

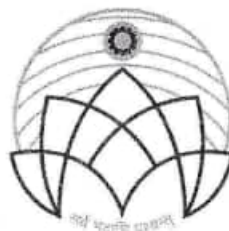
# SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(A unit of Shri Sode Vadiraja Mutt Education Trust ®)

VISHWOTHAMA NAGARA, BANTAKAL, UDUPI

Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

Accredited by NBA (BE –CSE, ECE) and NAAC with A



## SMVITM

### INSTITUTE GREEN POLICY

2019-20

*Anzama*

Principal

SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udupi Dist.

*Inacop*

Principal

SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udupi Dist.  
BANTAKAL - 574 115

## CONTENTS

- 1.0 PREAMBLE
- 2.0 ROLES AND RESPONSIBILITIES
- 3.0 POLICY GUIDELINES PROCEDURES AND BENEFITS



Principal

SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udipi Dist.  
BANTAKAL - 574 115

## 1.0 PREAMBLE:

Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Udupi is located in a lush green environment having large number species of flora and fauna. The photography club of the institute has identified more than 50 varieties of birds and more than 100 variants of trees. The college has adopted a green policy to protect the green environment. Also the policy helped the management to create awareness among the stakeholders

**Objectives of green policy:** The objective of green policy in the institute encompasses several key issues aimed at promoting sustainability, environmental responsibility and resource conservation. The defined objectives of green policy are as follows:

- The primary objective is often to minimize the institution's environmental footprint by reducing energy consumption, emissions of greenhouse gases and pollutants and using renewable energy resources as much as possible
- To encourage sustainable practices among the stakeholders, such as waste water treatment, recycling and reusing, managing the e- waste in sustainable manner
- Encouraging public transport / mass transport and usage of electric vehicles for transportation
- To encourage the practices such as paperless campus and discouraging the use of plastics in the campus.
- Creating awareness on the impact of pollution on the environmental, effect of climate change, and the importance of sustainable living practices through workshops, seminars, and educational campaigns.

## 2.0 ROLES AND RESPONSIBILITIES:

Effective implementation of the policy happens only when the entire stakeholders are involved. Roles and responsibilities to be performed by various stakeholders are listed below:

### MANAGEMENT:

- Establish and communicate the organization's commitment to the Green policy.
- Allocate necessary resources to support the implementation of sustainable practices.
- Set goals, targets, and performance indicators related to environmental sustainability.
- Monitor and review the progress of sustainability initiatives.
- Encourage and promote a culture of environmental responsibility in the organization.

### PRINCIPAL:

- Oversee the implementation of the Green policy.
- Develop strategies and action plans to achieve sustainability goals.
- Provide guidance, training, and support to employees in implementing sustainable practices.

### STAFF AND STUDENTS:

- Follow sustainable practices and adhere to the policies and guidelines outlined in the Green policy.
- Conserve resources, such as energy and water, in their daily activities. Practice waste reduction, recycling, and proper disposal of materials

## 3.0 POLICY GUIDELINES, PROCEDURES AND BENEFITS:

### a. ALTERNATE SOURCES OF ENERGY AND ENERGY CONSERVATION MEASURES

**Solar Power Plant:** The SMVITM has established 125 KW solar power plants for the generation of electricity. During the peak load, the energy produced will be utilized by the institutes and during Sundays and holidays, the energy produced will be transmitted to the power grid. With this facility, the institute is expected to save nearly 10,000 units of power in a calendar month. This facility saves the revenue, reduce the use of fuel for power generation and the greenhouse gases. The maintenance Engineer is responsible

for arranging regular washing of solar panel to improve the efficiency of the system and the maintenance of control panel.

The solar water heaters are provided in girls and boys hostel for hot water facility which saves the non-renewable energy consumption.

The facility installed in the campus educates the stakeholders to know more about renewable energy technology, sustainability and environmental stewardship.

**Energy Audit:** The management also suggested carrying out the "Energy Audit" by a certified external body once in two years and implementing the suggestions given by the organization by prioritizing the recommendation of the organization.

**Education and Outreach:** To implement the green policy effectively, it is decided to conduct workshops, seminars, and educational programs to raise awareness about the importance of energy efficiency, its benefits, and practical tips for conserving energy in daily life.

Engage with local communities, schools, and civic organizations to promote energy efficiency initiatives, foster collaboration, and empower individuals to take action. Switch of the energy consumption devices when not in use. Provide training and capacity-building programs for professionals, technicians.

#### b. WASTE MANAGEMENT:

**Plastic Free environment:** Restrict the usage of plastic in the campus. Create awareness sessions of effects of plastic usage.

**Biodegradable and non-biodegradable waste management:** Install recycling bins throughout the campus in easily accessible locations to segregate the waste at the collecting points. Clearly label bins for different types of recyclable materials such as paper, plastic. Educate students and staff about proper sorting techniques to ensure effective recycling.

**E- Waste Management:** Being a technical institute, considerable amount of e-waste generate in the campus. The staff and students shall be educated on reducing e-waste and put the e-waste in the bins provided so that the institute can dispose the e-waste properly. The management has suggested to handover the e-waste generated in the campus to the certified e-waste handling agencies by following the proper procedure and documentation. Once an affordable technology is developed, implement the same in the institute for e-waste management.

**Wet waste management:** Wet waste is generated in the hostels, particularly in dining hall, cafeteria and other places. Also the wet waste can be handled easily than other type of wastes. As per the decision of the management, the institute has provided wet waste collection bins where food waste and other organic materials to collect and process into nutrient-rich compost and use the compost as manure to garden plants.

**Reduce paper usage:** The management has informed the institute authorities to reduce the usage of paper at its source by promoting practices like printing circulars, draft reading materials in the used papers with one side empty. Also restrict the paper usage through digital alternatives, encouraging reusable water bottles and coffee cups, and discouraging single-use items like plastic cutlery and straws.

**Reduced paper usage by using indigenous MIS:** Promote usage of college MIS for various communication to faculty and student management. Increase the email communication for circulars and other matters. Use the developed technology to conduct paperless exams and to convey the results.

#### c. WATER CONSERVATION:

**Rain water harvesting:** It has been decided during the GC meeting to install the Rain water harvesting system and store the rainwater for non-potable uses, such as landscape irrigation or toilet flushing. Direct downspouts into rain barrels and use the collected rainwater during dry periods. Rain water harvesting and ground water recharging incorporates in increasing the level of water in the aquifer.

**Sewage Treatment Plant:** The 125KLD Sewage treatment plant in the institute helps to treat the sewage water and utilize the same for flushing and gardening purpose. It has been observed that approximately 40 to 50 KLD treated water being used for the above purpose. By treating sewage before discharge, institutions help to minimize their environmental footprint, reduce water pollution, and protect natural ecosystems. The STP enhances an institution's reputation and foster positive relationships with the surrounding community, regulatory agencies, and stakeholders.

**Maintenance of plumbing system:** Monitor water usage patterns and identify leaks or inefficient systems that need repair or improvement. Repair any leaks or drips in faucets, toilets, irrigation systems, and other water fixtures promptly. Install water-saving fixtures, such as low-flow faucets, showerheads, and toilets, throughout the campus.

**d. SUSTAINABLE TRANSPORTATION:**

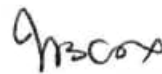
**Restricted entry of automobiles:** The institute management is appealing the students to use public transports instead of commuting through own vehicles.

Implementing restricted entry of automobiles for a green campus involves careful planning and consideration to balance the needs of the campus community with environmental sustainability goals.

**Encouraging mass transportation:** Encouraging college bus usage as part of a green campus initiative involves promoting the benefits of mass transit, providing convenient and reliable bus services, and incentivizing students, faculty, and staff to choose buses over personal vehicles. The management has decided to operate institute buses from prominent places and ensure at least 25% of the students commuting through institute buses. Also to encourage the use of mass transport facility, the institute has decided to operate the buses at nominal fare and the loss incurred to be borne by the management.

**e. GREEN SPACES AND LANDSCAPING:**

Incorporating green spaces and landscaping into a green policy is essential for promoting environmental sustainability, enhancing biodiversity, improving air quality, and creating attractive and healthy campus environments. The management has decided to implement preservation of existing trees and the planting of new trees to increase the quality of environment.



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2022-23: Revision-1

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The facility installed in the campus educates the stakeholders to know more about renewable energy technology, sustainability and environmental stewardship.

**Promotion of using low consumption lights:** It has been decided during the **GC Meeting held on 08-01-2022** to replace the fluorescent lamps (tube lights) with **LED bulbs and tubes**. The action plan to be implemented in phased manner starting from the sources consuming more power during night time such as Hostels, dining hall, street lights..etc. This in turn reduces the power consumption as well as reduction in the consumption of diesel for the DG sets.

**BLDC (Brushless Direct Current) Fans:** The management also decided in the **meeting held 08-01-2022** to replace the conventional AC fans by **Brushless DC fans** so as to reduce the consumption of energy. Similar to the promotion of low consumption bulbs and lights, the decision of replacing the conventional fans with BLDC fans to be implemented in phased manner starting from the sources consuming more power during night time such as Hostels, dining hall, street lights..etc.

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**d. SUSTAINABLE TRANSPORTATION:**

**Restricted entry of automobiles:** The institute management is appealing the students to use public transports instead of commuting through own vehicles. As a supporting action, the management has decided not to allow students' vehicles inside the campus. However, the use of bicycles and e-scooters are encouraged and a separate shelter has been provided in the campus for students' bicycle and e-vehicles.

Implementing restricted entry of automobiles for a green campus involves careful planning and consideration to balance the needs of the campus community with environmental sustainability goals.

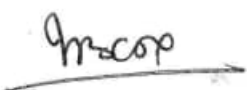
**EV Vehicles:** Transition institutional fleets to electric vehicles (EVs) by purchasing electric cars, bicycles or scooters. The management appreciates the staff and students for commuting by EV vehicles.

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# Energy and Green Audit Report

August - 2023



**Shri Madhwa Vadiraja Institute of Technology & Management,  
Udupi, Karnataka**

**Bigeta Energy Solutions LLP**

Bengaluru

[bigetaenergy.com](http://bigetaenergy.com)



Principal

SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udupi Dist.  
BANTAKAL, KARNATAKA

## Acknowledgement

Bigeta Energy Solutions is thankful to Shri Madhwa Vadiraja Institute of Technology & Management for providing us an opportunity to conduct an energy and green audit at their institution located in Vishwothama Nagar, Bantakal, Udupi, Karnataka. We are grateful to Dr.Thirumaleshwara Bhat - Principal, Dr.Ganesh Aithal - Vice Principal, Dr. Sudarshan Rao - Dean (Quality Assurance), Mr. Vinayaka - Maintenance Engineer, and the other staff members for their active involvement and support during the audit process.

We hope you find the recommendations provided in the report helpful in saving energy and improving sustainability. While we have made every effort to adhere to high quality standards in both data gathering analysis and report presentation, we would appreciate any comments from your side on how we may improve even further.

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In case of any suggestions or queries:

### Bigeta Energy Solutions LLP

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BEE Accredited Energy Auditor

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Sarjapura, Bengaluru, Karnataka 562 125

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## 1.0 Introduction

The working details of assignment are as follows:

<b>Project</b>	<b>Energy and Green Audit</b>
<b>Client</b>	<b>Shri Madhwa Vadiraja Institute of Technology &amp; Management</b>
<b>Industry</b>	Engineering College Dr. Sudarshan Rao K Dean (Quality Assurance)
<b>Contact</b>	Mobile- +91 9448252890 Email: qa@sode-edu.in
<b>Site</b>	Vishwothama Nagar, Bantakal, Udupi, Karnataka - 574115
<b>Consultant</b>	Bigeta Energy Solutions LLP Bangalore, India
<b>Duration</b>	28 and 29-Aug-2023
<b>Project Scope</b>	To conduct energy and green audit at Shri Madhwa Vadiraja Institute of Technology & Management
<b>Report</b>	This document gives recommendations, details of findings and the way forward.
<b>Consultants involved</b>	Mr. Benet George V - BEE Accredited Energy Auditor- AEA0053 Dr. Ganapathi A (EA-34973/23) Alwar Purushotham - Sr.Engineer
<b>Notes</b>	The suggestions / alternatives in the audit report are based on the present operating conditions of equipment/systems and to the best of our knowledge.



## 1.1 About the college

Shri Madhwa Vadiraja Institute of Technology and Management, established in Bantakal in 2010, is managed by Shri Sode Vadiraja Mutt Education Trust, Udupi. It is represented by its present head, Shree Vishwa Vallabha Theertha Swamiji. The trust was registered on October 29, 2009, as a charitable trust under the Indian Trusts Act 1882. The trust is set up with the express objective of promoting educational and research activities in the rural areas of the country.

More than 1200 students are currently pursuing engineering degrees in the fields of computer science, electronics and communication, mechanical engineering, and civil engineering. In terms of infrastructure, SMVITM is comparable to other well-established engineering colleges in the region.

The institution is getting power from Mangalore Electricity Supply Company Ltd. (MESCL). Electricity is received at 11 kV, and a 500 kVA transformer is installed in the institution to step down the incoming 11 kV supply to 433 kV. Other than the EB power supply, there are two DG's of 160 kVA and 62.5 kVA in the institution to generate power in case of EB power failure. The institute has also installed a 125-kW solar system to generate electricity.

Major Loads in the Institution:

- ❖ Fans and Lights
- ❖ Air Conditioners
- ❖ UPS
- ❖ Computers
- ❖ Pumps
- ❖ Air Blowers

Table 1. Student's details

Programme		From the state where College is located	From other states of India	NRI students	Foreign students	Total
UG	Male	669	25	1	0	695
	Female	580	5	0	0	585
	Others	0	0	0	0	0

Table 2. Faculty details

Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
Ph.D.	5	0	0	3	5	0	4	2	0	19
PG	2	0	0	1	0	0	21	33	0	57

There are 1280 students enrolled in the college's undergraduate programs, which include CSE, ECE, MECH, CIVIL, AIML, and AIDS. In addition, the College confers Ph.D. degrees, and it has 76 faculty members.

## 1.2 Vision and Mission

### Vision

To establish an excellent, value-based higher educational hub to meet the challenges of global competitiveness.

### Mission

To impart holistic education with state-of-the-art infrastructural facilities and conducive academic ambience, at affordable costs, leading to the creation of centres of excellence with best brains collectively interacting for total personality development and intellectual growth.

## 1.3 Infrastructure

Figure 1. Location of College



The college has a total built-up area of 74460.06 square meters, and it has all of the necessary physical amenities.

## 1.4 Energy and Green Audit

Detailed energy and green audit fieldwork has been conducted during 28<sup>th</sup> and 29<sup>th</sup>, August 2023. In addition to external team, staff and students also involved in the audit.

## 1.5 Energy Audit methodology

### Phase 1 - Pre-Audit

Campus details, energy consumption details, etc. are collected, analyzed, and planned for field work. Based on the initial details, two days of field work are planned.

### Phase 2 - Field work and data collection

On the first day, the opening meeting was done, and key stakeholders and members of the management team were present. The purpose of the audit, methodology, and activities planned were explained. Student volunteers were selected for data collection. Field visits, interviews, data verification, and spot measurements are done. The closing meeting to discuss the initial findings and observations is done on the final day of the field work.

Figure 2. Opening meeting



### Phase 3 - Report

Analysis of the data and preparation of the report.

## 1.6 List of faculties and students who participated in the Audit

Table 3. List of faculty members involved in Audit process

S. No.	Name	Designation
1	Dr. Thirumaleshwara Bhat	Principal
2	Dr. Ganesh Aithal	Vice Principal
3	Dr. Sudarshan Rao K	Dear (Quality Assurance)
4	Mr. Vinayaka	Maintenance Engineer
5	Mr. Dinesh Kumar	Maintenance Assistant
6	Mr. Sathish Bangera	Electrician

Table 4. List of students who participated in the audit

S.No	Student Name	Year	Reg. No	Team
1	Dhanish Mohammed	II	4MW21ME004	Energy Audit
2	S.Chetam	II	4MW22ME402	
3	kitan Avari	II	4MW21ME009	
4	Guru Kiran B	II	4MW21ME400	
5	Sagar	II	4MW21CV007	
6	K.Sathvik Acharya	II	4MW21CV003	
7	Aryan Raj	II	4MW21CV001	Bio Diversity
8	Likhith Yermal	II	4MW21ME010	
9	Gagan Kumar	II	4MW21ME005	
10	Annapa	II	4MW22CV400	
11	Rohith	II	4MW22ME401	
12	Shiv preeth	II	4MW22ME403	

The above faculties and students actively participated in this energy and green audit conducted at SMVITM. The students are divided into two teams: energy and biodiversity. Each team was tasked with gathering the necessary data for energy management and biodiversity. Students' data was analyzed with the goal of proposing conservation and improvement strategies to enable the college to maintain a green and sustainable campus.

Table 5. Carbon (CO<sub>2</sub>) offset

Sl.No	Description	Type of Energy and their CO <sub>2</sub> Conversion Process			
		Electricity kWh	Diesel (Vehicle + DG) Litre	Petrol (Vehicle) Litre	LPG kg
1	Annual Consumption	215693	27655	430	6400
2	CO <sub>2</sub> Emission (Tons/Annum)	177	73	1	19
3	<b>Total CO<sub>2</sub> Emission (Tons/Annum)</b>				<b>270 (↑)</b>
4	<b>No. of Matured Trees Available</b>				<b>700</b>
5	CO <sub>2</sub> offset due to Trees (Tons/Annum)				<b>15.26 (↓)</b>
6	Annual Energy Exported from SPV Plant (kWh)				29982
7	CO <sub>2</sub> offset due to export Solar Power Plant (Tons/Annum)				<b>25 (↓)</b>
8	CO <sub>2</sub> Emission per (Tons/Annum) currently				<b>230 (↑)</b>
9	Expected Reduction of Annual Electricity Consumption after Implementing Proposed Energy Conservation Measures (kWh)				95438
10	CO <sub>2</sub> offset after implementing ECM (Tons/Annum)				<b>78.3 (↓)</b>
11	Expected Reduction of Annual LPG Consumption after Implementing Proposed ECM (kgs)				<b>1232 (↓)</b>
12	CO <sub>2</sub> offset after implementing biogas plant instead of LPG (Tons/Annum)				<b>3.7 (↓)</b>
13	Amount of CO <sub>2</sub> to be offset final (Tons/Annum)				<b>82 (↔)</b>
14	Per Capita CO <sub>2</sub> Consumption (Tons/Annum)				0.116

- ❖ Apart from energy conservation and environmental analysis, the audit team proposes technical recommendations focusing on energy, water, environmental, safety, and best operating practices to be followed.



**CO<sub>2</sub> emission**  
**270 Tons/Annum**



**CO<sub>2</sub> offset due to Trees**  
**15.26 Tons/Annum**



**CO<sub>2</sub> offset due to solar plant  
25 Tons/Annum**



**CO<sub>2</sub> offset after implementing ECM  
82 Tons/Annum**

*Principat*

**Principal**  
**SHRI MADHWA VADIRAJA**  
**INSTITUTE OF TECHNOLOGY & MANAGEMENT**  
Vishwothama Nagar, Udipi Dist.  
BANTAKAL - 574 115

# ENERGY AUDIT



## 2.0 Energy Audit

An energy audit is an inspection, survey, and analysis of energy flow for energy conservation in a building, process, or system to reduce the amount of energy input into the system without negatively affecting the output. The energy audit consists of a detailed examination of how a facility uses energy and what it pays for the energy that is consumed. Reducing energy consumption while maintaining or improving human comfort, health, and safety are of primary concern. The primary objective of an energy audit is to determine ways to reduce energy consumption per unit of product output or lower operating costs. An energy audit provides a "benchmark" for managing energy in the organization and provides the basis for planning a more effective use of energy throughout the organization. Therefore, by conducting an energy audit program, the overall efficiency of a system can be improved.

### 2.1 Executive summary

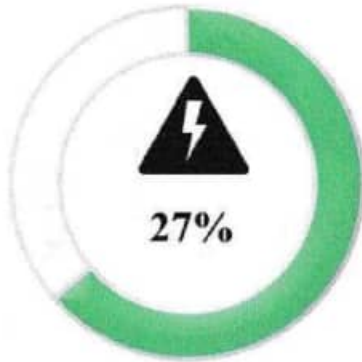
#### 2.1.1 Highlights

Total annual cost savings	=	11	Rs. Lakhs
Total investments	=	38	Rs. Lakhs
Overall simple payback period	=	42	Months
Annual Electrical Energy Consumption (Sep-22-Aug-23)	=	215693	kWh
Annual Electricity cost	=	20.3	Rs. Lakhs
Solar generation (Sep-22 -Aug-23)	=	163700	kWh

### 2.2 Impact of proposed Energy conservation measures

Electricity Savings	=	95,438	kWh/annum
	=	27	%
Annual cost reduction	=	11	Rs. Lakhs
	=	52	%
Co <sub>2</sub> reduction	=	13	Tonnes/Annum

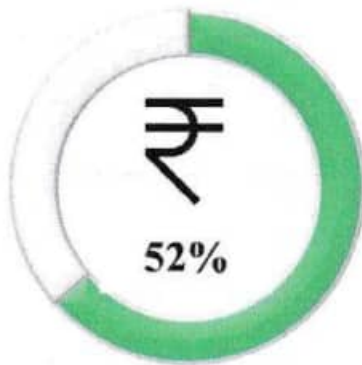




**Electricity Savings**  
95,438 KWh



**Investment**  
38 lakhs



**Cost Reduction**  
11 lakhs



**CO<sub>2</sub> Reduction**  
13 Tonnes/Annum

## 2.3 Summary of Energy Conservation Measures

Table 6. Summary of Energy Conservation Measures

S. No.	Energy Conservation Measures	Annual Savings				Investment	Simple Payback Period	CO <sub>2</sub> Reduction
		kWh	LPG (Kg)	Water (Lakhs Litres)	Rs. Lakhs	Rs. Lakhs	Months	(Tons/Annum)
0-35 months payback								
1	<p><b>Optimized operation of the STP aerator blower motor by an interlock mechanism for nighttime operation</b></p> <p>Currently, two 5.5 KW rated air blower motors are installed. It's operating 12 hours per day. Optimize the operation of the air blower for 2 hours at night.</p>	4191	-	-	0.42	0.10	3	3.6
2	<p><b>Install an automatic water overflow controller or monitor in overhead tanks to reduce the water overflow in all buildings.</b></p> <p>At present, there are ten tanks with a capacity of 10,000 litres and one with a capacity of 5,000 litres. It's filled twice a day, and there is no control over overflow of water.</p>	-	-	3		0.20	13	
3	<p><b>Replacement of existing CFL lights to LED lights</b></p> <p>At present, all blocks in the institution (Admin, Civil &amp; Mech, EC, AIDS, and Library) have a total of 845 CFL (23 W) lights installed. Change to LED lights.</p>	19874	-	-	1.99	2.88	17	0.11
4	<p><b>Replacement of existing conventional ceiling fans with BLDC fans in Boys and Girls hostels</b></p> <p>Boys hostels (I and II) and girls hostels have around 223 conventional ceiling fans installed. Replace the ceiling fans with BLDC fans.</p>	21453	-	-	2.15	5.58	31	18.23
5	<p><b>Install a solar water heater instead of using LPG to boil the water for rice cooking in the canteen.</b></p>	-	118	-	0.11	0.30	34	-

S. No.	Energy Conservation Measures	Annual Savings				Investment	Simple Payback Period	CO <sub>2</sub> Reduction
		kWh	LPG (Kg)	Water (Lakhs Litres)	Rs. Lakhs	Rs. Lakhs	Months	(Tons/Annum)
	The canteen uses LPG to boil water for rice. Install the solar water heater to boil the water and reduce the consumption of LPG.							
6	<b>Install water-efficient high-pressure nozzles in canteens and vehicles for cleaning.</b> In the canteen and nearer to the DG room, taps are used to clean the vessels and vehicles with high-pressure pipes. Install water-efficient, high-pressure nozzles to reduce water consumption.	-	-	11	-	0.05	-	-
7	<b>Install a biogas plant for food waste</b> Canteen food waste is around 60 kg/day. Install a biogas plant to reduce LPG gas usage.	-	1232	-	1.15	2.05	21	-
>36 months payback								
8	<b>Replacement of existing 2/3-star-rated AC units with 5-star inverter AC units</b> Existing 2/3-star older ACs in all block should be replaced with 5-star-rated inverter AC units as they age and have higher power consumption.	18820			1.88	9.90	63	16.00
9	<b>Replacement of existing conventional ceiling fans to BLDC fans in all blocks</b> At present, all blocks have around 646 conventional ceiling fans installed. Replace the ceiling fans with EC-BLDC fans.	30117			3.02	16.15	64	25.60
10	<b>Install motion and occupancy sensors in corridors and rest rooms in boys and girls hostels.</b> It is recommended to install motion and occupancy sensors in corridors and rest rooms in boys and girls hostels to reduce their operation when unoccupied.	983			0.10	0.35	43	0.84
<b>Total</b>		<b>95438</b>	<b>1350</b>	<b>13</b>	<b>11</b>	<b>38</b>	<b>42</b>	<b>13</b>

## 2.4 Marginal cost of electrical energy

Electrical marginal energy charges typically include the sources of energy and their corresponding charges (like EB, DG, and green energy—wheeled). Since the proportion of annual DG is lower, the cost of energy due to it is neglected.

