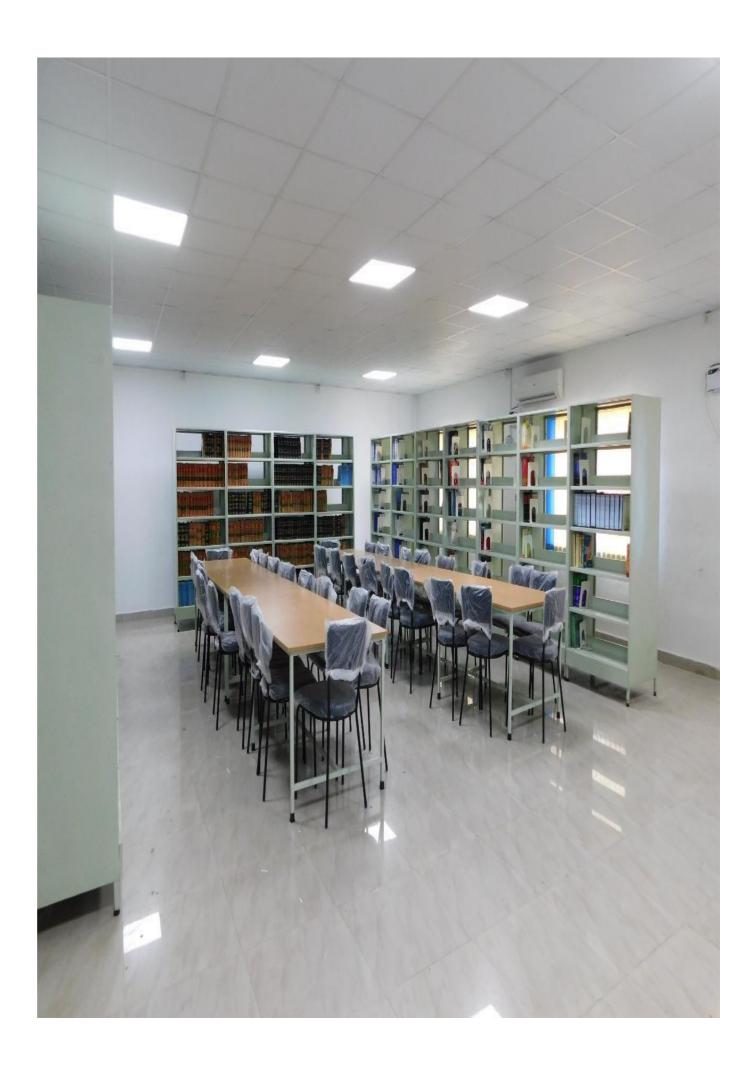
## **Moot Court - School of LAW BIHER**



## **Moot Court - School of LAW -Library**



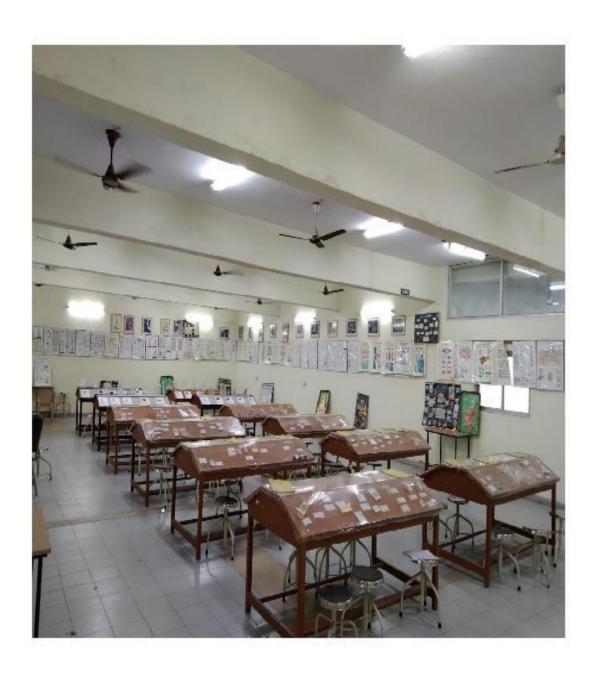






## School of Medicine –Bharath Institute of Higher Education & Research

# Museum Animal House & Research LAB LED Photos



#### SREE BALAJI COLLEGE OF NURSING

#### 3.1.5 PHOTOS OF RESEARCH LAB/STATISTICAL DATABASE



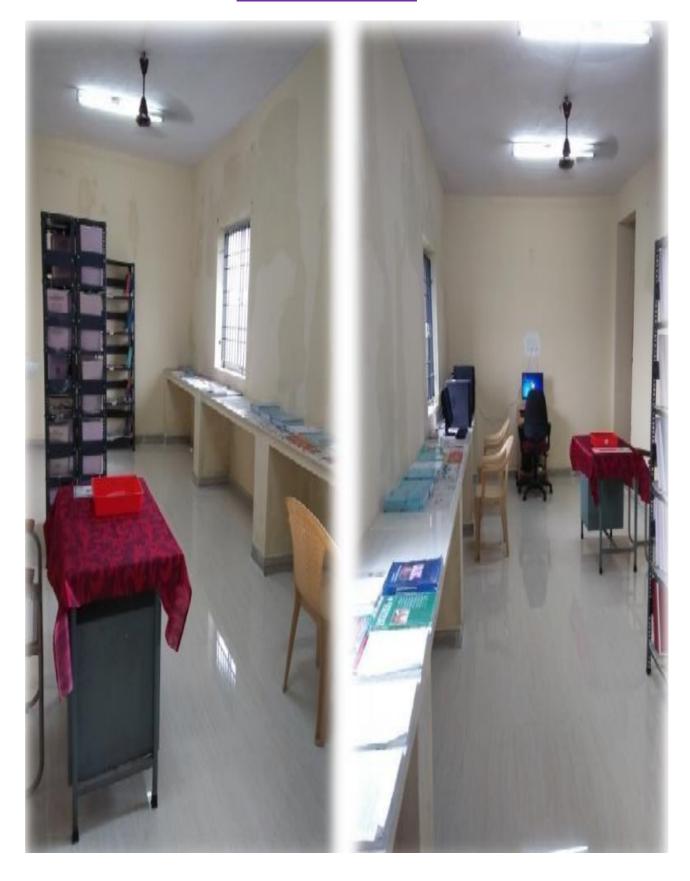






## **School of Medicine - Central Instrumentation Centre**

#### Sree Balaji College Of Nursing Research Lab / Statistical Database







#### **School of Pharmacy-Pharmacology Museum**