*Table 1. Marginal cost of Energy*

Description	Unit	Value
Energy consumption	kWh	20274
Energy charge	Rs./kWh	8.5
other charges	Rs./kWh	0.75
Tax (@9% of Energy charge)	%	0.77
<b>Marginal Energy Cost</b>	<b>Rs./kWh</b>	<b>10.02</b>

Note: unit charge taken based on latest bill

## 2.5 Good Practices

- ❖ A 125-KW rooftop solar plant is installed on campus as an alternate renewable source of energy.
- ❖ In Boys & Girls Hostel, exiting tube lights are changed to 9-W LED lights when they fail.
- ❖ Energy conservation practices, such as switching off the AC and fans when not required, are encouraged.
- ❖ Faculty and students are encouraged to come by EV and CNG vehicles.
- ❖ Conducting seminars every year on the topic of energy conservation.
- ❖ The Environment Club of SMVITM is conducting a workshop on paper pen making for the students of SVH Kannada High School, Innanje on the school premises.
- ❖ Every year, students celebrate World Environment Day and conduct seminars.

## 3.0 Energy Conservation Measures (ECM)

### 3.1 STP Treatment Plant

#### 3.1.1 Optimized operation of the STP aerator blower motor by an interlock mechanism for nighttime operation

##### Background & Findings

- ❖ The institution is equipped with a 120 KLD capacity sewage treatment plant (STP) operating 24 hours a day.
- ❖ Two air blowers' same capacity (same air flow rate) are connected in the sewage treatment plant, supplying air to the aerator tank.
- ❖ The capacity of the air blowers is 5.5 KW/7.5 HP motors operating 12 hours each alternately in a day.
- ❖ The main purpose of an air blower is to supply oxygen (from ambient air) in order to maintain the BOD level.

Figure 3. Sewage treatment plant



##### Recommendation:

- ❖ Load in the STP is variable based on the people at campus. Also the actual flow to the STP is lower than the design capacity. Hence air required at STP varies with respect to time. Considering this intermittent operation during night and weekends will save energy without affecting the performance of the STP.

- ❖ During the night, it is better to operate the motor for 45 minutes and 15 minutes off (for 1 hour of operation). It can be done from 10 p.m. to 6 p.m., resulting in 2 hours of run-time savings directly.

#### Benefit:

cost benefit analysis is given in the table below

*Table 2. Cost benefit analysis for optimized operation of STP aerator air blower*

Description	Unit	Air blower
<b>Present system</b>		
Total no of units operating	No's	1
Motor rated	kW	5.5
Motor Efficiency	%	86
Average power consumption	kW	6.2
Loading	%	113
Operating Hrs per day	Hrs	12
Annual operating days	Days	260
Annual Energy consumption	kWh	19.34
<b>Proposed system-optimize the operation of Air blower</b>		
Reduce the operating hours	Hrs	2
Energy consumption/day	kWh/day	3.22
Estimated Annual Energy savings	kWh/annum	4191.20
Energy cost	Rs./kWh	10.02
Annual cost savings	Rs. Lakhs	0.4197
Investment	Rs. Lakhs	0.1
Payback	months	3
CO <sub>2</sub> Reduction	Ton/Annum	3.6

## 3.2 Water system

### 3.2.1 Install an automatic water overflow controller or monitor in overhead tanks to reduce the water overflow in all buildings.

#### Background

- ❖ At present, there are ten tanks with a capacity of 10,000 litres and one with a capacity of 5,000 litres. It's filled twice a day, and there is no control over overflow of water.

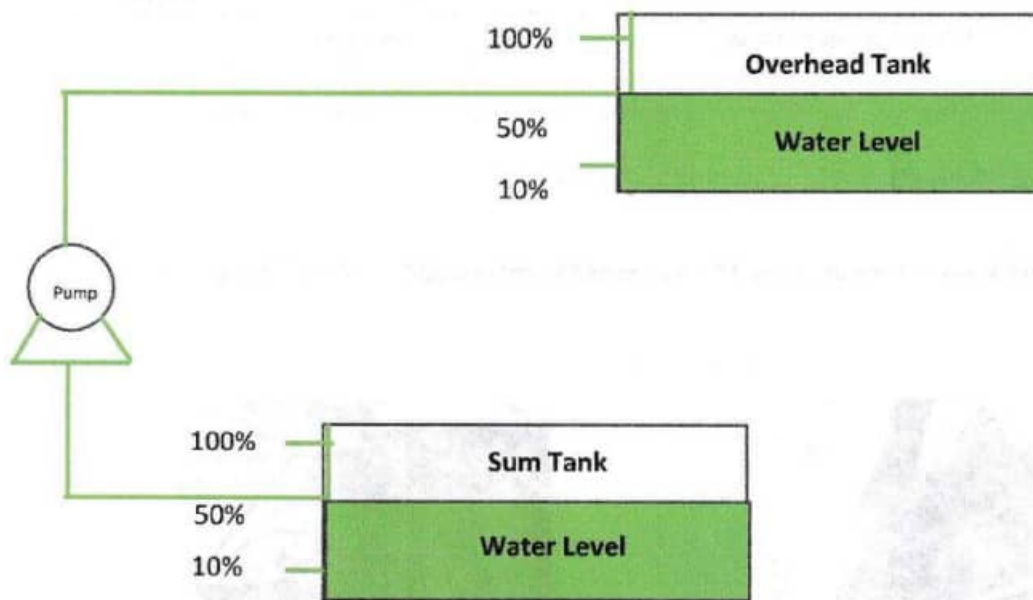
**Findings:**

- ❖ During the audit, it was observed that overhead tanks in boys and girls hostels overflow for at least 10 minutes.
- ❖ Overhand tanks have no water overflow control. It's wasting water and energy.

**Recommendation:**

- ❖ Install automatic water overflow control for overhead tanks in all buildings. It will control the water flow and reduce water waste and energy.

Figure 4. Automatic water overflow control for overhead tanks



**Benefit:**

Table 3. Cost benefit analysis for automatic water over flow control

Description	Unit	Flow controller
No. of in tanks of Hostel (Boys & Girls)	No's	4
No. of in tanks of Admin Block	No's	2
No. of in tanks of Civil/Mech Dept	No's	1
No. of in tanks of Canteen	No's	1
No. of in tanks of AIDS Block	No's	1
No. of in tanks of EC Block	No's	1
Flow rate of water	lpm	10
Average Time of overflow (2 times a day)	mins	10

Description	Unit	Flow controller
Total over flow of water	litres	1000
<b>Assessment of Motor power for pumping 500litres of water</b>		
Power consumed per m3 of water	kW	0.6
Power Savings for reduction in water consumption	kW	0.6
Annual power Savings (260 days)	kW	156
Cost of one unit of electricity	Rs	10.02
Total Cost Savings per year	Rs. Lakhs	0.016
Investment	Rs. Lakhs	0.2
Payback Period	Months	12.79
Water Savings per Year	Lakh litres	2.6

### 3.2.2 Install water efficient high-pressure nozzles in canteen & Vehicle cleaning

#### Background & Findings

- ❖ In canteen, taps are used to clean vessels and are operated for 5 hours a day.

Figure 5. *Taps photos in institution*



#### Recommendation:

- ❖ To reduce the water consumption from this tap, install the high-pressure water nozzles in the canteen and vehicles cleaning.
- ❖ It will reduce the water consumption by 50% operate with low pressure.



Figure 6. High-pressure water nozzles



**Benefit:**

cost benefit analysis is given in the table below

Description	Unit	values
No of open Valves in canteen	Nos	3
Flow rate of water	lpm	15
Average open time per day	mins	300
Total flow of water	litres	13500
Average water Saving due to Nozzle	%	60
Total Water Savings per day	lts	8100
<b>Assessment of Motor power for pumping 500litres of water</b>		
Power consumed per m3 of water	kW	0.6
Power Savings for reduction in water consumption	kW	4.86
Annual power Savings (260 days)	kW	1263.6
Power consumed by Dish washer per day	kW	1
Annual power Consumption by dish washer	kW	260
Annual Power Savings	kW	1003.6
Cost of one unit of electricity	Rs	10.02
Annual Power Savings	kW	10056
Investment	Rs. Lakhs	0.05
Payback Period	Months	0.00
Water Savings per Year	lakh Litres	10.53

Note: For calculation we consider only 3 taps

**Option-2**

- ❖ Install an automatic dishwashing machine in the canteen to reduce water consumption. The payback period will be high, but water will save nearly 5.85 lakh litres.

❖ *Automatic Dish washing machine*



### 3.3 Lighting System

#### 3.3.1 Replacement of existing CFL lights to LED lights

##### Background & Findings

- ❖ At present, institutional existing CFL lights (23 W) are around 845 No's.
- ❖ Existing lights in Boys and Girls Hostels have already been replaced with LED lights (9W). It is good practice.

##### Recommendation:

- ❖ Replace the existing CFL lights with LED lights (9W). It will reduce energy consumption without changing the illumination.

##### Benefit:

cost benefit analysis is given in the table below

*Table 4. Cost benefit analysis for replacement of CFL lights to LED lights*

Description	Unit	Value
<b>Present system</b>		
Total no. of CFL lights in all blocks	No's	845
Average light fitting wattage	W	23
Operating Hours	hrs	8
Annual Operating Days	days	210
Annual Energy Consumption	kWh	32651

Description	Unit	Value
Proposed system - CFL lights change to LED lights		
LED lights Average fitting wattage	W	9
Annual Energy Consumption	kWh	12776
Estimated annual Energy savings	kWh/annum	19874
Energy cost	Rs./kWh	10
Estimated annual cost savings	Rs. Lakhs	2
Total investment	Rs. Lakhs	2.88
Simple payback period	months	17
CO <sub>2</sub> Reduction	Ton/Annum	0.11

### 3.3.2 Install motion and occupancy sensors in corridors and rest rooms in boys and girls hostels

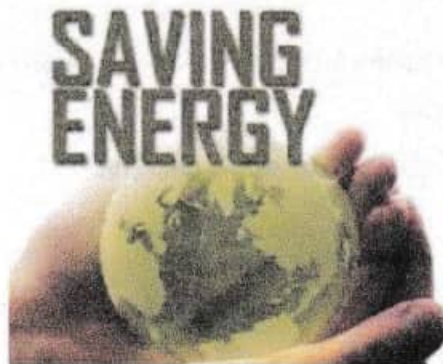
#### Background & Findings

- ❖ At present, hostels (boys and girls) corridors and rest rooms are using lights continuously throughout the night.

#### Recommendation:

- ❖ Install a motion/occupancy sensor in corridors and rest rooms.
- ❖ Management has to create awareness about energy savings among students and staff and provide posters in all class rooms and corridors.

Figure 7. Energy saving posters in class room and corridors



#### Benefit:

cost benefit analysis is given in the table below

Table 5. Cost benefit analysis for install motion sensors for Corridors & Rest room in hostel

Description	Unit	Value
Present system		Rest room & corridors
Total no. of lights	No's	50
Average light fitting wattage	W	9
Operating Hours	hrs	12
Annual Operating Days	days	260
Annual Energy Consumption	kWh	1404
Proposed system - Install Occupancy/motion sensor		
Estimated Annual Energy Savings*	kWh	983
Energy cost	Rs./kWh	10.0
Estimated annual cost savings	Rs. Lakhs	0.10
Estimated investment for motion sensors	Rs. Lakhs	0.35
Simple payback period	months	43
CO <sub>2</sub> Reduction	Ton/Annum	0.84

Note: For calculation we consider Average lights remaining Emergency lights

### 3.4 Ceiling Fans

#### 3.4.1 Replacement of existing conventional ceiling fans with BLDC fans in Boys and Girls hostels

##### Background & Findings

- ❖ According to data provided by the institution, there are approximately 223 conventional ceiling fans in the boys and girls hostels.
- ❖ Conventional fans consume 60 W–70 W during operation.

##### Recommendation:

- ❖ Replace the existing conventional fans with EC-BLDC fans in hostels in a phased manner and ensure good energy savings.
- ❖ BLDC fans operate with less energy and the same air delivery. Similarly, these fans generate less noise, run with an inverter supply, and have remote control-based speed control.
- ❖ BLDCF fans consume 1 unit of electricity for nearly 28-29 hours.

**Benefit:**

cost benefit analysis is given in the table below

*Table 6. Cost Benefit analysis for replacement of existing ceiling fans to BLDC fans in hostels*

Description	Units	value
<b>Present condition</b>		
No's of fans existing	No's	223
Power consumption	kW	0.07
Average No of hour working	Hrs	10
Annual No. of operating days	Days	260
Annual Energy consumption	kWh/annum	37687
<b>Proposed Condition</b>		
<b>Replace to BLDC fan</b>		
power consumption for BLDC fans	kW	0.028
Annual Energy consumption	kWh/annum	16234.4
Estimated annual Energy savings	kWh/annum	21452.6
Energy cost	Rs.	10.0
Total savings	Rs. Lakhs	2.1
Total investment	Rs. Lakhs	5.58
Payback period	Months	31
CO <sub>2</sub> Reduction	Ton/Annum	18

Note: This Recommendation more beneficial for HT consumer as direct reduction of KVA rating

**3.4.2 Replacement of existing conventional ceiling fans to BLDC fans in all blocks**

**Background & Findings**

- ❖ According to the institution's data, all 646 units are equipped with conventional ceiling fans.

**Recommendation:**

- ❖ Replace the existing conventional fans with EC-BLDC fans in the institution in a phased manner and ensure good energy savings.

**Benefit:**

cost benefit analysis is given in the table below

**Table 7. Cost Benefit analysis for replacement of existing ceiling fans to BLDC fans in all blocks**

Description	Units	value
<b>Present condition</b>		
No's of fans	No's	646
Power consumption	kW	0.07
Average No of hour working	Hrs	6
Annual No. of operating days	Days	210
Annual Energy consumption	kWh/annum	52907
<b>Proposed Condition</b>		
Change to BLDC fan		
power consumption for BLDC fans	kW	0.028
Annual Energy consumption	kWh/annum	22790.88
Estimated annual Energy savings	kWh/annum	30116.52
Energy cost	Rs	10.0
Total savings	Rs. Lakhs	3.0
Total investment	Rs. Lakhs	16.15
Payback period	Months	64
CO <sub>2</sub> Reduction	Ton/Annum	26

Note: This Recommendation more beneficial for HT consumer as direct reduction of KVA rating

### 3.5 Canteen

#### 3.5.1 Install a solar water heater instead of using LPG to boil the water for rice cooking in the canteen.

##### Background & Findings

- ❖ At present, in canteen, LPG gas is used to boil water for 40 kg of rice per day, so nearly 100 litres of hot water are required.

##### Recommendation:

- ❖ Install a solar water heater instead of using LPG to boil the water for rice. It will reduce the LPG consumption of boiling hot water.

##### Benefit:

cost benefit analysis is given in the table below

**Table 8. Cost benefit analysis for install solar water heater**

Description	Unit	Solar Water Heater
Quantity of rice cooked	kgs	40
Mass of Water required for cooking 1 kg of rice	Litres	2.5
Mass of Water required for cooking	kgs	100
Inlet temperature of cold water	Celsius	30
Outlet temperature of hot water	Celsius	80
Specific heat capacity of water	kcal/kg	1
Heat required to rise water	kcal	5000
Calorific value of LPG	kcal/kg	11000
LPG consumption /day	kgs	0.45
Annual LPG consumption saving	LPG/Annum	118
LPG cost	Rs/kgs	90
Savings per day	Rs	41
No of operating days per annum	Days	260
Total savings per annum	Rs. Lakhs	0.11
Investment	Rs. Lakhs	0.30
Payback period	months	33.8

Note: Rice hot water boiling it will varies based on persons

### 3.5.2 Install a biogas plant for food waste

#### Background & Findings

- ❖ In the canteen per day, approximately 60 kg of food waste is generated (50 kg of food and 10 kg of vegetables). Currently, food waste is delivered to a nearby pig farm freely.

Figure 8. Canteen Food waste



### Recommendation:

- ❖ Instead of sending food waste to a pig farm, it is suggested that a biogas plant be installed to generate methane gas.
- ❖ This methane gas can be used to cook food in canteens.
- ❖ This reduces the LPG consumption in the canteen.

### Benefit:

cost benefit analysis is given in the table below

*Table 9. Cost benefit analysis for Install Biogas plant for Canteen*

Description	Unit	Bio Gas Plant
Daily Kitchen Waste (Food + Vegetables)	kgs	60
Annual kitchen waste (260 Days)	kgs	15600
Methane production/kg of food waste	per kg	0.2
Methane production/day	kgs	12
Total methane production per annum	kgs	3120
Calorific value of methane	kcal/m <sup>3</sup>	4700
Total energy content of kitchen waste per day	Kcal	56400
Calorific value of LPG	kcal/kg	11900
Quantity of LPG consumed per day in canteen	kgs	25.4
LPG savings per day	kgs	4.74
LPG savings per Annum	LPG/Annum	1232
Cost of LPG	Rs/kg	93
Total savings per day	Rs	440.77
Annual savings (260 Days)	Rs Lakhs	1.15
Investment	Rs Lakhs	2.05
Payback period	Months	21.47

Note: For operating Biogas plant 1 operator is required to clean daily and fill the food waste

## 3.6 Air Conditioners

### Background & Findings

- ❖ Administration block has 2/3-star-rated air conditioning units. A total of 22 units are installed.
- ❖ Specific energy consumption (SEC) is high for existing AC units.
- ❖ Our assessment shows an AC consumed 2.21 kW in 26°C operation; it's high in value.



### Recommendation:

- ❖ It is suggested to replace the existing 2/3 star-rated AC's with 5 star-rated inverter-based AC's.
- ❖ 5-star AC's will consume 0.97 KW of power per TR.
- ❖ It will reduce the energy consumption of the air conditioners (AC).

### Benefit:

cost benefit analysis is given in the table below

*Table 10. Cost benefit analysis for replacement of existing AC to 5-star rated AC's*

Description	Units	Server room	AC's remaining Locations
Present condition			
No. of AC units under operating during audit	Nos.	1	20
Average power consumed by the 2-star AC units	kW	1.30	2.10
Power consumption of 5 star rated inverter AC units	kW	0.97	0.97
Difference in Power Consumption	kW	0.33	1.13
Estimated operating hours of operation	Hrs	24	6
Annual No. of operating days	Days	365	210
Compressor Loading Percentage considered	%	60%	60%
Expected Annual Energy Saving	kWh	1734	17086
Energy Cost	Rs./kWh	10	10
Estimated Annual Cost Savings	Rs.(Lakhs)	0.17	1.71
Total annual Cost savings	Rs. Lakhs	1.88	
Investment (Rs. 40,000 per AC unit)	Rs. (lakhs)	9.9	
Simple payback period	months	63	
CO <sub>2</sub> Reduction	Ton/Annum	16	

Note: Savings estimation is based on operating hours and savings will change based on operating hours.

## 4.0 Observation and Analysis

### 4.1 Electricity supply and Network

Electricity is one of the energy sources used to meet the demands of the institution. The institution is getting power from Mangalore Electricity Supply Company Ltd. (MESCL). Electricity is received at 11 kV, and a 500 kVA transformer is installed in the institution to step down the incoming 11 kV supply to 433 kV. Other than the EB power supply, there are two DG sets of 160 kVA and 62.5 kVA installed in the institution to generate power in case of EB power failure.

The observations made during the study are given in the following sections.

#### 4.1.1 Tariff structure of the Institution

Tariff structure of the Plant is as follows

◆ Tariff Code	=	HT2C(ii)
◆ Supply voltage	=	11 kV
◆ Contracted demand	=	150 kVA
◆ Minimum billing demand	=	128 kVA (85% of CD)
◆ Demand charges	=	128 kVA=Rs. 350 per kVA
◆ TOD	=	Opted
◆ Energy charges	=	8.5 Rs. /kWh.

**4.1.2 Electricity Bill Analysis** The electricity bill for the 12 months (from Sep- 2022 to Aug- 2023) for the Institution was analysed and the details are tabulated as follows

*Table 11. EB Bill Analysis*

Month	Contract demand	Billing Demand	Recorded Demand	Import	Export	Net Consumption	Fixed charges	Energy charges	Total Bill Amount	Solar Generation	Consumption
	kVA	kVA	kVA	kWh	kWh	kWh	Rs.	Rs.	Rs. Lakhs	kWh	(Solar -Export + Import)
Sep-22	150	128	71	18180	2198.25	15982	33920	131050	1.80	11034	27016
Oct-22	150	128	55	14776.5	3290.25	11486	33920	94187	1.42	12650	24136
Nov-22	150	128	67	16094.25	4383.75	11711	33920	96026	1.44	15355	27066
Dec-22	150	128	51	17391.75	1917.75	15474	33920	126887	1.79	12272	27746
Jan-23	150	128	59	20810.25	1363.5	19447	33920	159463	2.05	13513	32960
Feb-23	150	128	57	18489.75	2556.75	15933	33920	130651	1.74	14926	30859
Mar-23	150	128	60	16557.75	2115	14443	33920	118431	1.61	13033	27476
Apr-23	150	128	73	18699	3037.5	15662	33920	128424	1.74	17527	33189
May-23	150	128	67	16787.25	3781.5	13006	33920	106647	1.36	16916	29922
Jun-23	150	128	61	15773	3387	12386	44800	105281	1.46	16378	28764
Jul-23	150	128	61	21054	1146	19908	44800	169218	2.21	11880	31788
Aug-23	150	128	83	21079	805	20274	44800	172329	2.17	8216	28490
<b>Total</b>	-	-	-	<b>215693</b>	<b>29982</b>	<b>185710</b>	<b>439680</b>	<b>1538594</b>	<b>20.8</b>	<b>163700</b>	<b>349410</b>
<b>Average</b>	-	-	<b>64</b>	<b>17974</b>	<b>2499</b>	<b>15476</b>	<b>36640</b>	<b>128216</b>	<b>1.7</b>	<b>13642</b>	<b>29118</b>
<b>Min</b>	-	-	<b>51</b>	<b>14776.5</b>	<b>805</b>	<b>11486.25</b>	<b>33920</b>	<b>94187.25</b>	<b>1.4</b>	<b>8216</b>	<b>24136.25</b>
<b>Max</b>	-	-	<b>83</b>	<b>21079</b>	<b>4383.75</b>	<b>20274</b>	<b>44800</b>	<b>172329</b>	<b>2.2</b>	<b>17527</b>	<b>33188.5</b>

*Anoop*

Principal

**Observation:**

- ❖ Institutional contract demand is 150 kVA, and billing demand is 128 kVA (85% of CD).
- ❖ In the month of August 2023, the maximum demand was 83 kVA with a power factor of 0.96.
- ❖ 125 kW solar system generating maximum active power in the month of April 2023 is 17527 kWh.
- ❖ The maximum net consumption of the institution is 33188 kWh (Sep-2022-Aug-23).

Figure 9. Annual Contract demand, Record Demand



Figure 10. EB consumption Vs Solar generation

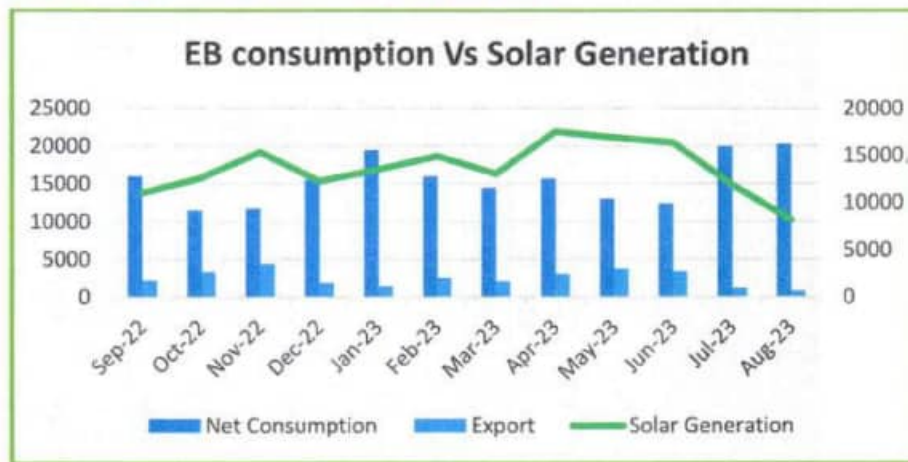
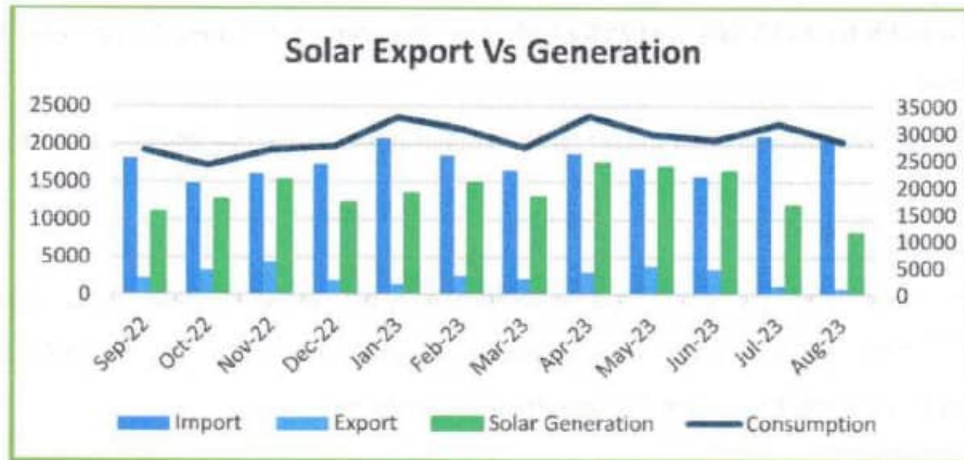


Figure 11. Solar Export Vs generation



## 4.2 Capacitor banks

The solution to improve the power factor is to add power factor correction capacitors to the institutional power distribution system. They act as reactive power generators and provide the needed reactive power to accomplish kW of work. The primary purpose of capacitors is to reduce maximum demand. This reduces the amount of reactive power, and thus total power, generated by the utilities. In the institution, one APFC panel system is installed, with a capacity of 165 kVAR.

Towards monitoring the health of the capacitors, the current of each phase of the capacitors is measured, and the details are as follows:

Table 12. Capacitor bank individual phase current measurement

Transformer (500 kVA) Side 166 kVAR,440V						
Bank S.No	Capacitor rating (kVAR)	Rated Current	R	Y	B	Remarks
1	25	32.84	28.16	0.68	28.13	Derated
3	50	65.5	61.10	60.5	60.6	Ok
4	5	6.5	6.22	6.13	6.28	Ok
5	10	13.2	12.28	12.75	12.86	Ok
6	25	32.84	0	0	0	Derated
7	50	65.5	62	62.14	61.18	Ok
<b>Total</b>	<b>165 kVAR</b>					

**Observation:**

- ❖ Capacitor banks 25 KVAR and 25 KVAR derated their capacity; change the capacitor banks with new ones.
- ❖ The present main incomer power factor is maintained at 0.96 average because of the solar system.

**4.3 Air Conditioners**

To provide cooling load for the work space, conference room, admin building, and server room, 22 units (1.5 TR and 2 TR) of individual split-type air conditioners are installed. During the audit, a sample-based performance assessment was done for operating air conditioners.

*Table 13. Performance assessment of Air conditioners*

Design Parameters	Units	Server Room AC-1	Conference Room AC-1	Conference Room AC-2	Boys Hostel
Type of Freezer	-	Split AC	Split AC	Split AC	Split AC
Make	-	Carrier	Carrier	Carrier	Carrier
Model No	-	42KGL-024C+51MSG-024RA/2010	42KGL-024C+51MSG-018RA/2010	42KGL-024C+51MSG-018RA/2010	42KGL-024C+51MSG-024RA/2010
Rated Cooling Capacity	TR	2	1.5	1.5	1.5
Rated Amps	A	-	-	-	-
AC Star rating		2	3	3	2
<b>Operating Parameters</b>					
Set point	°C	24	26	26	-
Operating Hours	hrs.	24	3	3	8
<b>Supply air</b>					
Suction air DBT	°C	19.4	13	20.3	17.3
Suction air RH	%	86.7	87.4	62.1	69.1
Suction air WBT	°C	17.90	11.82	15.68	13.90
Suction air enthalpy	kJ/kg	50.53	33.63	43.81	38.93
Suction air density	kg/m <sup>3</sup>	1.16	1.18	1.15	1.17
<b>Return air</b>					
Return air DBT	°C	26.9	25.61	25.61	25.5
Return air RH	%	59.32	50.14	50.14	50.6
Return air WBT	°C	21.01	18.41	18.41	18.4
Exhaust air enthalpy	kJ/kg	60.71	51.95	51.95	51.93
Δ Enthalpy	kJ/kg	10.18	18.32	8.14	13

Design Parameters	Units	Server Room AC-1	Conference Room AC-1	Conference Room AC-2	Boys Hostel
Air velocity	m/s	1.0	0.7	0.6	1.1
Area	m <sup>2</sup>	0.109	0.099	0.099	0.109
Actual air flow	m <sup>3</sup> /s	0.11	0.07	0.05	0.11
	m <sup>3</sup> /hr	384	255	196	411
	kg/hr	444	302	226	479
	CFM	226	150	115	242
Input motor power	kW	1.3	1.8	2	2.5
Effective TR	TR	0.36	0.44	0.15	0.49
SEC	kW/TR	3.64	4.11	13.74	5.07
Heat Rejected	kJ/hr	1081	1324	440	1490

#### Observation:

- ❖ All the AC units are older than 14 years with 2/3-star ratings.
- ❖ The specific energy consumption (SEC) is in the range of 3–14 KW/TR, which is higher than the rated value. (Refer to ECM 3.6 for replacing the older AC units with energy-efficient ones.)
- ❖ The AC units are operating at a set point temperature of 24 °C, which is a good practice.
- ❖ Admin building server room AC's operating with timer, which is good practice.

#### 4.4 Pumps

- ❖ There are bore well pumps (5.5 KW) each and a sump pump near the sump tank (5.5 KW) is installed.
- ❖ In a sewage treatment plant (STP), a filter feed-back pump with two no's (5 HP each) is installed, operating for 2 hours per day.
- ❖ STP water pump to supply water to all blocks (3.7 KW) installed
- ❖ During the audit, sample-based pump assessments were done (flow, pump details, and power measurement).
- ❖ The performance assessment is given below.

Table 14. Performance assessment for Bore well pumps

Design Parameter	Units	Borewell-1	Sump tank Pump	Borewell-3
Manufacturer	-	-	-	-
Model	-	HRF 19/30	HRF 19/30	HRF 19/30
Motor Power	kW	3.7	3.7	3.7
Flow	m <sup>3</sup> /hr.	-	-	-
Head	m	-	-	-
Speed	rpm	-	-	-
Motor Efficiency	%	86%	86%	86%
<b>Actual Measurement</b>				
Operating Hours	hrs.	4	4	4
Actual Power	kW	5.9	4.4	3.7
Suction Pressure	kg/cm <sup>2</sup>	0	0	0
Discharge Pressure	kg/cm <sup>2</sup>	9	9	9
Flow	m <sup>3</sup> /hr.	9.8	9.2	5.2
<b>Throttling</b>				
Suction Control Valve open	%	100%	100%	100%
Suction Control Valve close	%	0%	0%	0%
Discharge Control Valve open	%	100%	100%	100%
Discharge Control Valve close	%	0%	0%	0%
<b>Variable Speed Drive</b>				
VFD Installed	(Yes / No)	No	No	No
Operating Frequency	Hz	-	-	-
<b>Calculation</b>				
Head(H)= Discharge Pressure-(-Suction Pressure)*10	m	90	90	90
Hydraulic Power = (Q <sub>in</sub> m <sup>3</sup> /hr*1000/3600)*H*9.81/ 1000	kW	2.4	2.3	1.3
Combined efficiency = (Hyd Power/Actual power)*100	%	41%	51%	34%
Pump efficiency = (Comb Eff/Motor Efficiency)*100	%	47%	60%	40%
Motor Loading	%	137%	102%	86%

**Observation:**

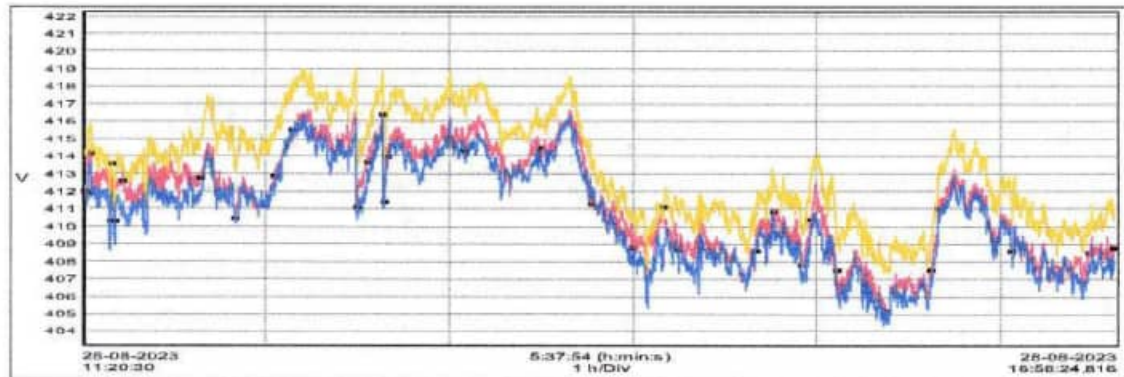
- ❖ Borewell pump-1 near canteen is overloaded by 137%.



## 5.0 Electrical Graphs

### 5.1 Main incomer 500 KVA Transformer

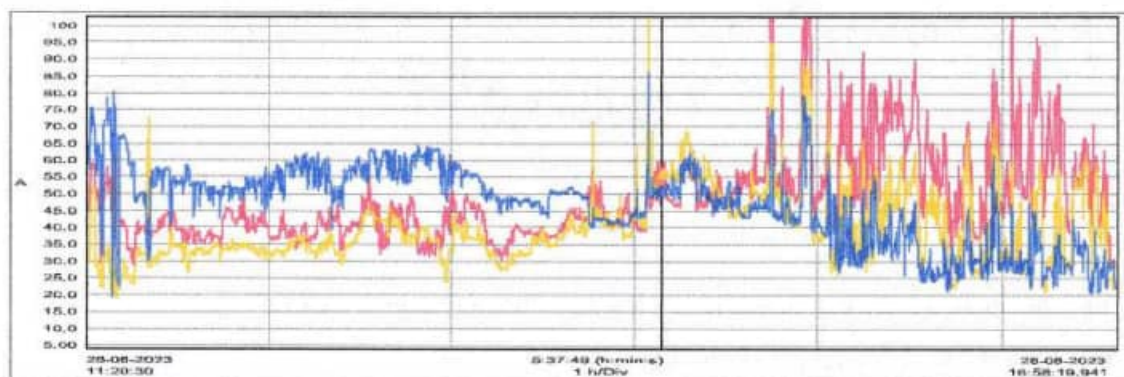
Figure 12. Voltage profile for main incomer



#### Observations:

- ❖ The main incomer panel voltage varies from 409 V to 418 V. The average voltage is 413 V during recording time.
- ❖ The main incomer voltage profile value is within the limit specified as per the IEC 60038-2009 ( $\pm 10\%$ ) standard.

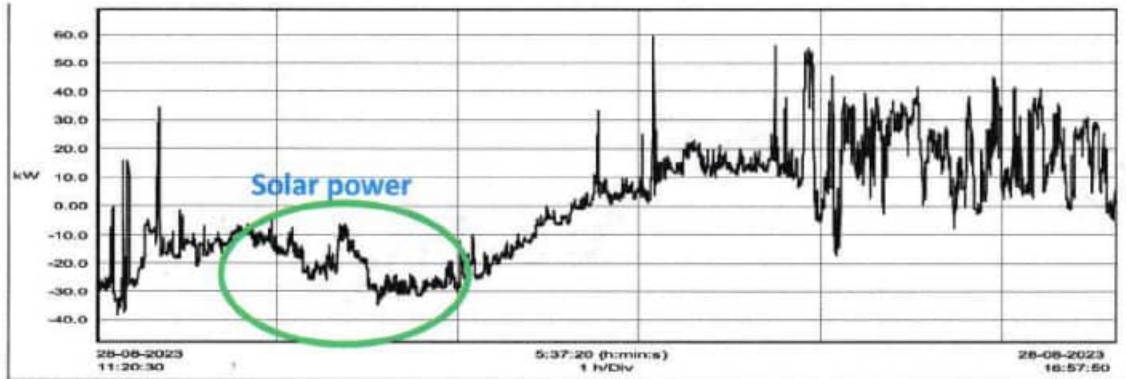
Figure 13. Current profile for main incomer



**Observations:**

- ❖ The main incomer the current varies from 28A to 141A during recording time.
- ❖ During recording main incomer load is less.

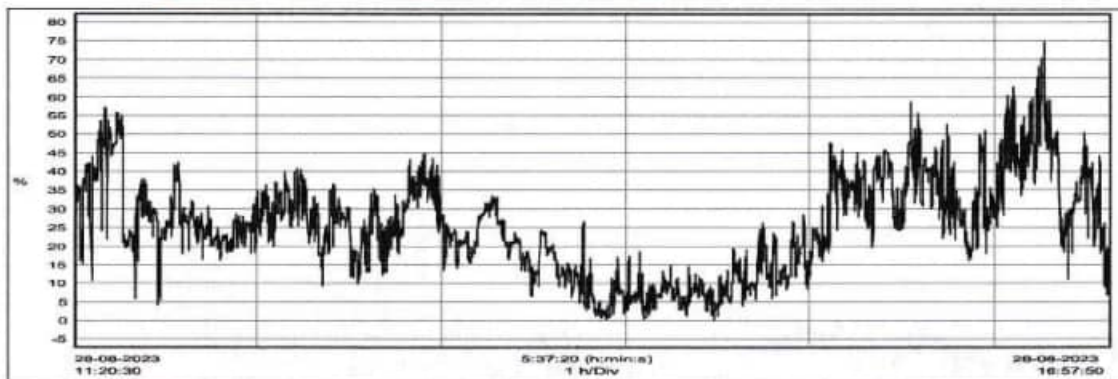
Figure 14. Power profile for main incomer



**Observations:**

- ❖ The Power of the main incomer varies from -37 kW to 59 kW. Average power is 18W during recording time.

Figure 15. Current Unbalance in main incomer



**Observations:**

- ❖ The main incomer current Unbalance is Average 25%.it is high in value.
- ❖ Distribute the loads equally in loads side.



# GREEN AUDIT

*Green*  
Practical  
Sustainable  
Solutions

## 6.0 Green Audit

A green audit is a process of systematic identification, quantification, recording, reporting, and analysis of components of the environmental diversity of an institution. It aims to analyze environmental practices within and outside the concerned sites, which will have an impact on the eco-friendly ambience. A green audit can be a useful tool for a college to determine how and where energy, water, or other resources are used the most. The college can then consider how to implement conservation measures and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve a waste minimization plan. Green audits can be a highly valuable tool for colleges in a wide range of ways to improve their environmental and economic performance and reputation while reducing waste and operating costs. The main objective of the green audit is to promote environmental management and conservation on the college campus.

### 6.1 Waste Management

Waste management is a process that determines the kind and volume of waste that an organization produces. Different types of waste generated inside the institution are represented in the below block diagram.

Figure 16. Types of waste generated



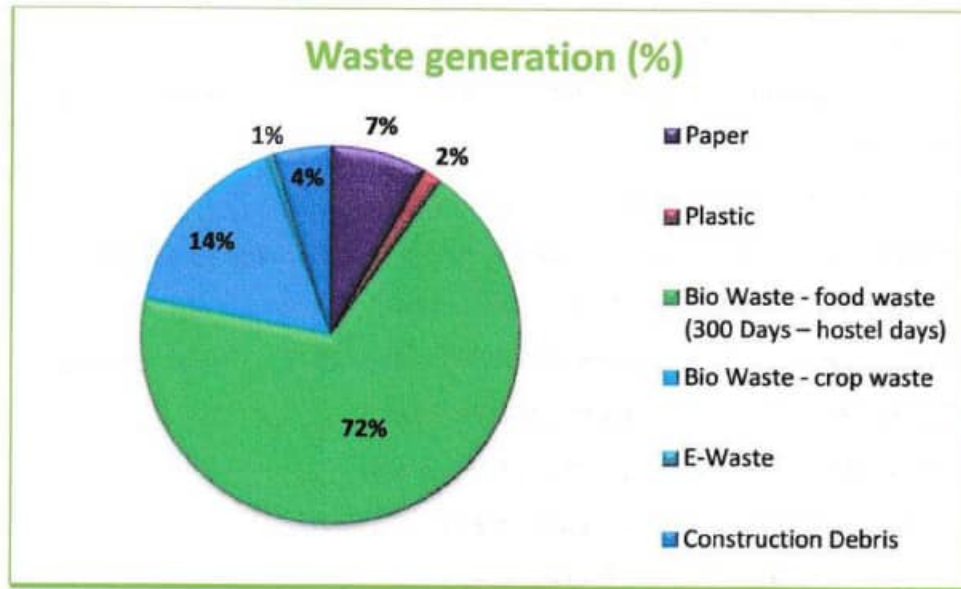
## Observations

- ❖ Paper waste from office/class and labs are stored and sent for recycling
- ❖ E-Waste is collected, stored, and disposed with help of Moogambigai Metal Refineries, Mangalore.
- ❖ Incinerator is fixed for safe disposal of sanitary waste.
- ❖ Separate bins are not there for bio-degradable and non-biodegradable waste.
- ❖ No quantification of waste daily or monthly basis.
- ❖ Other solid waste is collected and disposed through the municipal corporation.
- ❖ DG changed oil is taken back by DG service person.
- ❖ Garden waste is collected and dumped in backyard.
- ❖ Waste from chemistry lab is going to same drain.
- ❖ Steel glasses are provided for drinking water.
- ❖ Cleaning and collecting wastes at frequent intervals.
- ❖ Food waste is being disposed to local pig rearing units.
- ❖ Making pens with waste paper.

Table 15. Waste generation

S NO	TYPE OF WASTE	QUANTITY IN KG/DAY	QUANTITY IN KG/YEAR
1	Paper	5	1800
2	Plastic	1	360
3	Bio Waste - food waste (300 Days – hostel days)	60	18000
4	Bio Waste - crop waste	10	3600
5	E-Waste	0.44	158.4
6	Construction Debris	3	1080
Total		79.44	21998.4

Figure 17. Total waste generation



- ❖ The campus generates nearly 79.44 kg of waste every day, including paper, construction debris, plastic, e-waste, and bio-waste (food waste, leaves, grass, etc.). According to per-month data, 72% of waste comes from food, 14% organic (both dry and wet leaves), 7% from paper, 4% from construction debris, 2% from plastic, and 1% from e-waste.
- ❖ As per our observations, the college should take the initiative to reduce their overall waste. Most of the waste comes from used food from the hostel or canteen and papers in classrooms.
- ❖ Waste from construction debris is found around the campus. So, this waste can be effectively reused for landscaping. Only a minimum amount of e-waste is generated inside the campus, and it is disposed of through Moogambigai Metal Refineries, Mangalore.
- ❖ The incinerator is fixed for the safe disposal of sanitary waste. Separate bins should be placed for biodegradable and non-biodegradable waste disposal.
- ❖ Educate the students on how to use the bins and their purpose. Maintain proper records on the type of waste, quantity of waste, and vendor details on a daily basis.
- ❖ Establish vermicompost pits for dumping garden and wet waste from campus. Paper waste can be reduced by using both sides before disposal.
- ❖ The college should set a yearly goal to lower waste generation. Nearly 1.8 tons of paper is sent to recycling every year. You can minimize paper by going for digital practices (electronic signatures

and digital document management solutions). To become a zero-waste campus, waste generation must be monitored.

- ❖ Awareness programs are to be conducted among staff and students on effective use of resources and contributing to the environment.

### Recommendations

- ❖ Reduce the amount of waste that is produced in classrooms.
- ❖ Keep biodegradable and non-biodegradable waste bins for segregation of waste.
- ❖ Establish vermicompost for composting dry leaves, green waste, and wet waste.
- ❖ Install a mini biogas production unit to convert food waste into biogas.
- ❖ Use construction debris waste for landscaping.
- ❖ Maintain records for the type of waste and the amount of waste disposed of.
- ❖ Use concrete blocks from the civil lab for landscaping applications.
- ❖ A proper record should be maintained for the type of waste, its quantity, and how it's disposed.
- ❖ Keep a proper record of the DG oil replaced and ensure proper disposal.
- ❖ Chemistry lab waste should be handled effectively (acid-base neutralization).
- ❖ LPG Savings by Installing biogas plant for the food waste produced from canteen is given in (section 3.5.2).
- ❖

Figure 18. *Strategies need to be implemented*



## 6.2 Water Management

A water audit is a qualitative and quantitative analysis of water consumption to identify means of reducing, reusing, and recycling water. A water audit is a method of quantifying all the flows of water in a system to understand its usage and improve water conservation. A water audit gives an idea of the amount of water that is consumed in the college for activities like washing hands, drinking in the laboratories, watering the garden, and flushing toilets and urinals. From the results obtained, students and staff will consider better ways to improve water conservation throughout the building and on the college campus. It is therefore essential that any environmentally responsible institution examine its water use practices. A water audit provides an overview of water use trends, the effectiveness of conservation measures, and potential cost and water savings.

### Observations

- ❖ Two borewells are available on campus to meet the water requirement.
- ❖ Overhead tanks of 2X10,000 litres in the admin block, 1X10,000 in the EC block, 1X10,000 in the civil and mechanical blocks, 1X10,000 in the AIDS block, 1X5,000 in the workshop block, 1X10,000 in the library block, 2X10,000 in the canteen, 2X10,000 in the girls hostel, and 2X10,000 in the boys hostel are installed. The total capacity of the installed water tanks is 1,25,000 litres.
- ❖ Waste water is collected and treated in an STP plant with a capacity of 74,000 litres.
- ❖ Overhead tanks of 7 x 10000 litres for storing and utilizing STP water are installed in all blocks.
- ❖ Exact consumption details are not available as water meters are not installed.
- ❖ v. A demo A rainwater harvesting system is installed in the civil and mechanical blocks.
- ❖ Rainwater flowing off of places near the admin block is used to recharge a bore well.
- ❖ In all blocks, the overhead tanks are overflowing.
- ❖ A RO water system is provided for drinking water.
- ❖ Many taps in both boys and girls rest rooms in both academic and hostel blocks are not properly closed.
- ❖ The approximate water consumption is 100,000 litres per day.
- ❖ Periodic testing of raw water and drinking water is done.
- ❖ Open-pipe irrigation is used on campus.
- ❖ Around 300 taps are installed on the campus.



- ❖ Water flow varies from 5 lpm to 12 lpm.
- ❖ Potable water is used for cleaning buses.

Water from a fully open valve pipe of diameter 10mm is used for more than 4 hours per day at a rate of 10 lpm to clean utensils in the kitchen of the canteen.

*Table 16. Water test results*

SI.NO	Parameters	Unit	Boys Hostel	Girls Hostel	Canteen	BIS: 10500-2012 Desirable Limit
1	Ph	-	6.98	7.35	6.75	6.5-8.5
2	Total Hardness as CaCO <sub>3</sub>	mg/l	88	88	84	200 Max
3	Turbidity	NTU	1.4	0.9	.98	1 Max
4	TDS	mg/l	176	196	176	500 Max
5	Conductivity	mg/l	265.6	285.6	285.6	-
6	Chlorides	mg/l	21.99	27.99	19.99	250 Max
7	Nitrate Nitrogen	mg/l	Nil	Nil	Nil	Nil
8	Ammonical Nitrogen	mg/l	Nil	Nil	Nil	Nil
9	H2S (Bacteriological Contamination)	-	Nil	Nil	Nil	Nil

**Figure 19. STP Water Quality test report**



Figure 20. Water Quality test report canteen

**SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT**  
Unit of the Government of Karnataka, Udupi Region  
 Accredited by AICTE, Autonomous Institute with 80 seats - (Institution's Website)  
 Accredited by SI, Anna Amal & Anna Amal Institute, Anna Amal  
 Accredited by SI, Anna Amal & Anna Amal Institute, Anna Amal

**SMVITH**

SMVITH/CL/2023-24/0229 22 June 2023

**Customer:**  
SMVITH, Kuvempu  
Udupi

**Dear Sir,**  
 Re: Water Quality Testing  
 Ref: Your request dated 29-07-2023

With reference to the above, we have conducted the following tests on the sample supplied by you. The test report is as follows.

Sl. No.	Tests	Results	MS-15000-2012 Desirable limit
1	pH Value	8.95	6.5 to 8.5
2	Total Hardness as CaCO <sub>3</sub> , mg/l	70	500 mg/l
3	Turbidity, NTU	2.90	5 mg/l
4	Total dissolved solids, mg/l	156.00	500 mg/l
5	Calcium, mg/l	27.5	-
6	Chlorides, mg/l	28.35	250 mg/l
7	Water Hardness, mg/l	90	500
8	Ammonical Nitrogen	50	50
9	TDS (Electrode type of Conductivity)	90	500

In-Charge  
 Department of Civil Engineering  
 (Dr. Geetha B V)

Coordinator  
 Testing Laboratory (SMVITH)  
 (Mr. Rajesh Lakshmi)

Head  
 Department of Civil Engineering  
 (Dr. Geetha B V)

Figure 21. Best Practices

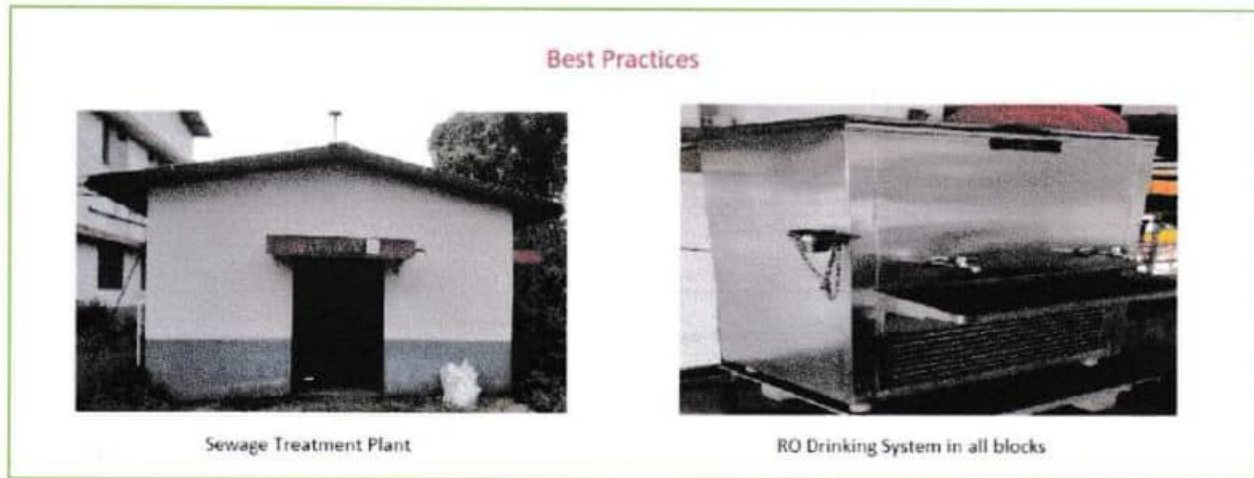
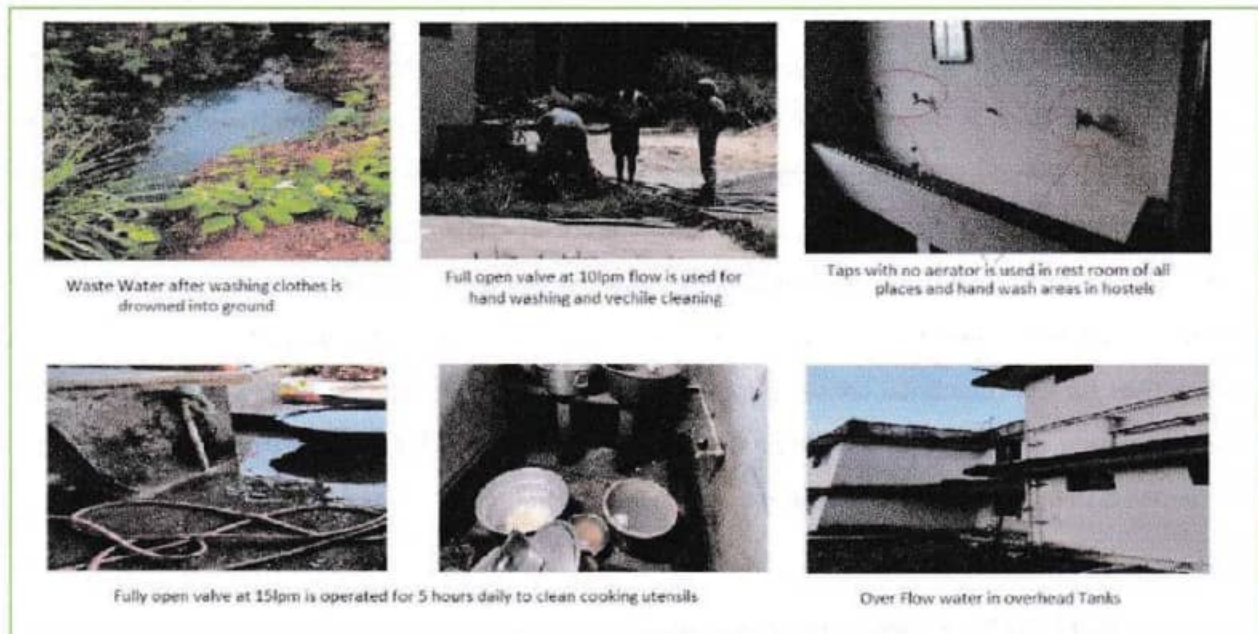


Figure 22. Processes in need of improvement



### Recommendations

- ❖ Install water meters at the bore well side for details on the quantity of water pumped from the source and on all hostels and academic blocks to monitor the overall consumption of water inside the campus and take necessary actions when required.
- ❖ Install a rainwater harvesting system for all blocks.
- ❖ Install an automatic water tank overflow controller to arrest the overflow of water.
- ❖ Use aerated taps to conserve more water.
- ❖ Conduct awareness programs on water conservation for students. Place posters like "Save Water" in all blocks.
- ❖ Adjust the main pipe regulator to reduce the water flow to 5 lpm in handwashing areas.
- ❖ Install dishwashing machines and nozzles in the canteen to clean utensils and minimize water consumption.
- ❖ Check the option for a drip irrigation system.
- ❖ Planting native trees in place of exotic plants will reduce the water requirement for irrigation.
- ❖ Replant invasive grass lawns with native grass, which will conserve water.

## 7.0 Biodiversity

A biodiversity audit ensures the greenery and sustainability of the campus. The biodiversity audit is conducted to analyze the present biodiversity status of the college and to propose plans to enhance the existing biodiversity. In this audit, the focus has been on the assessment of the present status of diversity, which includes trees, shrubs, birds, and other habitats on and around campus. Efforts are also made by the college authorities to conserve nature. In this audit, student volunteers were involved to identify the flora and fauna present on campus. The focus is also given on pollution control methodology, best practices for environmental conservation, etc. This audit gives recommendations to the college for the conservation and protection of natural vegetation and animal life by involving students and faculty members to make the institute's campus biodiversity rich.

### Observations

- ❖ Nearly 53 floral species are seen around the campus.
- ❖ Around 700 mature trees of various species are found.
- ❖ 25 faunal species are found on the campus.
- ❖ The faunal diversity is lower compared to the floral diversity.
- ❖ Many exotic trees are found on campus.
- ❖ Flowering, medicinal, and herbal plants are less common compared to common native plants.
- ❖ Rank holders are planting trees on campus.

Table 17. Floral species in the campus

S.No	Common Name	Scientific Name
1	Mauritius Hemp	Furcraea Foetida
2	Oleander Spurge	Euphorbiaceae
3	Kudzu	Pueraria Montana
4	Asian Spyder Flower	Clomeviscosa
5	Prostrate Shrub	Euphorbiaceae
6	Dogbanes	Apocynaceae
8	Garden Croton	Codiaeum Variegatum
9	Travers Palm	Ravenala Madagascariensis
10	Bermuda Grass	Cynodon Dactylon
11	African Arrowroot	Canna Indica
12	Tulsi	Ocimum Tenuiflorum

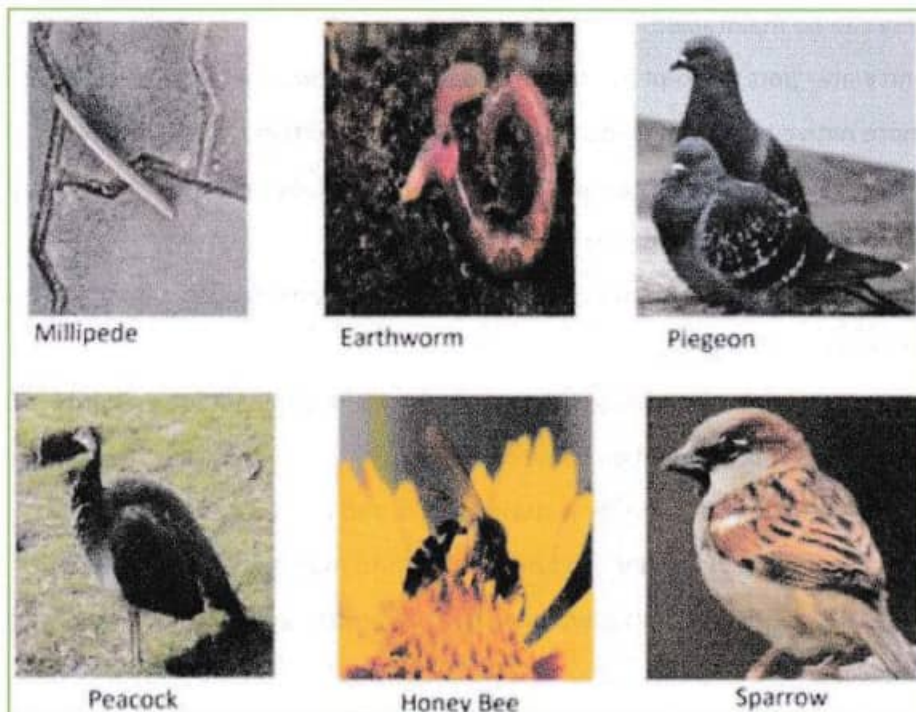
S.No	Common Name	Scientific Name
13	Dumb Cane	Dieffenbachia Seguine
14	Santa Maria	Parthenium Hysterophorus
15	Cape Periwinkle	Catharanthus Roseus
16	Dunchi	Legume Sesbania Bispinosa
17	Indian Almond	Terminalia Catappa
18	Pongam	Milletia Pinnata
19	Coconut	Cocos Nucifera
20	Polyalthia	Monoon Longifolium
21	Broom Rain	Albizia Lebbeck
22	Mango	Mangifera Indica
23	Orchid	Orchidaceae
24	Indian Banyan	Ficus Benjamina
25	Date Palm	Phoenix Dactylifera
26	Hibiscus	Hibiscus Rosa-Sinensis
27	Night-Blooming Jasmine	Cestrum Nocturnum
28	Chicoo	Manilkara Zapota
29	Crape Jasmine	Tabernaemontana Divaricata
30	Golden Trumpet	Allamanda Cathartica
31	Golden Dewdrop	Duranta Erecta
32	Pitanga	Eugenia Uniflora
33	Golden Tree	Cassia Fistula
34	Queen's Crepe	Lagerstroemia Speciosa
35	Guava	Psidium Guajava
36	Jackfruit	Artocarpus Heterophyllus
37	Banana	Musa Acuminata
38	Sugar Cane	Saccharum Officinarum
39	Breadfruit	Artocarpus Altilis
40	Papaya	Carica Papaya
41	Indian Sandalwood	Santalum Album
42	Calabura	Muntingia Calabura
43	Chinese Apple	Malus Prunifolia
44	Java Plum	Syzygium Cumini
45	Cashew	Anacardium Occidentale
46	Acacia	Vachellia Nilotica

S.No	Common Name	Scientific Name
47	Neem	Azadirachta Indica
48	Jujube	Ziziphus Jujuba
49	Chinese Ixora	Ixora Chinensis
50	Gooseberry	Ribes Uva-Crispa
51	Rose	Rosa Indica
52	Yellow Elder	Tecoma Stans
53	Bamboo	Bambusa Vulgaris

Table 18. Faunal species in the campus

Si.No	Common Name	Scientific Name
1	Common Hawk-Cuckoo	Hierococcyx Varius
2	Asian Koel	Eudynamys Scolopaceus
3	House Sparrow	Passer Domesticus
4	Lizard	Lacertilia
5	Pigeon	Columbidae
6	Ants	Formicidae
7	Butterflies	Rhopalocera
8	Rat	Rattus
9	Snake	Serpentes
10	Beetles	Coleoptera
11	Dragonfly	Anisoptera
12	Peacock	Pavo Cristatus
13	Indian Myna	Acridotheres Tristis
14	Hummingbirds	Trochilidae
15	Starling	Sturnus Vulgaris
16	Cat	Felis Catus
17	Dog	Canis Lupus Familiaris
18	Frog	Anura
19	Millipede	Diplopoda
20	Common Earthworm	Lumbricina
21	Bug	Hemiptera
22	Crow	Corvus Spp

Figure 23. *Flora and Fauna in the campus*



**Recommendations**

- ❖ To maintain the college campus green and eco-friendly, more trees need to be planted so that carbon neutrality can be maintained.
- ❖ Food and water pots are kept inside the campus for feeding the animals and birds.
- ❖ Plant more native trees rather than exotic species to maintain plant diversity.
- ❖ Review the list of trees planted in the garden periodically, allot numbers to the trees and keep records. Assign scientific names to the trees.
- ❖ Create awareness of environmental sustainability among students and take actions to ensure environmental sustainability.
- ❖ Indoor plantation to be encouraged, Bonsai can be planted in corridor to bond a relation with nature.
- ❖ All trees in the campus should be named scientifically.
- ❖ Establish drip irrigation system for watering plants and trees to save more water.
- ❖ Plant more medicinal plants and fruit bearing trees to maintain plant diversity.
- ❖ The faunal diversity is low; however, it can be improved by planting more flowering and fruit bearing plants.

## 8.0 Carbon Foot Print Analysis

Carbon footprint due to transport, energy consumption and internal diesel consumption is analysed, and the details are given below.

Table 19. Carbon Foot Print Analysis

Sl.No	Description	Type of Fuel and their CO <sub>2</sub> Conversion Process			
		Fuel Consumption			
		Electricity kWh	Diesel (Vehicle + DG) Litre	Petrol (Vehicle) Litre	LPG kg
1	Total Annual Consumption	215693	27655	430	6400
2	CO <sub>2</sub> Emission (Tons/Annum)	177	73	1	19
3	<b>Total CO<sub>2</sub> Emission (Tons/Annum)</b>				<b>270 (↑)</b>
4	<b>No. of Matured Trees Available</b>				<b>700</b>
5	<b>CO<sub>2</sub> offset due to Trees (Tons/Annum)</b>				<b>15.26 (↓)</b>
6	Annual Energy Exported from SPV Plant (kWh)				29982
7	<b>CO<sub>2</sub> offset due to export Solar Power Plant (Tons/Annum)</b>				<b>25 (↓)</b>
8	<b>CO<sub>2</sub> Emission per (Tons/Annum) currently</b>				<b>230 (↑)</b>



Sl.No	Description	Type of Fuel and their CO <sub>2</sub> Conversion Process			
		Fuel Consumption			
		Electricity kWh	Diesel (Vehicle + DG) Litre	Petrol (Vehicle) Litre	LPG kg
9	Expected Reduction of Annual Electricity Consumption after Implementing Proposed Energy Conservation Measures (kWh)				95438
10	CO <sub>2</sub> offset after implementing ECM (Tons/Annum)				78.3 (↓)
11	Expected Reduction of Annual LPG Consumption after Implementing Proposed ECM (kgs)				1232 (↓)
12	CO <sub>2</sub> Offset after implementing biogas plant instead of LPG (Tons/Annum)				3.7 (↓)
13	Amount of CO <sub>2</sub> to be Offset (Tons/Annum)				82 (↔)
14	Per Capita CO <sub>2</sub> Consumption (Tons/Annum)				0.116

### Observations

- ❖ Major carbon emission is for the electricity usage.
- ❖ Encourage carpooling and usage of cycles planting more trees will help to reduce net carbon emission.



**Bigeta Energy Solutions LLP** is an ISO 9001:2015 certified, Energy & Sustainability Management company. We provide consultancy services in Energy Audits & Assessments, Electrical Power Assessment, Electrical Safety Assessment, ETAP Analysis, Measurement & Verification, Thermal Imaging, Energy Data Analytics, Green Building, ISO 50001 EnMS and Training. We are a team of BEE accredited energy auditor, BEE certified energy auditor, energy manager, Certified Measurement and Verification Professional (CMVP), ISO 50001 lead auditor, IGBC Accredited Professional (IGBC AP), GRIHA Certified Professional and power quality professionals committed to giving most promising solutions to customers to save energy and attain sustainability.



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www.bigetaenergy.com

*Principa*

Principal

SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udipi Dist.  
BANTANAL - 574 115

Bangalore  
16-09-2023

## CERTIFICATE

This is to certify that we have carried out an energy audit and green audit of **Shri Madhwa Vadiraja Institute of Technology & Management**, Vishwothama Nagar, Bantakal, Udupi, Karnataka – 574115 during 28<sup>th</sup> to 29<sup>th</sup> August 2023 and detailed survey, observations, measurements, and verification were carried out to assess the energy, waste, water, and biodiversity aspects of campus. A detailed report consisting of key parameters, observations and recommendations was submitted to the management on 16-09-2023.

For Bigeta Energy Solutions LLP

BENET GEORGE Digitally signed by  
BENET GEORGE  
VADAKKEMUL VADAKKEMULANJANAL  
ANJANAL Date: 2023.09.16  
11:08:03 +05'30'



**Benet George V – CEM, CMVP, PMP, IGBC AP**

**BEE Accredited Energy Auditor – AEA0053**  
**Chief Consultant**  
**Bigeta Energy Solutions LLP**

*Arscop*  
Principal  
SHRI MADHWA VADIRAJA  
INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwothama Nagar, Udupi Dist.  
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INSTITUTE OF TECHNOLOGY & MANAGEMENT  
Vishwathama Nagar, Udupi Dist.  
BANTAKAL - 574 115

# SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(A unit of Shri Sode Vadiraja Mutt Education Trust ®)

VISHWOTHAMA NAGARA, BANTAKAL, UDUPI

Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

Accredited by NBA (BE–CSE,ECE) and NAAC with A



## SMVITM SOFTWARE

Design and Developed by

Department of Computer Science and  
Engineering

Faculty User manual

# Overview:

**SMVITM Software is a desktop application having the following Features:**

- a) It maintains the student Profile like USN, Name, DOB, etc.
- b) Employee profile.
- c) It helps in Keeping track of student's performance throughout his stay in the college.
- d) Creation of Students section, lab batches, Elective allocation, USN updating, Teacher Student guardian, etc.
- e) Student and Faculty subject link.
- f) Student attendance system
- g) Student Grace attendance
- h) Student Sessional Marks
- i) Student assignments
- j) Transfer of students at the end of the semester
- k) There is a Faculty feedback regarding the performance and teaching.
- l) There is online Quiz in lines with the industrial Standard.
- m) Online Faculty exam duty allocation for theory subjects.
- n) Lab allocation VTU examination.
- o) DCS duty allocation.
- p) All VTU related Invoice and Reports.
- q) Employees Attendance integrated to the Face and Punching time attendance.
- r) Online leave system
- s) Students Grievances.
- t) Student Hostel system which helps to keep track of absentees, their mess bills, sending of emails as and when required.
- u) Sending e-greeting for the Alumni, current students and employees

## Roles Classifications:

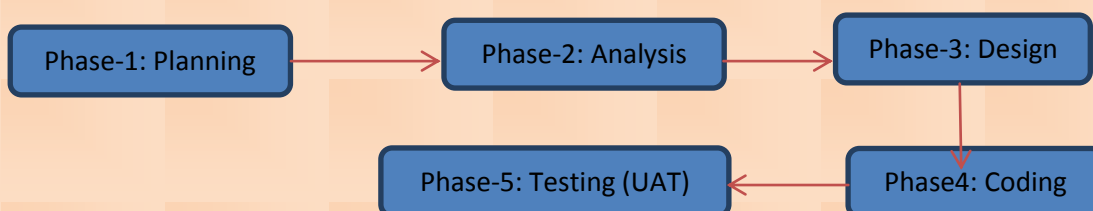
- a) Employee Role
- b) Student Role
- c) Faculty Role
- d) Office/Non-Teaching Role
- e) HOD Role
- f) Principal Role
- g) Administrator Role

## Software and Hardware used:

- a) MS-SQL Server is used as Backend
- b) VB.Net is used as Front End.
- c) Crystal Report is used as reporting tools.
- d) Windows Server 2008
- e) Users PC's (Windows XP, 8, 10, etc.) and printers.
- f) Wi-Fi and Local Area Network with ....
- g) Face and punching attendance machines are used for attendance.

## Method used:

System Development Life Cycle (SDLC): This is one of the most common processes adopted to develop a project and not surprisingly, this project is following this model too. To be precise, waterfall model is being applied. Waterfall model is a sequential model process where the input of a phase actually results from the previous phase.



## Core Modules:

- a) Faculty Profile
- b) Monthly Student Attendance
- c) Student Internal Marks
- d) Student Assignments
- e) CPD Entry.
- f) Grace Attendance
- g) Student Activities
- h) Vacation Leave
- i) Permitted Hours
- j) Faculty Feedback on Student Feedback
- k) Documents like FDP, Journal, Conference, Patent and Activity form

SMVITM SOFTWARE



# Student Profile:

**Objective:** In this module update and display the Students all detailed information

**Module Type:** Master

**Module Used by:** HOD / Employee

**Location/Link:** Master→Student



Description: In student Profile update and displays all the information recorded for a student including personal and contact information. In this Module you can change all the data expect student USN Number. Enter student Name, branch from the branch dropdown list. Select the Current semester and section from the list. Status column contain 4 types of parameter such as [Active, Inactive, Detained, Passed].current students are in active mode. There are five specific types listed in the admission mode options. Based on the options provided, the category under which a student can do their admission would be either ["CET" "Management", "Lateral Cet/Management" or "Comedk."].

Enter a college fees and receipt number, receipt Date and Admission Date. To select the admission issue date, you would need to locate that information within the downloaded document. Next, you would enter the CET rank, Student claimed category, and allocated category as required.the three types of KEA category are [SNQ,Arivu, and Normal].

Select a [Mother Tongue ,Religion or Caste]. choose a [Gender type,Blood group,Nationality] of the student. Enter a [Adhar number, parent whatsapp number and Date of joining].

Enter the City where you are resident.Enter the student Academic details such as 10<sup>th</sup> and 12<sup>th</sup> institution name, Exam Board,Percentage of mark,and Medium. In pre-qualifying course enter the students previous studied class and then go to the [more info](#).

Enter the mobile locker facilities [Yes or No].Enter the hostel facilities [Yes or No]. Enter the subject marks [Physics, Chemistry, Maths]. Enter the personal details like Father Name, Mother Name, Qualification, Occupation, Annual Income and the Mobile Number. Enter the student Achievement, Extracurricular Activities and hobbies etc.. Enter students' permanent or correspondence home address. Choose the option where you are sent student progress Report. Close the window go to the main page. Click on the button [VTU%].

Semester	Percentage
Semester 1	7.36
Semester 2	6.80
Semester 3	6.43
Semester 4	6.57
Semester 5	6.28
Semester 6	6.94
Semester 7	6.55
Semester 8	6.17



UJN	code	sub_name	GE	CR	CR	CR	CR	CR	CR	IA_1	IA_2	IA_3	LAB	EST	Assign	TOTAL	CG	CA	Abs
4MWTSEC01	HEC504	LEARNING	A	21	2	0	20	20	20	11.00	11.00	11.00	0.00	11.00	0.00	11			11.00
4MWTSEC01	HEC507	COMPUTER NETWORKS	A	01	2	0	20	0	0.00	0.00	0.00	0.00	0.00	0.00	0	11	11	0.00	
4MWTSEC01	HEC508	EMBEDDED SYSTEMS LAB	A	25	2	0	25	0	0.00	0.00	0.00	11.00	11.00	0.00	21	11	0	11.75	
4MWTSEC01	HEC509	PYTHON APPLICATION PROGRAMMING	B	21	4	4	21	20	10.00	10.00	10.00	0.00	10.00	0.00	21	10	10	10.00	
4MWTSEC01	HEC510	PROGRAMMING IN C++	F	21	4	0	0	20	0.00	0.00	11.00	0.00	11.00	0.00	10	10	10	10.00	
4MWTSEC01	HEC511	DIGITAL COMMUNICATIONS	F	20	4	0	0	20	0.00	11.00	10.00	0.00	10.00	0.00	21	10	10	10.00	
4MWTSEC01	HEC512	EMBEDDED SYSTEMS	C	12	4	1	20	20	11.00	10.00	11.00	0.00	10.00	0.00	10	10	10	10.00	
4MWTSEC01	HEC513	MICROPROCESSORS	D	20	4	0	20	20	10.00	10.00	10.00	0.00	10.00	0.00	21	10	10	10.00	

UJN	code	sub_name	GE	CR	CR	CR	CR	CR	CR	IA_1	IA_2	IA_3	LAB	EST	Assign	TOTAL	CG	CA	Abs
4MWTSEC01	HEC70	LEARNING	D	21	0	2	12	20	20.00	12.00	11.00	0.00	11.00	10.00	21	12	12	12.00	
4MWTSEC01	HEC701	PROJECT WORK PHASE 1	C	0	2	7	7	0.00	11.00	0.00	0.00	0.00	10.00	0.00	21			0.00	
4MWTSEC01	HEC702	COMPUTER NETWORKS LAB	B	01	2	1	10	0	0.00	0.00	0.00	0.00	0.00	0.00	10	0	0	10.00	
4MWTSEC01	HEC703	DIGITAL IMAGE PROCESSING	B	21	0	4	12	0	10.00	10.00	0.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC704	CRYPTOGRAPHY	C	21	0	1	21	20	10.00	17.00	10.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC705	ENERGY AND ENVIRONMENT	C	21	0	1	21	20	10.00	10.00	10.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC706	VEHICLES	A	21	2	0	19	0	0.00	0.00	0.00	10.00	10.00	0.00	14	0	0	10.00	
4MWTSEC01	HEC707	COMPUTER NETWORKS	B	21	2	4	15	20	10.00	10.00	10.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC708	ENERGY AND ENVIRONMENT	C	21	0	1	21	20	0.00	0.00	0.00	0.00	0.00	10.00	10	10	10	10.00	

UJN	code	sub_name	GE	CR	CR	CR	CR	CR	CR	IA_1	IA_2	IA_3	LAB	EST	Assign	TOTAL	CG	CA	Abs
4MWTSEC01	HEC91	PROJECT WORK PHASE 1	A	01	0	0	11	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	11			0.00
4MWTSEC01	HEC92	PROJECT WORK	B	01	0	0	10	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	10			0.00
4MWTSEC01	HEC93	OPTICAL COMMUNICATION NETWORKS	D	21	0	0	11	20	0.00	10.00	10.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC94	WIRELESS AND CELLULAR COMMUNICATIONS	B	21	0	0	10	0	0.00	17.00	10.00	0.00	10.00	10.00	21	10	10	10.00	
4MWTSEC01	HEC95	RENEWABLE	A	0	1	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1			0.00

All Semester:

UJN: 4MWTSEC01

SemesterWise Marks

Semester 1:	7.35
Semester 2:	8.80
Semester 3:	8.43
Semester 4:	6.63
Semester 5:	5.28
Semester 6:	5.94
Semester 7:	6.85
Semester 8:	6.17

[Detailed VTU Grade] will display the all semesters subjects marks, assignment marks, Total amount, grade points, credits points etc.. of the particular selected student.

# Employee Profile:

**Objective:** In this module Employee details are updated.

**Module Type:** Master

**Module Used by:** HOD / Employee

**Location/Link:** Master→Employee

The screenshot shows a web-based form titled "Employee Master Information Entry". The form is filled with the following data:

- Emp No.: 1121
- Full Name: MAGARAJHARI
- City: UDUPI
- Mobile No.: 999304006
- Date of Birth: 14/02/2019
- E-Mail: magrajh11@univ.ac.in
- Branch: COMPUTER SCIENCE
- Gender: M
- Sub Branch: COMPUTER SCIENCE & ENGINEERING - I/M
- DESIGNATION: DEAN
- Permanent Address: Kullemere, Chondole, Hormana 581223, UttaraKannada
- Campuses Address: K04, A/B00, Channaya Padaray, Ekappa Habba, Akshat G001, Enkavadi
- Employee Type: Teaching
- Exam Duty Type: Faculty Duty
- Employee Status: Permanent
- Employee Category: Lecturer
- PAN: KLLPE012P
- AC No.: 60103020070
- IFSC: HFC00060

**Description:** In this module you can change all the data expect employee no. Enter your **name** along with the middle name/last name. Enter the **City** where you are resident. Enter the **mobile no., DOB, Date of Join, e-mail address**. Select the branch from the branch dropdown list. Choose your **Gender type, sub branch and Designation** in dropdown list. Enter your permanent home address. Update your **pan aadhar and IFSC code** and also choose the type of the employee such as **Teaching or Non-teaching**. Exam duty Type is only for teaching staff, some faculty members will not be able to take their duties due to some personal reason. In this case, they would be considered as being on the **[No duty]** list". Only Hod, Dean and Single Faculty comes

under [DCS] duty list and Category of the employee such as [lecturer](#) or [office](#). In the transport mode list for employees coming from the college bus, they will need to enter their boarding point from a dropdown list. This helps in accurately tracking and managing transportation logistics for employees using the college bus service. In this module there are 4 types of buttons such as update, delete ,exit and cancel which are used to perform various type operation. The [[update](#)] button is designed to update the employee details of a specific employee number. When you click on the update button and provide the necessary information or changes, it will be reflected in the employee's details associated with that particular employee number. The [[delete](#)] button is intended to delete the details of a specific employee number that has been entered. When you click on the delete button, it will remove the employee's information associated with that particular employee number. Clicking on the [[exit](#)] button will indeed exit the current page or close the current window.

# Monthly Student Attendance:

**Objective:** In this module student Monthly attendance details are Updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks entry → Monthly Student Attendance

**Description:** In this module you have to enter the student monthly attendance report. Select the semester, branch, subject, Section, year and month from the Dropdown list. Click on [click to get student] button you will get the student list. Here you can enter the student attendance of that particular Day and month. **Cumulative Days** means the total number of classes held for a particular subject over a period of time. To edit the attendance of a particular student, you can use the "Control-F" button to search for that student's name or ID in the attendance record. This will help you quickly locate the student's information and make any necessary edits. **Total attendance per day** refers to the number of classes held on that particular day.

If you want to edit the student attendance of a particular day Simply click on the specific day you want to edit, and the column will be highlighted for you to make the necessary changes to the student attendance. When you select a particular row, the [weekday] associated with that specific day will be displayed. This feature helps you easily identify and keep track of the day corresponding to the row you have selected. The [Print] button is designed to generate and print out the report of student attendance. The [save] button will save the report that you have entered.

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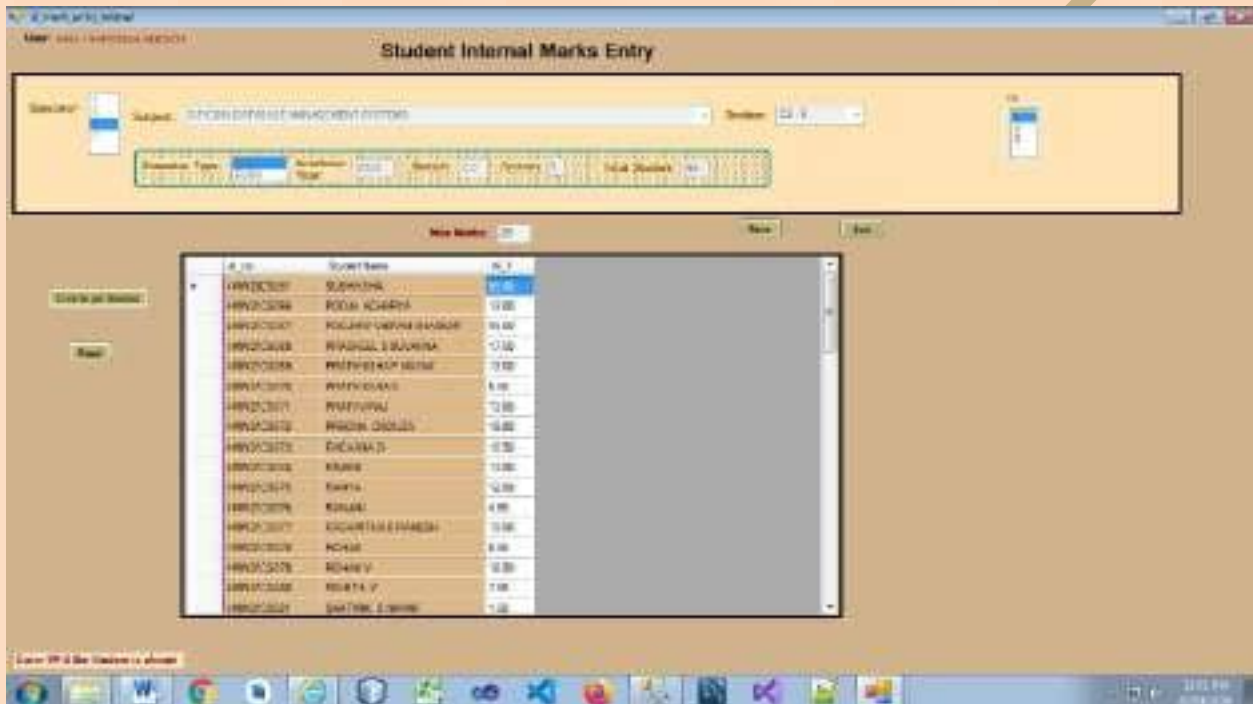
# Student Internal Marks:

**Objective:** In this module student internal marks details are Updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction→Student Marks Entry->Course wise (theory/lab) Internal Marks



**Description:** In this module Enter student internal marks for a particular IA test . To do this, you will need to select the [section](#), [semester](#), [subject](#), [semester type](#), [academic year](#), [branch](#), and [IA](#) (Internal Assessment ex: IA1,IA2, IA3) test. Once you have selected these parameters, click on [\[Click to Get Student\]](#) button will display columns showing the [student's name](#), [USN \(University Serial Number\)](#), and [IA \(Internal Assessment\)](#) marks. here you can enter the student's internal marks for that specific IA test. The maximum marks [\[Max Marks\]](#) for a subject is set at 20 and cannot exceed that limit. The highest score they can achieve is 20. The [\[save\]](#) button will save the data you have entered. The [\[reset\]](#) button will indeed reset the data you entered. If a student is absent for a particular IA test, you should [\[Enter the number 99\]](#) in the IA test column to indicate their absence.

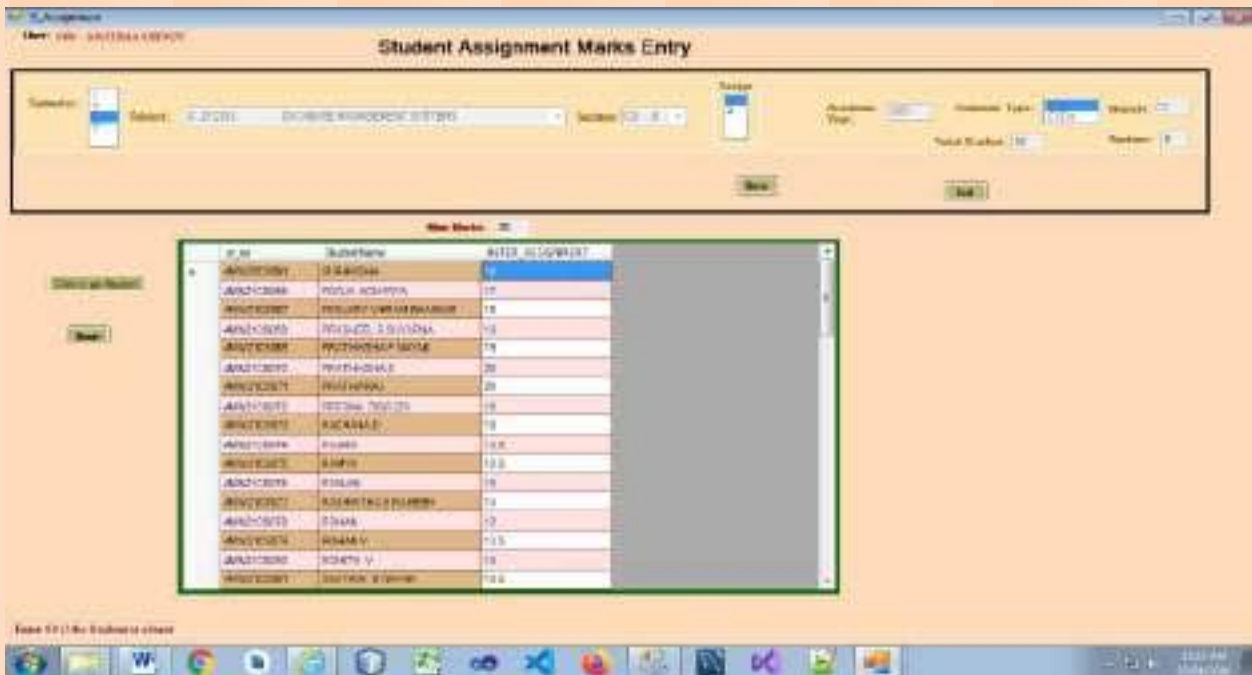
# Student Assignment Marks:

**Objective:** In this module Student Assignment Marks details are being Updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction->Student Marks Entry->Assignment Marks



**Description:** In this module you have to Enter Student Assignment Marks. For that select the **subject, semester, section, assignment, branch, year, and semester type** from the dropdown list. Click on the [Click to Get Student] button to retrieve the specific parameters of the student list. it will display columns showing the **student's name, USN (University Serial Number), and IA (Internal Assignment) marks**. Here you can enter the student's internal Assignment Marks for that specific IA column. The maximum marks [Max Marks] for a subject is set at 20 and cannot exceed that limit. The [save] button will save the data you have entered. The [reset] button will indeed reset the data you entered. The [total student] column will display the total number of student. This helps provide an overview of the total student count in that particular section.

# CPD Entry:

**Objective:** In this module CPD Entry details are Updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction->Student marks Entry->CPD Entry



**Description:** This module is used for Students CPD Entry. select the student USN and Internal test column. Click on the [Click to Get Data] button it will display columns Semester No, Student Number, Student Name, Subject code, Subject

Name, grade, Max Marks, IA1, IA2, IA3 marks of selected students.

The parent meeting details have two parameters. The first parameter is the [parent meeting date], where you enter the date of the meeting that was held with the parents. The second parameter is the [remark of the parent], where you can input any comments or feedback provided by the parents during the meeting.

The Student meeting details have two parameters. The first parameter is the [student meeting date], where you enter the date of the meeting that was held with the students. The second parameter is the [remark of the student], where you can input any

comments or feedback provided by the students about the subject during the meeting. In the context of the [dispensary action], there are two important parameters [action suggestion] and [action taken] for the student. Here you have to suggest appropriate actions based on the discussions and outcomes of the meetings. If you want to include any additional remark on [Extra Remark] column.

In [Report option] there are 2 parameters. First parameter is [CPD entry] of the student and another one is [Activity report] of the student .The [update] button will save the data you have entered. The [delete] button will delete the data you entered.

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# Grace Attendance:

**Objective:** This module captures the student activities throughout his course.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Grace Attendance



**Description:** In this module you have to give the grace attendance to the student who have shortage of attendance.(i.e less than 85%).select the semester, subject and section in the list. Cutoff of the attendance is set at 85 percentage in [Attn cutoff] list. Click on the [Click to Get Student] button it will display columns Student USN Number(ST\_No), Student Name, Number of Class held(CH),Number of class Attended(CA), Percentage of the student attendance (ST.Attn Per), Required grace attendance, and New grace attendance given to the students for a particular subject. The [Save] button will save the data you have entered. The [Print] button is designed to generate and print out the report of student grace attendance.

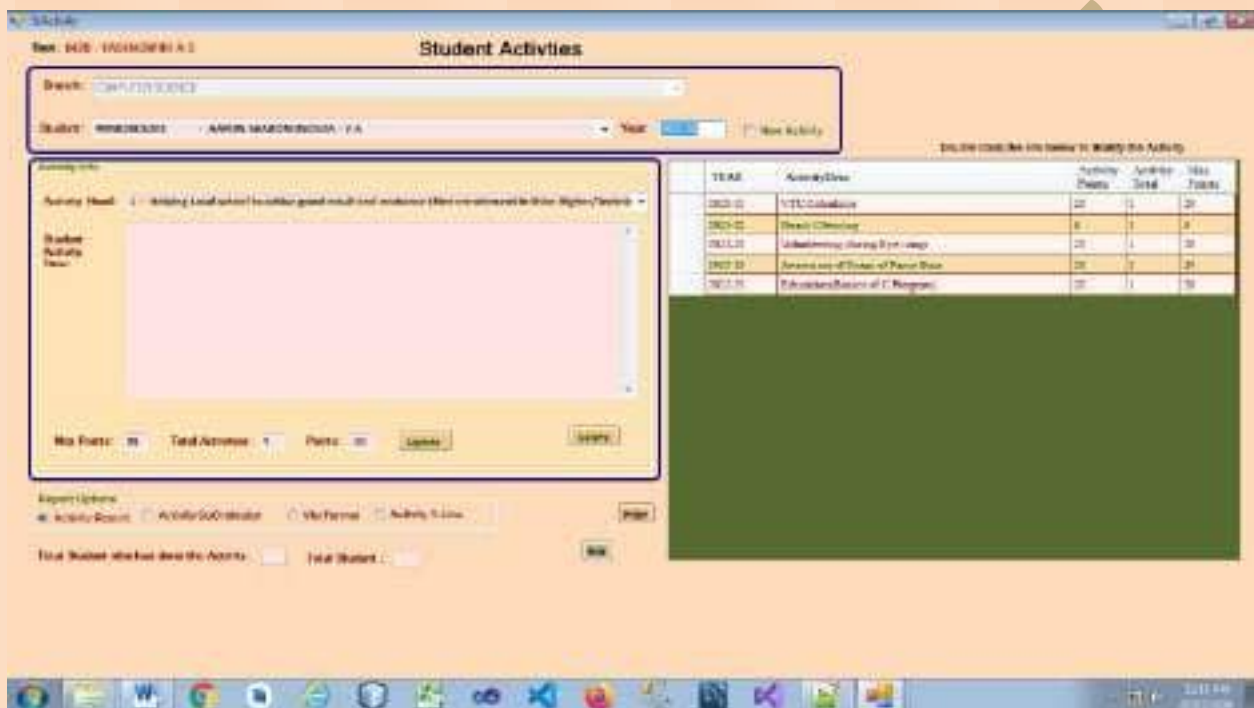
# Student Activities:

**Objective:** In this module captures the student activities throughout his course.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Student Activities



**Description:** In this module you have to capture the student activities throughout the year. Select the branch and student in dropdown list. Enter the year in text box. [Activity info] contains 2 parameters one is [Activity Head] and [Student Activity Description].

The [Activity Head] should contain the name or title of the activity conducted by the students of a specific academic year. The [Student Activity Description] parameter should provide a detailed description of the activity carried out by the students. The maximum points for a activity is set at 20. the [Total Activities] and [Points] label shows total number of activities done by a student in an academic year and the points they received for each activity. [Update] button saves the information you entered. [Report option] that generates an activity report showing the activities completed by a student and the marks they obtained in each activity throughout an academic year.

The module that includes a table displaying the activity description, total points, total activity, and maximum points of a specific student selected for different academic years. This module seems to provide detailed information about the student's performance in various activities across different academic years.

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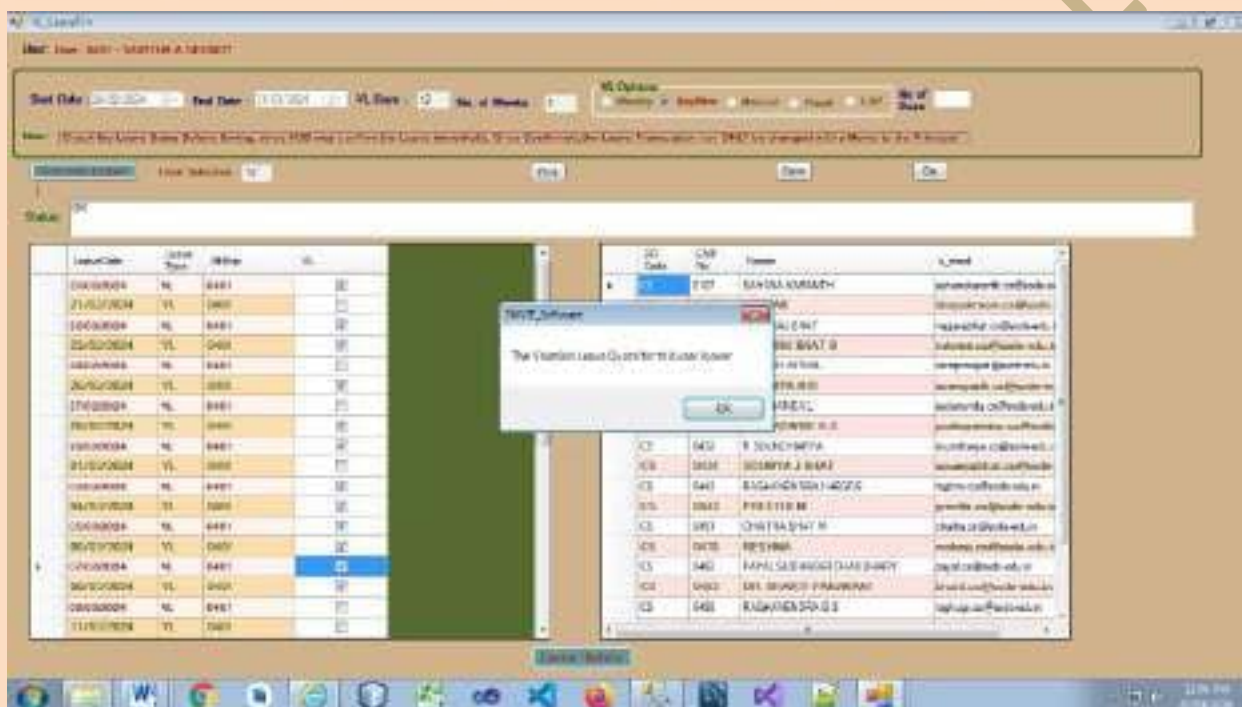
# Vacation Leave:

**Objective:** In this Module Faculty can enter their vacation leave dates.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Vacation Leave



**Description:** In this module you can input the dates of your vacation leave as required. Select the start date and end date for your vacation, [VL days] feature that displays the number of vacation leave days you have available. [No of weeks] displays total number of weeks that faculty members have applied for leave. Warning message that may appear on the screen that the faculty has entered IA marks and assignment marks before proceeding with the vacation leave application. In vacation leave (VL) option, there are five types of parameters available [ i.e Weekly, Daywise, Manual, Fixed and LOP]. In the [weekly option], faculty members can apply for leave for a total number of weeks [ex. 2 weeks]. On the other hand, in the day wise option, faculty members can apply for leave within a specific range of days.



For example: faculty members can select up to 12 vacation leave days within a specified range of dates. Once you have selected 12 vacation leave days within the specified range, a message will appear indicating that the vacation leave quota for the user has been reached. Check the leave dates before saving, since HOD may confirm the leave immediately, once confirmed, the leave transaction can only be changed with a memo to the principal. In the vacation leave system, an alternate employee is required only for the Head of Department (HOD) and the Principal positions. [process leave] button display the column such as Leave Date, Leave Type, Altr Emp and VL. The [Save] button will save the data you have entered.

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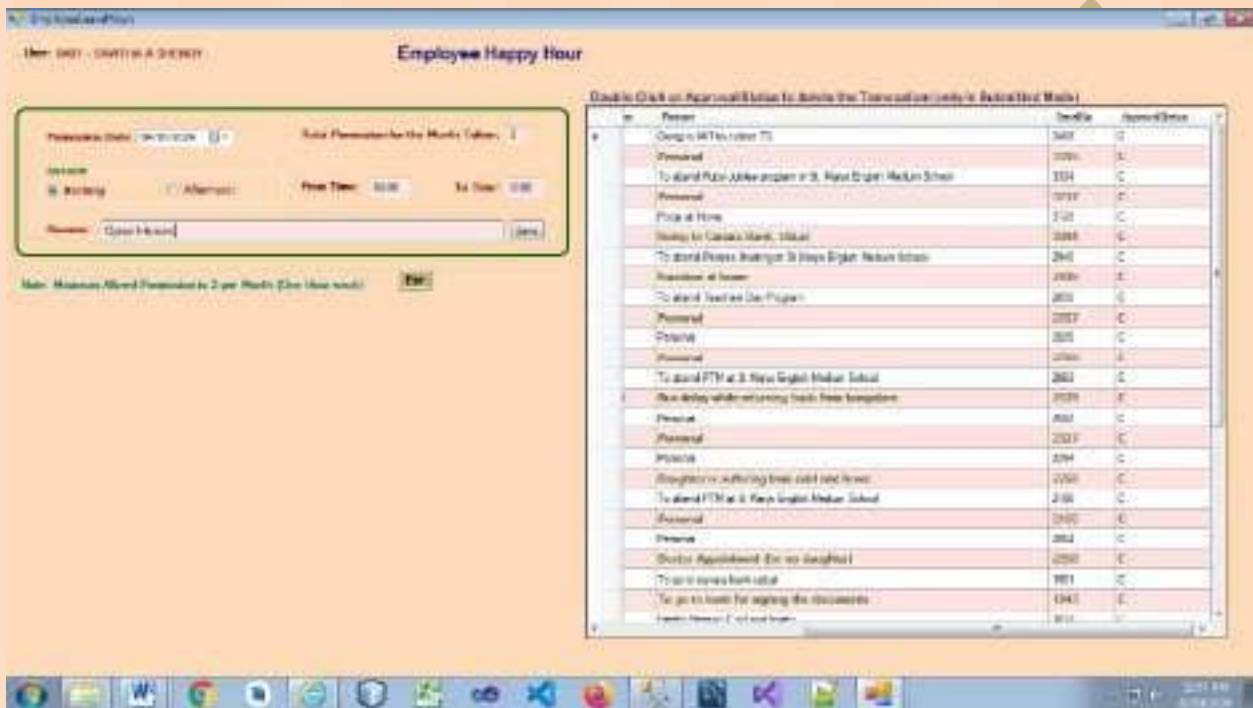
# Permitted Hours:

**Objective:** This module is used for the student activities throughout his course.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Permitted Hours



**Description:** Every month employees have the option to take 2 one hour permission each.

Select the date for which the permission is required. Select the session (Morning/Afternoon). Enter from time and to time. Enter the permission reason.

Press **Save** button.

On the right hand side grid you can see all the permission taken. You can delete the permission before HOD approves by double clicking the Approval status.

# Faculty Feedback on Student Feedback:

**Objective:** In this Module where faculty members provide feedback to students based on the student feedback

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction->Faculty Feedback on Student Feedback

Home > FAC > FACFEEDBACK

### Faculty Feedback on Student Feedback

Faculty Subject:  Feedback Type:  Formative  Summative   Feedback Print Options:  Faculty  Subject

Q.No	Description	SubCode	ES %	Try %	Good %	Fair %	Poor %	Faculty Feedback on Student Feedback	
1	Teaching skills and clarity of explanations	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
2	Communication skills of the faculty	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
3	Subject knowledge & preparation for the classes held in it	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
4	Explanation is quite suitable to the class, some faculty do the questions with the students	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
5	Control in the discipline in the class	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
6	Faculty is capable and adheres to class format	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
7	Faculty spend care of continuously monitor students and helps them understand better	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
8	Encourage the activities	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
9	Faculty is fair and transparent in students' evaluation and provides effective feedback on their examination performance	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified
10	Available and appreciable after the class hours for clarifying the doubts	BSCS03	14.29	38.79	33.33	4.29	9.00	38.67	verified

**Description:** In this Module where faculty members provide feedback to students based on the feedback received from the students themselves. Select the Faculty subject in Dropdown list. Choose the feedback type. There are two types of feedback given by students, formative feedback (given after the first IA test) and summative feedback (given at the end of the semester). Select a feedback type and retrieve data in a table format that includes questions about the subject or faculty, subject code, percentage of the feedback that the faculty gained in the subject, and faculty feedback on student feedback columns.

In Feedback print option there are 2 types faculty and subject report.in faculty report it will display the feedback about the faculty of particular subject and subject report displays the feedback regarding to the subject.

## Document Approval:

**Objective:** Whenever the employees attend any FDP or publish any Journal/Conference/Patent/Activity, the details are entered by the employee and then approved by the HOD. They can also upload the Document PDF file.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Documents → Journal



## Description:

The HOD can view the Journal details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of Journal published for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the journal details published by that faculty.

The details of the journal include paper title, journal name, Volume, issue, Page No, ISBN no, Doc ID, Students and his college, who have contributed for this paper, coauthors for this paper.

The journal paper can be uploaded in the field “File Upload” by the author.

The journal status once created can be “Open” and once submitted can be made “Close” by the author. All these details are not editable for the HOD.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

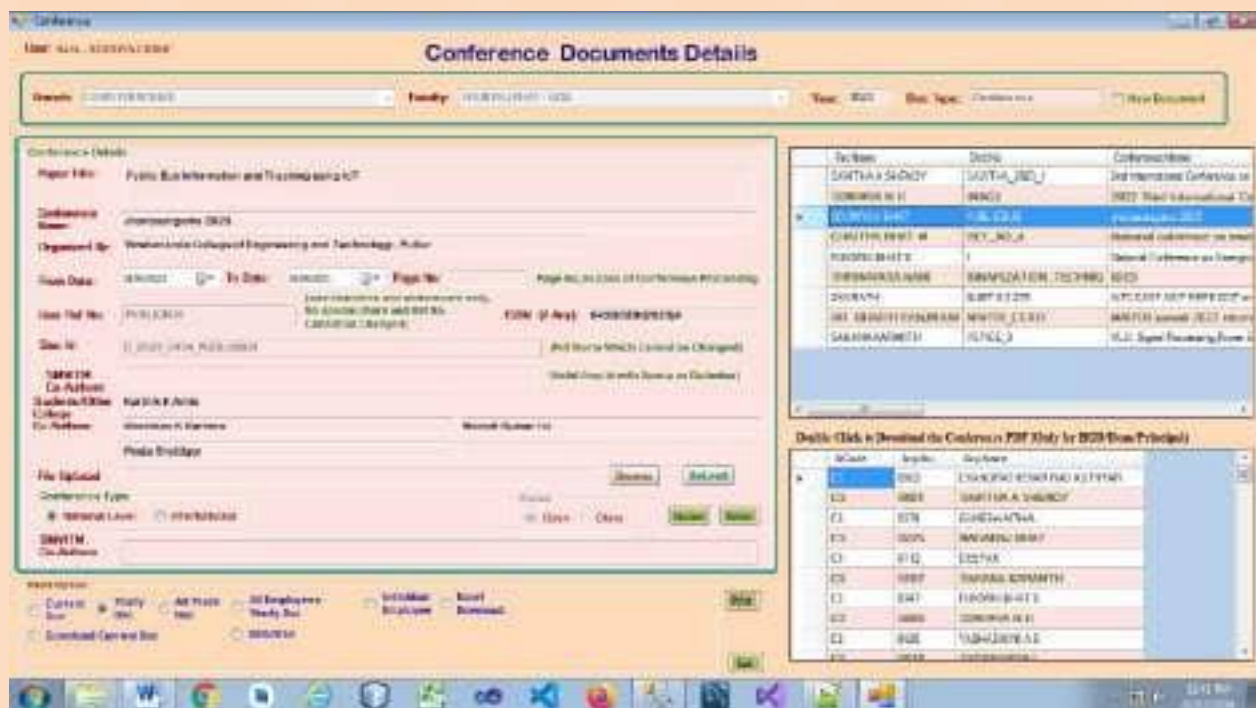
HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”, ”Individual Employee”, ”Download Current Doc”, ” Excel Download” and “Date Wise” download, which are the documents related to other employees.

If the HOD wants to download the entire journal PDF’s of a particular employee he/she can double click on the RHS below form data.

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Location/Link: Transaction → Documents → Conference



### Description:

The HOD can view the Conference details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of paper published in the conference for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the conference details attended by that faculty.

The details of the journal include paper title, conference name, Organized by, ISBN no, Doc ID, User Ref No, Students and his college, who have contributed for this paper, coauthors for this paper.

The conference paper can be uploaded in the field “File Upload” by the author.

The journal status once created can be “Open” and once submitted can be made “Close” by the author.

Additionally the conference type (National or International),SMVITM coauthors can be entered for this conference and paper.

All these details are not editable for the HOD and only entered by the faculty.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”, ”Individual Employee”, ”Download Current Doc”, ”Excel Download” and “Date Wise” download, which are the documents related to other employees.

If the HOD wants to download the entire journal PDF’s of a particular employee he/she can double click on the RHS below form data.

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**Location/Link:** Transaction → Documents → FDP



### **Description:**

The HOD can view the FDP details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of Journal published for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the FDP details attended by that faculty.

The details of the FDP include Organized By, To and From Dates, Ref No, Doc ID.

The certificate can be uploaded in the field “Certificate Upload” by the author.

The FDP status once created can be “Open” and once submitted can be made “Close” by the author.

Additionally the conference type (National or International), FDP mode (Can be online or Offline) are entered.

All these details are not editable for the HOD.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.



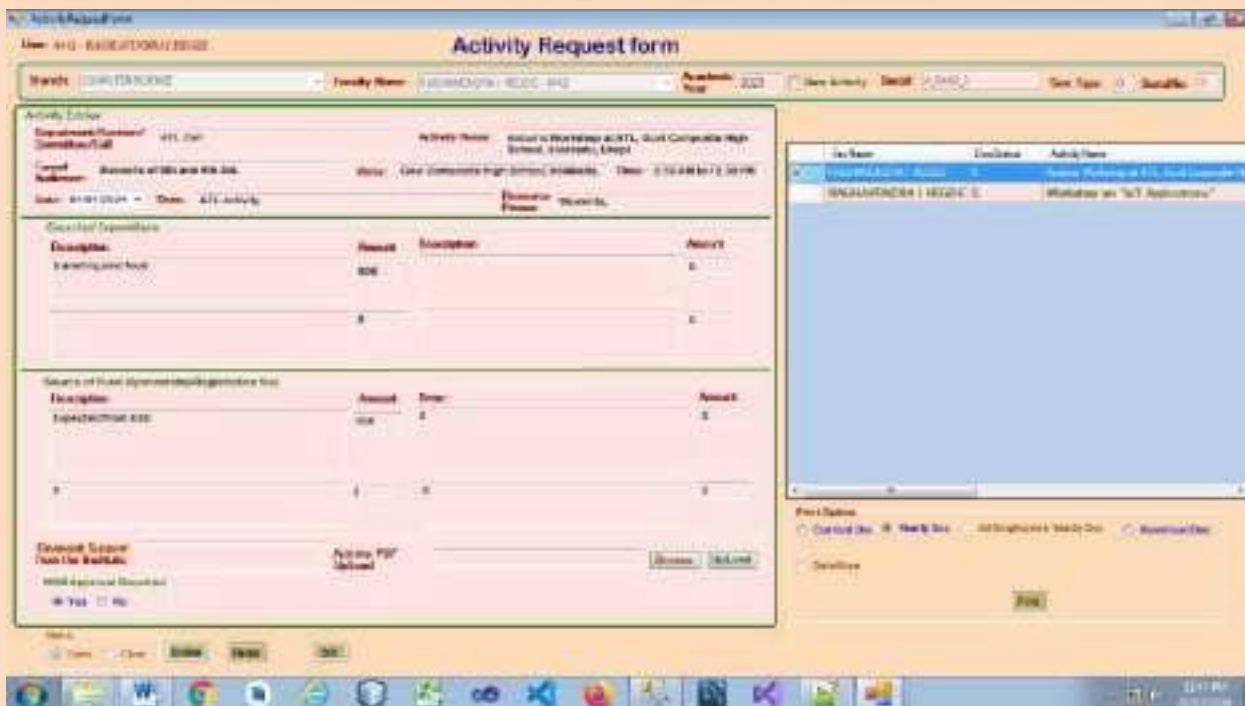
HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”, ”Individual Employee”, ”Download Current Doc”, ”Excel Download” and “Date Wise”, download, which are the documents related to other employees.

If the HOD wants to download all the conference PDF’s of a particular employee he/she can double click on the RHS below form data.

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Location/Link: Transaction → Documents → Activity Form



### Description:

An activity request form is generated if there is an event which the college is conducting and an approval in terms of expenses is required from HOD. There can be activities which do not require the permission of HOD also.

An activity request form is filled with details of branch, faculty name, Academic year and tab is pressed to get the details of activities done by that faculty.

By double clicking on the activity in the RHS form data, the activity details are displayed with name of activity, target audience, date of activity and Expected Expenditures.

Financial support from the institute can be entered in the textbox given.

Also the PDF related to the activity can be uploaded using the “Browse” and “Upload” button.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All Employees Yearly Doc”, ”Download Doc” and “Date Wise” download of document.

The form is either submitted to HOD for approval or can be there as an internal document.

SMVITM SOFTWARE

# SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(A unit of Shri Sode Vadiraja Mutt Education Trust ®)

VISHWOTHAMA NAGARA, BANTAKAL, UDUPI

Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

Accredited by NBA (BE –CSE, ECE) and NAAC with A



## SMVITM SOFTWARE

Design and Developed by

Department of Computer Science and  
Engineering

HOD Manual

## Overview:

**SMVITM Software is a desktop application having the following Features:**

- a) It maintains the student Profile like USN, Name, DOB, etc.
- b) Employee profile.
- c) It helps in Keeping track of student's performance throughout his stay in the college.
- d) Creation of Students section, lab batches, Elective allocation, USN updating, Teacher Student guardian, etc.
- e) Student and Faculty subject link.
- f) Student attendance system
- g) Student Grace attendance
- h) Student Sessional Marks
- i) Student assignments
- j) Transfer of students at the end of the semester
- k) There is a Faculty feedback regarding the performance and teaching.
- l) There is online Quiz in lines with the industrial Standard.
- m) Online Faculty exam duty allocation for theory subjects.
- n) Lab allocation VTU examination.
- o) DCS duty allocation.
- p) All VTU related Invoice and Reports.
- q) Employees Attendance integrated to the Face and Punching time attendance.
- r) Online leave system
- s) Students Grievances.
- t) Student Hostel system which helps to keep track of absentees, their mess bills, sending of emails as and when required.
- u) Sending e-greeting for the Alumni, current students and employees

## Roles Classifications:

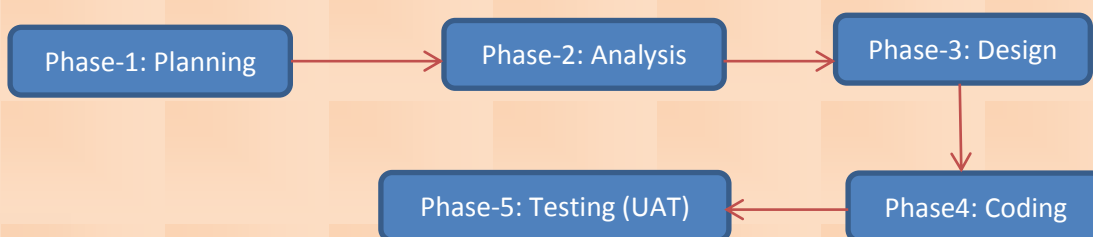
- a) Employee Role
- b) Student Role
- c) HOD Role
- d) Office Role
- e) Principal Role
- f) Administrator Role

## Software and Hardware used:

- a) MS-SQL Server is used as Backend
- b) VB.Net is used as Front End.
- c) Crystal Report is used as reporting tools.
- d) Windows Server 2008
- e) Users PC's (Windows XP, 8, 10, etc.) and printers.
- f) Wi-Fi and Local Area Network with ....
- g) Face and punching attendance machines are used for attendance.

## Method used:

System Development Life Cycle (SDLC): This is one of the most common processes adopted to develop a project and not surprisingly, this project is following this model too. To be precise, waterfall model is being applied. Waterfall model is a sequential model process where the input of a phase actually results from the previous phase.



## Core Modules:

- a) Employee Profile
- b) Course Details
- c) Student Monthly Attendance
- d) CPD Entry
- e) Student Activities
- f) Student Grace Attendance
- g) Student Internals Marks
- h) Student Assignments
- i) Student Grievance.
- j) Transfer of Students
- k) Faculty Subject Relation
- l) Creation of Student Section
- m) Student Lab Batch
- n) Student Roll No
- o) Student USN
- p) Faculty Course Link
- q) Elective Link
- r) Teacher Guardian Link
- s) Online Leave System
- t) Leave Approval
- u) Help Desk Approval
- v) HOD Feedback on Faculty Feedback
- w) Document Approval
- x) Student SGPA Update
- y) Change of Branch
- z) Faculty Feedback on Student Feedback
- aa) Documents Like Journal, FDP, Conference, Patent, Activities

**Note:** Use Tab Button to go to the next Field/object in the entire screen

## HOD Profile:

**Objective:** In this module HOD details are updated.

**Module Type:** Master

**Module Used by:** HOD/All Employees

**Location/Link:** Master → Employee

The screenshot shows a web browser window with the title "Employee Master Information Entry". The form is filled with the following data:

- Emp No.: 1234
- Full Name: HANARUENH
- City: UDUP
- Mobile No.: 994304001
- Date of Birth: 22-07-1971
- E-Mail: hogan@nd.iiit@iitb.ac.in
- Branch: COMPUTER SCIENCE
- Gender: M
- Sub Branch: COMPUTER SCIENCE & ENGINEERING - IAN
- Designation: DEAN
- Permanent Address: Kalamnara, Chondoo, Survekar-BHIZP, Chhatrapati
- Correspondence Address: 4004, A Road, Shriyani Residency, Sakinaka, Sakinaka, Sakinaka
- Employee Type: Teaching
- Employee Status: Permanent
- Employee Category: Lecturer

At the bottom of the form, there are buttons for "Save", "Cancel", and "Print". The browser's taskbar is visible at the bottom of the screenshot.

**Description:** In this module you can change all the data except Employee no.

Enter your name along with the middle name/last name.

Enter the City where you are resident.

Enter the mobile no., DOB, Date of Join, e-mail address.

Select the branch from the branch dropdown list.

Pick the branch from the drop down list.

Select the gender type, sub Branch from the drop down list.

Enter the designation from the drop down list.

The employee if part of a coordination activity, one needs to check the appropriate coordinator.

Permanent address and Correspondence address can be updated for the employee.



Teaching type can be selected as 'Teaching' or 'Non-Teaching'.

Transport Mode can be selected as "College Bus" or "Private".

Also what kind of Exam duty the employee is attached to is entered here. Select from "Faculty duty" or "No Duty" or "DCS duty" from the choices.

Click the employee status as "Permanent" or "Probationary"

Click the appropriate employee status as "Permanent" or "Probationary".

Employee category can be clicked as either Lecturer or Office Staff.

The form also displays the PAN, A/C Number, IFSC code of the employee.

After the appropriate selection is done then the "Update" button is clicked.

If an employee information needs to be deleted then "Delete" button can be pressed.

If we want to fetch the information for an employee then Emp No is entered and "Query" button is clicked.

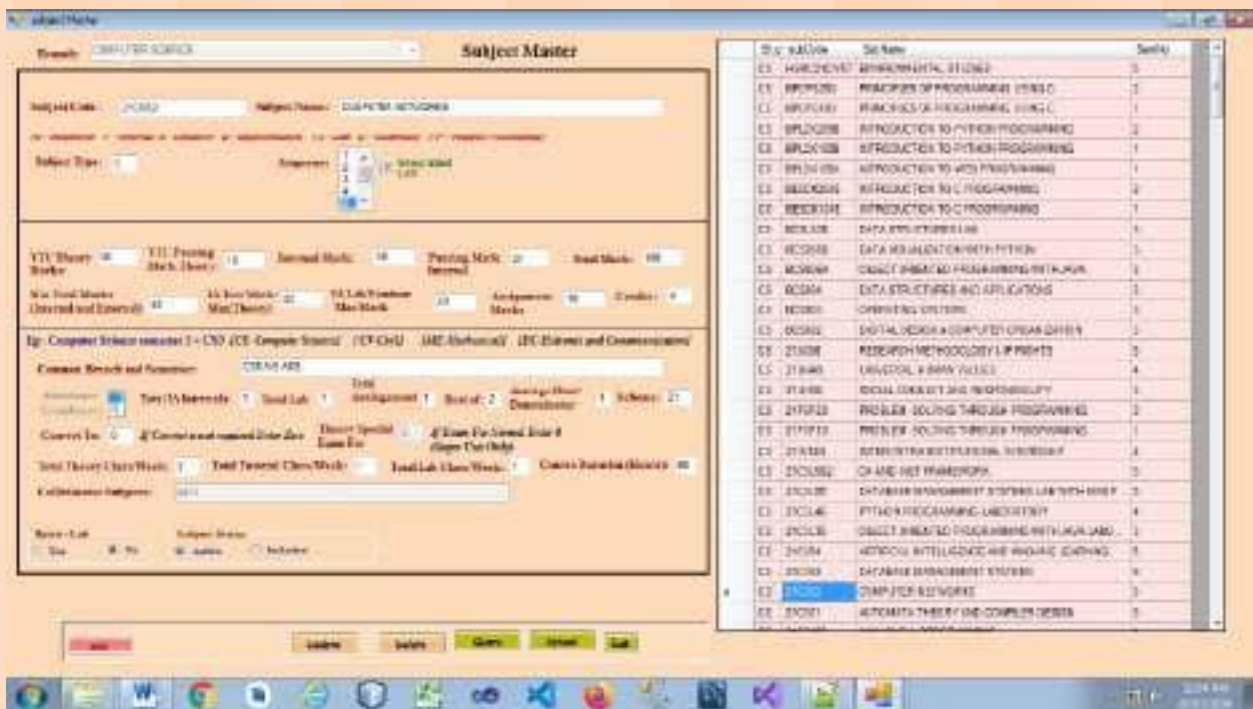
## Course Details:

**Objective:** In this module Course Details are updated.

**Module Type:** Master

**Module Used by:** HOD/Application Administrator

**Location/Link:** Master → Course



## Description:

This module has the details of different Courses related to the respective branches.

When we enter the subject code for the particular branch and press tab, it results in the description of the respective subject which are:

**Subject name:** Name of the subject.

**Subject Type :** One can be selected out of these different values. S for Semester, I for Internal, E for Elective, O for Open Elective, L for Lab, C for Common, P for Project Internship.

**Semester:** Semester it is taught in.

**Integrated Lab:** Ticked means the theory subject has an integrated lab as well.

It also lists VTU theory marks, internal marks (which consists of IA mark, assignment marks, seminar marks). It also lists the number of theory exams and labs, scheme that are present in the particular semester.

Common branch and semester: For the subject which is common to the entire semester a code is given.

Convert To: If the VTU says the internal marks are to be considered as a different ratio of the total internal marks then this field is used. Eg: The Internal marks is 20 for each of the 3 IA's but the VTU says it will be 15 rather than 20, then this ratio is considered.

Also the form lists if the subject status is active or inactive.

One can Update the values or Delete the record or Query to fetch the data for different fields in this form by selecting the particular subject code.

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## Student Monthly Attendance:

**Objective:** In this module Student attendance is being updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Monthly Attendance

Sl. No.	Student Name	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Cum Class	Cum Attn %
1	ARTHA PABAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
2	ABHIRAM C	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
3	ABHIRAM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
4	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
5	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
6	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
7	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
8	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
9	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
10	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
11	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
12	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
13	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
14	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
15	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
16	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
17	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
18	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
19	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00
20	ADITHYAN	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	44.00

### Description:

It lists the monthly attendance details of the student, displayed on a day to day basis.

On clicking the semester, subject, section, year and month for the attendance detail and once we say "Click to get student", we get the attendance details for the month.

Cumulative days will display the cumulative days of classes conducted till the end of previous month. Eg: Here 25 cumulative days are accounted for till 31<sup>st</sup> of January.

It lists the days on which the attendance is taken and lists if the particular student is present on that day or not. (The first row in the form data displays this)

It also calculates the attendance percentage of the particular student for the particular month. Cum Class -> Calculates the number of classes in the month and

Cum Attn -> Signifies the class attended by student

Attn% -> Displays the attendance percentage for this month.

Cumulative days as discussed above list the sum of number of day's classes are conducted.

Once Attendance details of the student is entered the "Save" button is pressed to complete the transaction.

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## CPD Entry:

**Objective:** In this module correspondence of the students/parents meeting and suggestion are being updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → CPD

Roll No.	Name	Section	Subject	Date	Marks	IA_1	IA_2	IA_3	Total of Course/Exam/IA
101234567	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	1	100	100	100	0	0
101234568	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	2	100	100	100	0	0
101234569	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	3	100	100	100	0	0
101234570	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	4	100	100	100	0	0
101234571	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	5	100	100	100	0	0
101234572	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	6	100	100	100	0	0
101234573	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	7	100	100	100	0	0
101234574	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	8	100	100	100	0	0
101234575	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	9	100	100	100	0	0
101234576	ABHIRAM	SECTION	COMPUTER AIDED ENGINEERING DESIGN	10	100	100	100	0	0

## Description:

This module lists the issues faced by student in the particular subject and IA test. This suggests why the student has received less marks in the IA and the course correction done to improve the student IA marks. It also lists the parents comment on the issue and also captures the remedial action suggested and remedial action taken for the student.

The HOD can click on the Student ID and the internal exam for which these details are sought. Then click on “Click to get data” to get the form data and different fields populated.

The parent and student meeting date is obtained and the action taken and action suggested are displayed.

Any update on action taken or action suggested can be entered and Update button is clicked.

The form data displays the student and his marks in different subjects in different IA's.

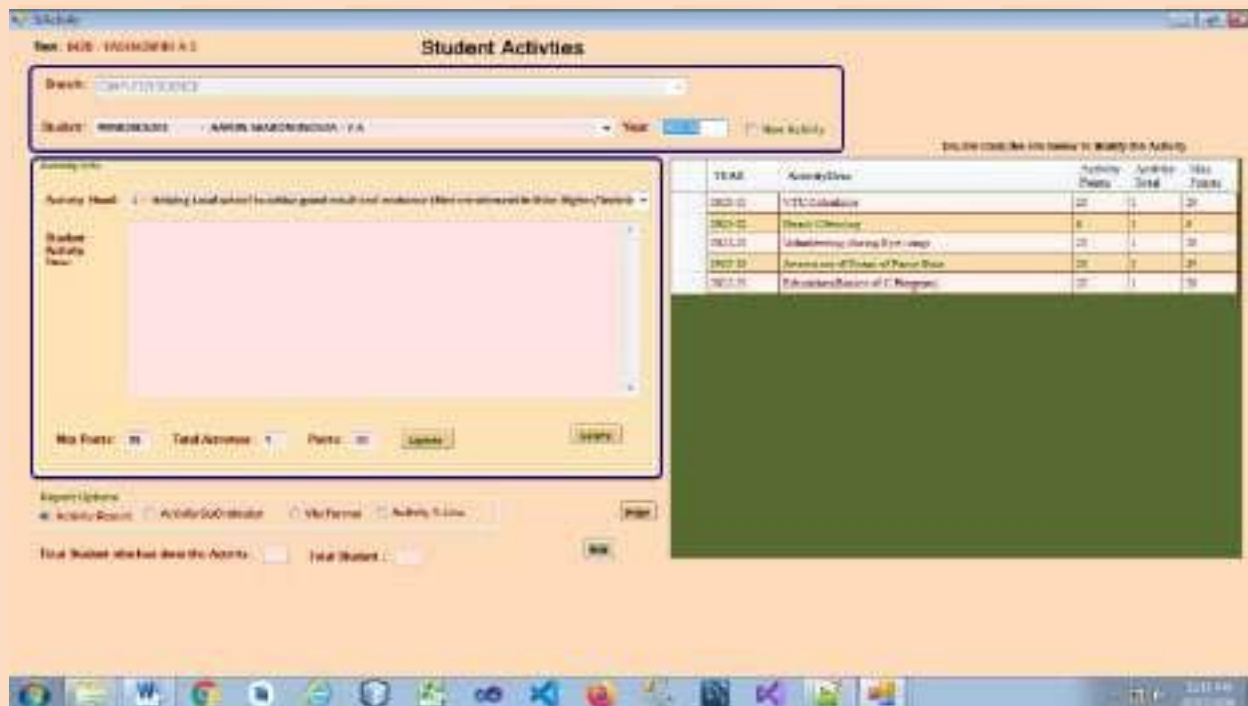
## Student Activities:

**Objective:** In this module captures the student activities throughout their course.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Student Activity



## Description:

The students have to take part in extra circular activities during the course duration. They will be given a stipulated number of points for doing a particular activity. HOD's of first year will conduct these activities and TG's will conduct these in other year's.

Click on branch and student and year from the drop down for which we would like to know student activities.

Then the form is populated with details of the activity. On the R.H.S the form data can be double clicked to modify the activity.

## Student Grace Attendance:

**Objective:** This module captures the student grace attendance given for the current semester.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Grace Attendance



**Description:** This module captures the attendance percentage of the student in the particular course and the required grace attendance for him or her to get the cut off attendance for that course.

Click on semester, subject, section you want the grace attendance details for.

Attendance CutOff % captures the cutoff attendance percentage that is required to pass.

Click on “Click to get Student”, to get the list of students and their attendance percentage.

It also lists the required grace attendance for the student to reach the cutoff attendance percentage.

It also displays Grace Attendance given in the column New Grace Attn.

Click on “Save” to save the transaction or “Exit” to exit the module.



## Student Internal Marks:

**Objective:** In this module student internal Marks are being updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Course wise (Theory/Lab) internal Marks



## Description:

Here we capture the internal assessment marks of the student for the corresponding course for different IA's.

Click on the semester, subject from the drop down list and the section and IA.

When we click "Click to get Student" we get the list of students with their IA marks.

If we want to update the IA marks then we can click on the marks, enter the marks and click on "save" button.

The fields like Semester Type, Academic Year, Branch, Section and Total Student is auto populated.

## Student Assignment Marks:

**Objective:** In this module student Assignment Marks are being updated.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Marks Entry → Assignment Marks

Sl. No.	Student Name	INTER_ASSIGNMENT
ANANDU	POOR	10.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSHU	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00
ANANDU	ARSH BHOJENDR	8.00

## Description:

As stated this module captures the assignment marks for the respective student in a particular semester.

Click on the semester and from the drop down list pick the subject of interest and also select the section.

Click on “Click to get Student” button to get the details of the student in the form data.

Then in the form click on INTER\_ASSIGNMENT column to enter the assignment marks.

Press “Reset “button to clear the form data.

Press “Save” button after the marks are entered.

## Student Grievance:

**Objective:** In this module student Grievance is addressed.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Student Grievance



## Description:

This module is for the faculty to assign a grievance against a particular grievance category and address this issue to the HOD. The grievance description tells about the exact nature of grievance.

Click on the “Grievance Category” and the “Grievance Type”.

If the Grievance is related to HOD then “Grievance to” is selected as HOD and then the Grievance description is entered.

Once submitted, this goes to HOD and marked to the faculty to whom this grievance is related to.

## Transfer of Student:

**Objective:** In this module is being used to transfer student from the current semester to the next semester.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → Student Transfer from Odd to Even



## Description:

This activity of transferring students from one semester to another semester is done by HOD and by using this screen.

Click on branch and semester to which the students are to be transferred.

Pick the section and then click Transfer.

This will transfer the students from current semester to the next semester.

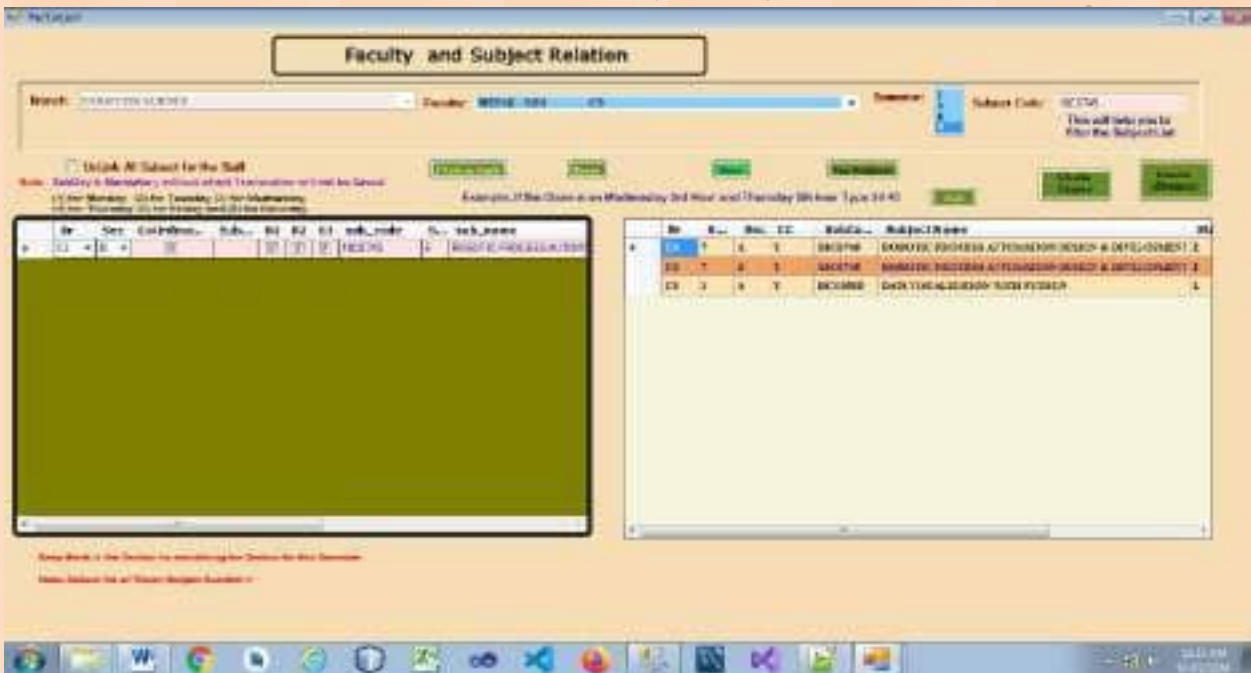
## Faculty Subject relation:

**Objective:** This module is being used to allocate each teaching staff with their respective subjects.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Faculty – Subject Link



## Description:

This screen is used by the HOD to link a faculty to a subject of a particular semester.

Select the branch and faculty to whom the subject needs to be linked after selecting the subject and semester.

The link is done by clicking on “Click to Link” button.

In the resulting output in form data click the branch and section to be allocated and also if this faculty is coordinator or not and batches that are linked to this subject code. Eg: If the subject is a lab then if this faculty is assigned to all the three batches of the subject then B1, B2, B3 is clicked.

To see the list of sections and subjects related to a particular faculty click on “Fac Subjects”

Click “Save” button to save the transaction.

Click “Reset “button to reset the transaction.

### Student Section:

**Objective:** This module is being used to allocate section for each student.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction →HOD→ Student Section Link



### Description:

This module is used by the HOD to allocate students from a particular semester to a particular section.

Click on the semester and the student total and enter the number of students in each semester.

Once we click on “Re process” the students are automatically assigned to the sections.

If we want to update the section of a particular student then in the form data we can update the section to which a student belongs to.

If a section for a student is changed then the attendance for the student needs to be reentered.

Press the “Save “button to save the transaction.

SMVITM SOFTWARE

## Student Lab Batches:

**Objective:** This module is being used to allocate Lab batches for each student.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Student Lab Batch Link



## Description:

This screen is used to link a particular student to a particular batch.

E.g.: Say there are 60 students in a section, 3 batches are created with 20 students each and the individual student is assigned to this individual batch ID 1, 2, 3.

Click on the semester and section of the student.

Create the number of batches this section would have and enter the starting USN and ending USN for whom this lab batch is allocated.

Click on “Reprocess” to automatically assign a batch to a student.

Click on the “Save” button to save this transaction.



## Student Roll No:

**Objective:** This module is being used to allocate roll number for each student. This is done since we have no USN for the first semester and third semester lateral entry.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Student - RollNo Link



## Description:

As the screen name signifies this is used to link roll number to a particular student.

Click on the semester and section to which we want to assign roll numbers.

Enter the starting and ending USN numbers we want to update the roll numbers.

When “Re-Process” button is clicked then roll numbers are automatically assigned to students.

Click on “Save” button to save this transaction.

## Student USN Update:

**Objective:** This module is being used in first and third semester (Lateral entry). Students USN are usually given by the VTU at the end of First Semester before the VTU Examination.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Student USN Link



## Description:

This module is used to allocate USN's to the student at the end of first semester.

The student application number got at the beginning of the semester will be replaced by the USN in this module.

Enter the branch name, semester and section along with starting USN and ending USN no's.

Once we click the button "Re Process" the USN's are automatically assigned to students.

Click on "Reset" to reset the transaction.

Click the "Save" button to save the transaction.

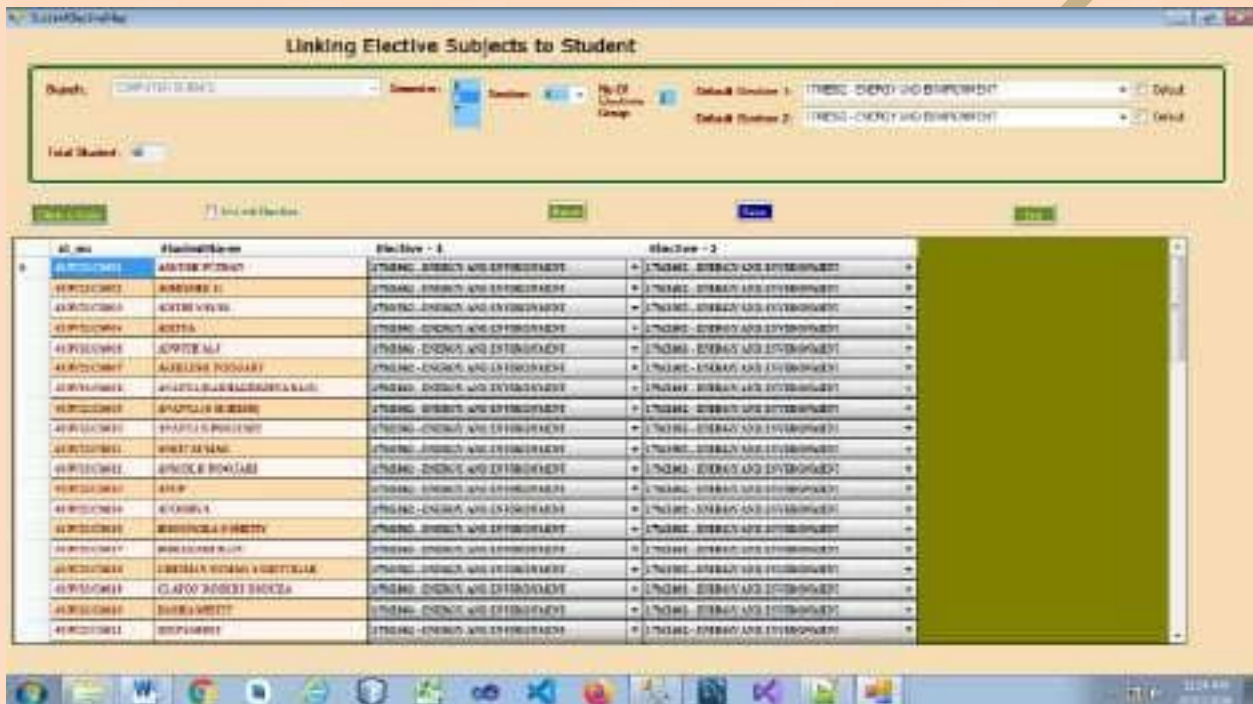
## Student Elective Link:

**Objective:** This module is being used to link every student with their respective elective subjects.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Student – Elective Link



## Description:

This module is used to link a particular student with his elective subject in that semester.

Click on Branch, Semester and Section and pick the default elective 1 and 2.

Total students having this elective combination is displayed in the field Total Student.

When “Click to Link” button is clicked the system automatically links these number of students with the respective Elective.

To assign a new elective to a particular student click on Default Elective 1 and Elective 2 in the form data and assign the appropriate Electives.

Click on “Unlink Elective” to unlink the elective to the student.

Click on “Save” to save the linking.

## Teacher Guardian Link:

**Objective:** This module helps in allocating each Faculty with certain students. They are fully responsible for these students.

**Module Type:** Transaction

**Module Used by:** HOD/Super User

**Location/Link:** Transaction → HOD → Student – FA/TG



## Description:

This screen is used to link a faculty as Teacher Guardian for a set of students.

Click and select the branch and semester and student section.

Pick the teacher guardian who is going to be assigned for the set of students.

Click on “Click to set Student” to map the FacName to the students in the form.

CurAdvisor lists the current teacher guardian.

Click on StAdvisor checkbox to complete the link between student and the new teacher guardian.

Click on “Save” button to save the transaction.

## Leave Approval:

**Objective:** Leave transaction module is a workflow. The employees will submit their leave. After the submission of leave this will appear to the HOD for approval. HOD can approve or reject the leave. Once approved by the HOD, this leave will appear for the principal for the final approval.

**Module Type:** Transaction

**Module Used by:** HOD

**Location/Link:** Transaction → HOD → Leave Approval

The screenshot displays the 'Leave Approval' module interface. At the top, there is a navigation bar with tabs for 'Leave Approval', 'Approval of Leave', 'Status of Leave', 'Leave/OT Permission', 'Permissions', 'Absences on a given Date and Time Interval', 'Leave Summary', and 'Help'. Below the navigation bar, there is a 'Click to Get Leave Approval' button and a 'Leave Off' button. The main area shows a table of leave transactions with columns: SNo, E Code, Emp No, Employee, Stat Leave, Leave Taken, Reason, Leave Type, No of Days, From Date, To Date, Leave Cross, Confirm Tick, Reject Tick, Course File, and Permission Taken. Three rows are visible, with the second row (SNo: 25333) highlighted in blue. Below this table, there is a section titled 'HOD Remarks in case of Rejection' with a 'Save' button. At the bottom, there is a 'Reject Will Delete the Leave Transaction from the System' section with a table showing details for a rejected leave (SNo: 25333, Leave Type: CL, Leave Date: 2024-02-28, Status: P, User: SURESH SHANMUGAN RAO, etc.).

## Description:

Leave Approval tab is used by the HOD to accept or reject the leave. One can see HOD leave rejection reason details in this view.

Once HOD Clicks “Click to get leave approval” all the employees who have applied for leave will be displayed

Then in the data form, in case of leave rejection, the checkbox “Reject Tick” is ticked and the reason for HOD rejection is entered. If the leave is rejected the leave would be deleted from the system.

If the leave is approved “Confirm Tick” is ticked.

If the course file is present then “Course File” is ticked.

If the permission is taken before applying the leave then “Permission Taken” is ticked.

If the leave is applied after the leave is taken and permission is not taken then this checkbox would be unchecked.

SMVITM SOFTWARE

## HOD Feedback on Faculty Feedback:

**Objective:** Every semester there are 2 students' feedbacks. One feedback at the beginning of the semester and the other is at the end of the semester.

**Module Type:** Transaction

**Module Used by:** HOD

**Location/Link:** Transaction → HOD → HOD feedback on Faculty feedback

Q.No	Question	YPCMA	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Faculty Remarks on Student Feedback
1	The theory skills and clarity of explanation	DCS01	75	80	85	90	95	100	98.47	verified
2	Comprehension skills of the faculty	DCS01	80	85	90	95	100	100	98.24	verified
3	Subject knowledge and preparation for the classes help of notes	DCS01	70	75	80	85	90	95	82.31	verified (The students did not understand the concept in their. They need to attend classes regularly)
4	Faculty does its extra efforts to the class, rather highly on the board room teaching extra efforts	DCS01	85	90	95	100	100	97.88	verified	
5	Control on the discipline in the class	DCS01	78	82	86	90	94	98	87.88	verified
6	Faculty is regular and adheres to class timings	DCS01	88	92	96	100	100	97.21	verified	
7	Help to spend most of academic time on student problems and helps them understand better	DCS01	78	82	86	90	94	98.47	verified	
8	Concepts of the syllabus	DCS01	88	92	96	100	100	98.24	verified	
9	Faculty is fair and transparent to students, evaluation and provides effective feedback to our teaching staff members	DCS01	75	80	85	90	95	95.11	verified	
10	Available and accessible after the class hours for handling the queries	DCS01	88	92	96	100	100	98.24	verified	

### Description:

This module is used to give HOD feedback on a particular subject against faculty feedback.

Essentially it captures the faculty feedback on student feedback and the HOD feedback on the faculty feedback.

HOD can click on the faculty whose feedback is needed.

Then, faculty subject is clicked and then “Retrieve” button is pressed to retrieve the results.

Then HOD gives the feedback on faculty feedback.

And then the transaction is saved by clicking on the “Save” button.

## Document Approval:

**Objective:** Whenever the employees attend any FDP or publish any Journal/Conference/Patent/Activity, the details are entered by the employee and then approved by the HOD. They can also upload the Document PDF file.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Documents → Journal



## Description:

The HOD can view the Journal details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of Journal published for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the journal details published by that faculty.

The details of the journal include paper title, journal name, Volume, Issue, Page No, ISBN no, Doc ID, Students and his college, who have contributed for this paper, coauthors for this paper.

The journal paper can be uploaded in the field “File Upload” by the author.



The journal status once created can be “Open” and once submitted can be made “Close” by the author. All these details are not editable for the HOD.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”, “Individual Employee”, “Download Current Doc”, “Excel Download” and “DateWise” download, which are the documents related to other employees.

If the HOD wants to download all the journal PDF’s of a particular employee he/she can double click on the RHS below form data.

SMVITM SOFTWARE

Location/Link: Transaction → Documents → Conference



## Description:

The HOD can view the Conference details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of paper published in the conference for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the conference details attended by that faculty.

The details of the journal include paper title, conference name, Organized by, ISBN no, Doc ID, User Ref No, Students and his college, who have contributed for this paper, coauthors for this paper.

The conference paper can be uploaded in the field “File Upload” by the author.

The journal status once created can be “Open” and once submitted can be made “Close” by the author.

Additionally the conference type (National or International), SMVITM coauthors can be entered for this conference and paper.

All these details are not editable for the HOD and only entered by the faculty.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”, “Individual Employee”, “Download Current Doc”, “Excel Download” and “Date Wise” download, which are the documents related to other employees.

If the HOD wants to download all the journal PDF’s of a particular employee he/she can double click on the RHS below form data.

SMVITM SOFTWARE

**Location/Link:** Transaction → Documents → FDP



## Description:

The HOD can view the FDP details and download it in this module.

By clicking on the branch name, the faculty name, year of publishing and by pressing tab, HOD can get all the details of Journal published for that year.

By double clicking on the RHS form data which houses the faculty name, HOD can get the FDP details attended by that faculty.

The details of the FDP include Organized By, To and From Dates, Ref No, Doc ID.

The certificate can be uploaded in the field “Certificate Upload” by the author.

The FDP status once created can be “Open” and once submitted can be made “Close” by the author.

Additionally the conference type (National or International), FDP mode (Can be online or Offline) are entered.

All these details are not editable for the HOD.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All years Doc” submitted by him/her.

HOD can also view “All Employees Yearly Doc”,”Individual Employee”,”Download Current Doc”,”Excel Download” and “DateWise” download,which are the documents related to other employees.

If the HOD wants to download all the conference PDF’s of a particular employee he/she can double click on the RHS below form data.

SMVITM SOFTWARE

Location/Link: Transaction → Documents → Activity Form

Description	Amount	Expected Expenditures
Training and food	500	500
	0	0

Description	Amount	Time	Amount
EXPERIMENTAL KIT	1000	2	5
	0	0	0

### Description:

An activity request form is generated if there is an event which the college is conducting and an approval in terms of expenses is required from HOD. There can be activities which do not require the permission of HOD also.

An activity request form is filled with details of branch, faculty name, Academic year and tab is pressed to get the details of activities done by that faculty.

By double clicking on the activity in the RHS form data, the activity details are displayed with name of activity, target audience, date of activity and Expected Expenditures.

Financial support from the institute can be entered in the textbox given.

Also the pdf related to the activity can be uploaded using the “Browse” and “Upload” button.

HOD has options to see his/her document in “Current Doc”.

HOD can also view all the documents submitted by him/her in that year by clicking “Yearly Doc”.

HOD can also view “All Employees Yearly Doc”, ”Download Doc” and “Date Wise” download of document.

The form is either submitted to HOD for approval or can be there as an internal document.

SMVITM SOFTWARE

## Student SGPA Update:

**Objective:** SGPA is calculated when the VTU marks are uploaded. Sometimes under certain circumstances we may need to recalculate the SGPA.

**Module Type:** Transaction

**Module Used by:** HOD

**Location/Link:** Transaction → HOD → Student updates (SGPA)

sl_no	Student Name	curr_sem	section	Pass(Tick)
49W20C3001	POOJA	7	A	<input type="checkbox"/>
49W20C3002	AARON SHARON DOUGLA	7	A	<input type="checkbox"/>
49W20C3003	REHSHIK	7	A	<input type="checkbox"/>
49W20C3004	ABEASH JINAMSH BEHAL	7	A	<input type="checkbox"/>
49W20C3005	ADARSH SHETTY	7	A	<input type="checkbox"/>
49W20C3006	ADITHYAN ADHARYA	7	A	<input type="checkbox"/>
49W20C3007	ADITHYAN SHERGAR	7	A	<input type="checkbox"/>
49W20C3008	AKANKSHA SHETTGAR	7	A	<input type="checkbox"/>
49W20C3009	AMARJEET KUMAR	7	A	<input type="checkbox"/>
49W20C3010	ANANYA PRASAD	7	A	<input type="checkbox"/>
49W20C3011	ANITHA NAYAK	7	A	<input type="checkbox"/>
49W20C3012	ANVITA	7	A	<input type="checkbox"/>
49W20C3013	ARATH KIM	7	A	<input type="checkbox"/>
49W20C3014	ASHWITH H PODJARY	7	A	<input type="checkbox"/>
49W20C3015	BHAT PRITHWIRAJ SHERGAR	7	A	<input type="checkbox"/>
49W20C3016	BHAKHIA RADHAKESHNA BHAT	7	A	<input type="checkbox"/>
49W20C3017	BHOOMIKA N BARDKAR	7	A	<input type="checkbox"/>
49W20C3018	BHUMIKA S SHETTY	7	A	<input type="checkbox"/>
49W20C3019	CHIRAGANA	7	A	<input type="checkbox"/>
49W20C3020	CLINTON JUSTIN KORNHAR	7	A	<input type="checkbox"/>
49W20C3021	DAKSHINAMURTI	7	A	<input type="checkbox"/>

## Description:

Under certain circumstances the SGPA would be wrongly assigned in Student Master. To correct this we are having this screen, in which we can update SGPA.

Click on the branch of interest, Current semester, Section, Semester for which SGPA is required (which can be different from the current semester).

Once we click on “Get Data” we get the list of students within that section.

When we click on Pass(Tick) column and say “Update”, the SGPA is recalculated for that student.



SMVITM SOFTWARE

## Faculty Feedback on Student Feedback:

**Objective:** First the student gives feedback for the each subject and for each lecturer. Faculty will give feedback on the student feedback.

**Module Type:** Transaction

**Module Used by:** Lecturer/HOD

**Location/Link:** Transaction → Faculty Feedback on Student Feedback

G.No	Question	refCode	ES	Avg	Good	Fair	Pass	Fail	Faculty Feedback on Student Feedback
1	Teaching skills and clarity of explanations	20052	36.82	36.82	11.56	4.62	0.00	05.11	Satisfactory
2	Communication skills of the faculty	20053	35.83	35.83	10.89	3.79	1.84	16.11	Satisfactory
3	Subject knowledge & preparation for the classes taught as to	20052	40.00	39.23	11.00	8.23	0.00	01.23	There is a need to improve the
4	Encouraging students to participate in the class, using feedback on the student feedback with effectively	20051	38.00	41.82	10.95	4.82	0.00	01.15	Satisfactory
7	Control on the discipline in the class	20052	47.50	45.00	8.23	1.00	0.00	04.40	Satisfactory
8	Faculty is knowledgeable of issues in class teaching	20052	46.00	36.77	9.23	3.00	1.84	07.00	Satisfactory
9	Takes special care of academically weaker students and helps them understand topics	20052	41.33	36.82	11.00	7.00	0.00	12.40	Satisfactory
8	Coverage of the syllabus	20052	38.46	36.77	7.00	1.84	1.84	04.00	Satisfactory
6	Faculty is liberal responses to students' evaluation and provides effective feedback on test/assignment performance.	20052	38.00	36.77	8.23	1.00	0.00	06.23	Satisfactory
10	Availability and approachability outside class hours for clarifying the doubts	20051	44.00	35.00	11.11	4.00	0.00	04.00	Satisfactory

## Description:

This screen is used to give faculties feedback on student's feedback about different teaching parameters. It is given against each subject.

There are 2 student feedback per semester.

- 1) Formative feedback: After 1st IA
- 2) Summative feedback: After 3rd IA

The faculty subject is selected and the feedback type (Formative-after 1st IA or Summative-After the completion of 3rd IA) is selected.

Choose the required feedback type. Against the feedback on each parameter given by student and against each category of performance the faculty feedback is given.

# SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(A unit of Shri Sode Vadiraja Mutt Education Trust ®)

VISHWOTHAMA NAGARA, BANTAKAL, UDUPI

Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi

Accredited by NBA (BE –CSE, ECE) and NAAC with A



## SMVITM SOFTWARE

Design and Developed by

Department of Computer Science and  
Engineering

Office Profile

## Overview:

**SMVITM Software is a desktop application having the following Features:**

- a) It maintains the student Profile like USN, Name, DOB, etc.
- b) Employee profile.
- c) It helps in Keeping track of student's performance throughout his stay in the college.
- d) Creation of Students section, lab batches, Elective allocation, USN updating, Teacher Student guardian, etc.
- e) Student and Faculty subject link.
- f) Student attendance system
- g) Student Grace attendance
- h) Student Sessional Marks
- i) Student assignments
- j) Transfer of students at the end of the semester
- k) There is a Faculty feedback regarding the performance and teaching.
- l) There is online Quiz in lines with the industrial Standard.
- m) Online Faculty exam duty allocation for theory subjects.
- n) Lab allocation VTU examination.
- o) DCS duty allocation.
- p) All VTU related Invoice and Reports.
- q) Employees Attendance integrated to the Face and Punching time attendance.
- r) Online leave system
- s) Students Grievances.
- t) Student Hostel system which helps to keep track of absentees, their mess bills, sending of emails as and when required.
- u) Sending e-greeting for the Alumni, current students and employees

## Roles Classifications:

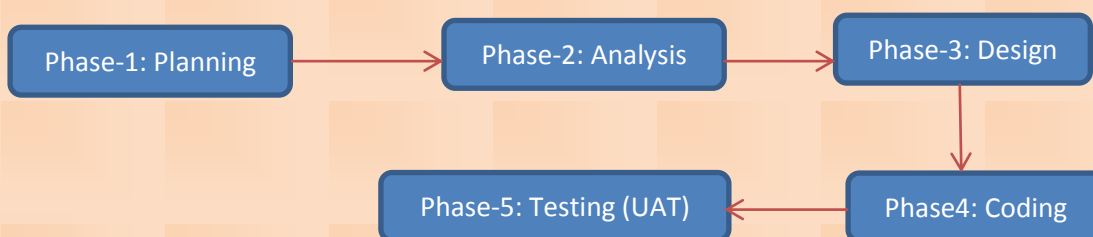
- a) Employee Login
- b) Student Login
- c) Faculty Login
- d) HOD Login
- e) Principal Login
- f) Administrator Login

## Software and Hardware used:

- a) MS-SQL Server is used as Backend
- b) VB.Net is used as Front End.
- c) Crystal Report is used as reporting tools.
- d) Windows Server 2008
- e) Users PC's (Windows XP, 8, 10, etc.) and printers.
- f) Wi-Fi and Local Area Network with ....
- g) Face and punching attendance machines are used for attendance.

## Method used:

System Development Life Cycle (SDLC): This is one of the most common processes adopted to develop a project and not surprisingly, this project is following this model too. To be precise, waterfall model is being applied. Waterfall model is a sequential model process where the input of a phase actually results from the previous phase.



## Core Modules:

- a) Employee Profile
- b) Student Profile
- c) VTU Examination Dates
- d) Fees/Examination Remuneration Fees
- e) Leave Master
- f) Leave Approval
- g) Yearly Holidays
- h) Room Master
- i) Lab Examination Allocation
- j) Faculty Exam Date Selection
- k) Manual Exam Date Allocation
- l) Exam Duty Date Exchange
- m) VTU Exam Date Change
- n) Reliever Exam Duty
- o) DCS Exam Date Selection
- p) DCS manual Allocation
- q) Dispatch Entry.
- r) VTU Student Appearing List Upload
- s) VTU Room Allocation
- t) VTU Student Seat Allocation
- u) VTU Exam Absentees
- v) Faculty Room Link
- w) Deactivation of Faculty Exam Duty / Exam Dates
- x) Leave Transaction
- y) Permitted Hours

**Note:** Use Tab Button to go to the next Field/object in the entire screen


## Employee Profile:

**Objective:** In this module HOD details are updated.

**Module Type:** Master

**Module Used by:** HOD/All Employees

**Location/Link:** Master→Employee



**Description:** In this module you can change all the data except Employee no.

Enter your name along with the middle name/last name.

Enter the City where you are resident.

Enter the mobile no., DOB, Date of Join, e-mail address.

Select the branch from the branch dropdown list.

Pick the branch from the drop down list.

Select the gender type, sub Branch from the drop down list.

Enter the designation from the drop down list.

The employee if part of a coordination activity, one needs to check the appropriate coordinator.

Permanent address and Correspondence address can be updated for the employee.

Teaching type can be selected as ‘Teaching’ or ‘Non-Teaching’.

Transport Mode can be selected as “College Bus” or “Private”.

Also what kind of Exam duty the employee is attached to is entered here. Select from “Faculty duty” or “No Duty” or “DCS duty” from the choices.

Click the employee status as “Permanent” or “Probationary”

Click the appropriate employee status as “Permanent” or “Probationary”.

Employee category can be clicked as either Lecturer or Office Staff.

The form also displays the PAN, A/C Number, IFSC code of the employee.

After the appropriate selection is done then the “Update” button is clicked.

If employee information needs to be deleted then “Delete” button can be pressed.

If we want to fetch the information for an employee then emp No is entered and “Query” button is clicked.



## Student Profile:

**Objective:** In this module student profile is being updated.

**Module Type:** Master

**Module Used by:** Office / Office Assistant

**Location/Link:** Master → Student

There are 4 screens

- 1) Basic Student Information
- 2) More info
- 3) VTU Marks
- 4) Detailed VTU Grade

SCHOOL	SCHOOL CATEGORY	YEAR	SEMESTER	SECTION	STATUS
SVKM'S DEEMED TO BE UNIVERSITY	SVKM'S DEEMED TO BE UNIVERSITY	2023	1	1	Active
SVKM'S DEEMED TO BE UNIVERSITY	SVKM'S DEEMED TO BE UNIVERSITY	2023	1	2	Active

**Description:** In student Profile update and displays all the information recorded for a student including personal and contact information. In this Module you can change all the data expect student USN Number. Enter student Name, branch from the branch dropdown list. Select the Current semester and section from the list. Status column contain 4 types of parameter such as [Active, Inactive, Detained, Passed].current students are in active mode. There are five specific types listed in the admission mode options. Based on the options provided, the category under which a student can do their admission would be either ["CET" "Management", "Lateral Cet/Management"] or "[Comedk."].

Enter a college fees and receipt number, receipt Date and Admission Date. To select the admission issue date, you would need to locate that information within the downloaded document. Next, you would enter the **CET** rank, Student claimed category, and allocated category as required. There are three types of KEA category are [SNQ, Arivu, and Normal].

Select a [Mother Tongue, Religion or Caste]. choose a [Gender type, Blood group, Nationality] of the student. Enter a [Aadhar number, parent whatsapp number and Date of joining].

Enter the City where you are resident. Enter the student Academic details such as 10<sup>th</sup> and 12<sup>th</sup> institution name, Exam Board, Percentage of mark and Medium. In pre-qualifying course enter the student's previous studied class and then go to the [more info].



Enter the mobile locker facilities [Yes or No]. Enter the hostel facilities [Yes or No]. Enter the subject marks [Physics, Chemistry, and Math's]. Enter the personal details like Father Name, Mother Name, Qualification, Occupation, Annual Income and the Mobile Number. Enter the student Achievement, Extracurricular Activities and hobbies etc. Enter students' permanent or correspondence home address. Choose the option where you are sent student progress Report. Close the window go to the main page. Click on the button [VTU%].



Enter a student USN, Select a Student scheme Type such as [CBCS or Non CBCS] it will display the table that Student Semester Wise aggregate Marks. It also it will shows the row [number of Back Logs paper] as of now. Close the window and go to the main page. Click on the [Detailed VTU Grade].

### Detailed VTU Grade:

Sl. No	Sem1	Sem2	Sem3	Sem4	Sem5	Sem6	Sem7	Sem8	Pass/Back	Backlogs								
48WVT9C004	1																	
Sl. No	Subject Code	Subject Name	GR A/E	marks	Credit Points	Grade Points	Grade Earned	Max MK	IA_1	IA_2	IA_3	LAB	BEST IA	Assign MK	FINAL IA	CR	CA	Att %
1	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004

Sl. No	Sem1	Sem2	Sem3	Sem4	Sem5	Sem6	Sem7	Sem8	Pass/Back	Backlogs								
48WVT9C004	1																	
Sl. No	Subject Code	Subject Name	GR A/E	marks	Credit Points	Grade Points	Grade Earned	Max	IA_1	IA_2	IA_3	LAB	BEST IA	Assign MK	FINAL IA	CR	CA	Att %
1	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004	48WVT9C004

All Semester:

Sem-1	Sem-2	Sem-3	Sem-4	Sem-5	Sem-6	Sem-7	Sem-8	PersonalInfo	AllSemesterInfo
UIN: 4MWTSECD24									
SemesterWise Marks									
Semester 1:		7.35							
Semester 2:		8.80							
Semester 3:		8.43							
Semester 4:		6.63							
Semester 5:		5.28							
Semester 6:		5.94							
Semester 7:		6.85							
Semester 8:		6.17							

[Detailed VTU Grade] will display the all semesters subjects marks, assignment marks, Total attendance, grade points, credits points etc. of the particular selected student.

## VTU Examination Dates:

**Objective:** In this module VTU theory Examination dates are being updated.

**Module Type:** Master

**Module Used by:** Office/Exam Section

**Location/Link:** Master → Examination Dates

The screenshot shows a web form for entering examination dates. The form includes the following fields and controls:

- Exam Date:** A date picker set to Monday.
- Exam Session:** Radio buttons for Morning and After Noon.
- Summary Statistics:** Total Subjects: 4, Total Candidates: 454, Total Rooms: 15, No. of Deputy Chief Superint. (DCS): 2, No. of Reliever Superint.: 3, No. of Room Superint.: 15, No. of Office Superint.: 1, No. of Typist: 1, No. of Clerk: 1, No. of Group "D" Staff (Warden): 3, Total Superint. (Total Faculty): 18.
- Remarks:** Six text areas for Subject 1 through Subject 6 Remarks.
- Buttons:** Add, Update, Delete, Clear, Cancel, Exit.

**Description:** Once VTU exam dates are published, we enter in MIS for all the dates and session. Once date is entered you need to enter the Session (morning/Afternoon). We need to enter total Subjects, Total Candidate, total rooms required, No. of chief superintendent, No. of reliever required, No. of Room Superintendent, no. of office Superintendent, no. of typist, no. of clerks and no. of attender required.

Subject1 Remarks, Subject2 Remarks, Subject3 Remarks, Subject4 Remarks, Subject5 Remarks, Subject6 Remarks are all optional

Once transaction is completed, press the Update button.

## Fees/Examination Remuneration Fees:

**Objective:** In this module VTU examination fees for theory/practical. Student fee/Hostel Fee also can be updated.

**Module Type:** Master

**Module Used by:** Office Superintendent

**Location/Link:** Master → Fees, Exam remuneration Fees

The screenshot shows a web application window titled "Examination Fees, Student fees and Hostel Fees". The form is organized into four distinct sections, each with a "Save" button:

- Practical Exam Fee:** Includes fields for Student Fee, Supervision Fee, Technician Fee, Attender Fee, External Fee, Internal Fee, Extra Student Fee, Chief Superintendent Fee, Chief Superintendent Max Fee, Chief Superintendent Min Fee, HOD Fee, Hod Max Fee, Hod Min Fee, and Clerk Fee.
- Theory Exam Fee:** Includes fields for Chief Super Fee, Deputy Super Fee, Deputy Super Fee, Room Super Fee, Reliever Super Fee, Office Super Fee, Typist Fee, Clerk Fee, and Attender Fee.
- Student Fee:** Includes fields for Tuition Fee, Other Fee, University Registration Fee, Value Added Course Fee, Eligibility Fee, and Hostel Fee.
- Hostel Fee:** Includes fields for Hostel Food Fee, Hostel Minimum Deduction Charge, 1/2 Bed Room Fee, and 1/3 Bedroom Fee.

**Description:** VTU has different exam fees for different category of employees for practical exams and theory exams. There are practical exam fee and theory exam fees.

**Practical Fee:** In practical exam fees is defined for Supervision fee, Technician fee, Attender fee, external fee, internal fee, extra student fee, chief superintendent fee, superintendent Max Fee, chief superintendent Minimum fee, HOD fee, Hod Max fee, Hod Minimum fee, Clerk fee

**Theory Fee:** In Theory exam fees is defined for chief superintendent fee, deputy superintendent fee, room superintendent fee, reliever superintendent fee, office superintendent fee, Typist fee, clerk fee, attender fee.

**Student Fee:** In Student fee is defined for tuition fee, other fee, University registration fee, value added course fee, eligibility fee, hostel fee

**Hostel fees:** In hostel fees is defined for Food, minimum hostel deduction, 1/2 bed room fee and 1/3 bedroom fee.

Once transaction is completed, press the Save button.

## Leave Master:

**Objective:** To maintain the employee leave details.

**Module Type:** Master

**Module Used by:** HR

**There are different screen in the module**

- 1) Leave Master
- 2) Leave Open Balance
- 3) Direct Update Leave Balance
- 4) Bulk Leave
- 5) Absentees and leave Balance (Report)

**Leave Master:**

**Location/Link:** Master→Leave Master→Leave Master



The screenshot displays the Leave Master software interface. At the top, there are search filters for 'Leave ID', 'Description', 'Total No. of Days', and 'Reset'. Below these is a 'Employee Type' dropdown menu. The main part of the screen is a table with the following columns: Leave ID, Leave Type, Leave Description, Total Days, Status, Emp Type, Employment, Leave Period, All Employees, Optional, No. Leave, Substitution, and Shift. The table lists various leave types such as Casual Leave, Certified Leave, For New Teaching Staff, Maternity Leave, Loss of Pay, Military Leave, Other Leave Similar to ODS, Official Duty, Parental Leave, Restricted Holiday, For Faculty Only, and Vacation Leave.

Leave ID	Leave Type	Leave Description	Total Days	Status	Emp Type	Employment	Leave Period	All Employees	Optional	No. Leave	Substitution	Shift
1	CL	Casual Leave	15	A	T	N	Y	Y	N	Y	Y	1
2	CEL	Certified Leave	15	A	T	Y	C	Y	N	N	Y	1
4	ZL	For New Teaching Staff	25	A	T	Y	C	N	N	N	Y	1
11	MPL	Maternity Leave	33	A	T	Y	C	Y	N	N	Y	1
7	LDP	Loss of Pay	15	A	T	N	Y	Y	Y	N	N	1
8	ML	Military Leave	110	A	T	Y	Y	Y	Y	N	N	1
10	OL	Other Leave Similar to ODS	5	A	T	Y	Y	Y	Y	N	N	1
6	ODO	Official Duty	5	A	T	Y	Y	Y	Y	N	Y	1
9	PL	Parental Leave	3	A	T	Y	Y	Y	Y	N	Y	1
5	RH	Restricted Holiday	2	A	T	N	Y	Y	N	N	Y	1
3	FL	For Faculty Only	25	A	L	N	Y	N	N	N	Y	1
13	VL	Vacation Leave	15	A	L	N	Y	N	N	N	N	1

**Description:** This just for viewing the different type of leave

## Leave Open Balance:

Location/Link: Master→Leave Master→Leave Open Balance

EMP ID	Name	DOJ	Franchise	Institute	Leave Type	CML Open Bal	CL Open Bal	Total Clng Bal	Leave Bal Taken	New Open Bal	New Bal Limit
000	VISHWANATHA DALTHELAYA M	15/07/2014	15020304	14020301	CML	300	240	90	00	240	340
000	VISHWANATHA DALTHELAYA M	15/07/2014	15020304	14020301	CL	340	220	90	00	220	410

**Description:** This module is used to add leave after the month of date of joining every year. He/she should be a permanent employee. If the user is non-teaching then he will be having CML and EL. If he/she is a teaching staff then they will be having CML and Vacation Leave.

## Direct Leave Update:

Location/Link: Master→Leave Master→Direct Update Balance Leave

Leave Type: CL - General Leave - 15-Y    Branch: CML  
Employee: 0017-SURESH KAO U-M    Get Leave Info    DOJ:    Last Updated Date:    Save

**Description:** This module is used when an employee joins in middle of academic he/she has limited no. of leaves or in case of any issue regarding the leave not being updated correctly.

Select the leave type from drop down list and select branch from the dropdown list. Select the employee from the employee drop down list. Press [Get Leave Info] button to get the current balance/DOJ and last updated date. Enter the new balance.

Once transaction is completed, press the [Save] button.



## Bulk Leave

Location/Link: Master→Leave Master→Bulk Leave

Sl. Code	Emp No	Emp Name	DOJ	LeaveStart Date	Leave Type	CRQ Quantities	Bal Leave	Available Leave
01	0401	SARITHA A SENEY	15.08.2015	15.12.2015	EL	00	7.0	17.0
02	0402	DEEPA	15.01.2011	15.12.2011	EL	20.0	20.0	40.0
03	0425	RAJAGANESH	14.07.2014	14.01.2014	EL	11.0	8.0	16.0
04	0407	SILVINDER K S	16.07.2017	20.07.2017	EL	00	0.0	10.0
05	0476	SUMERA SYAM	04.06.2016	05.11.2016	EL	00	0.0	20.0
06	0481	SANTHA SENEY	11.01.2018	20.12.2017	EL	00	0.0	10.0
07	0409	ROWNA S S	03.04.2011	15.12.2011	EL	00	0.0	10.0
08	0404	SADARAJAL	19.07.2011	18.12.2011	EL	00	7.0	17.0
09	0430	ANJALINI A S	19.06.2011	15.12.2011	EL	00	0.0	10.0
10	0411	S SUDHAKAR	19.01.2011	18.01.2011	EL	00	0.0	10.0
11	0404	SOMALAKSHMI	04.01.2010	01.12.2010	EL	00	0.0	10.0
12	0401	SARATHI SENEY	15.08.2015	15.12.2015	EL	00	0.0	10.0
13	0401	REETHA	04.06.2016	15.01.2016	EL	00	0.0	10.0
14	0411	CHANDRASEKAR	01.06.2011	20.12.2011	EL	00	0.0	10.0
15	0476	REKHA	14.01.2011	15.01.2011	EL	00	0.0	10.0
16	0401	SALIL KUNDEKAR CHAUDHARY	11.12.2010	11.12.2010	EL	00	0.0	10.0
17	0401	DR. BHAKTIKALWAN	01.06.2011	20.12.2011	EL	00	0.0	10.0
18	0401	SARATHI SENEY	15.08.2015	15.12.2015	EL	00	0.0	10.0

**Description:** This module is used when you want to update certain type of leave for a particular employee or for all employee (teaching or Non-teaching).

Select the branch from branch drop down list. Select teaching or Non-teaching staff from the radio button. Select the leave type from the leave drop down list. Next select all or specific employee. Enter the Leave days to be added. Press [Get Data] button to get the employee list. You can change the New Balance leave per employee as per the requirement.

Once transaction is completed, press the [Update] button.

## Leave Approval:

**Objective:** Every leave applied needs to be approved by the HOD and principal. First the HOD will approve the leave and then principal will approve the leave and leave deduction takes place.

**Module Type:** Transaction

**Module Used by:** HOD/Principal

**Location/Link:** Transaction → HOD → Leave Approval

**Description:** This module has 6 options

- 1) Leave Approval
- 2) Addition of leave
- 3) Deletion of leave
- 4) Leave with permission
- 5) Permitted hour
- 6) Absentees on a given date (Report)

**Leave Approval:** In this option we have 2 accesses. One is HOD approval and the other is Principal approval based on the user access.

**HOD Approval:** In this option HOD may approve or reject the leave. If the leave is rejected, the leave will be deleted. If the leave is approved it will then appear to principal.

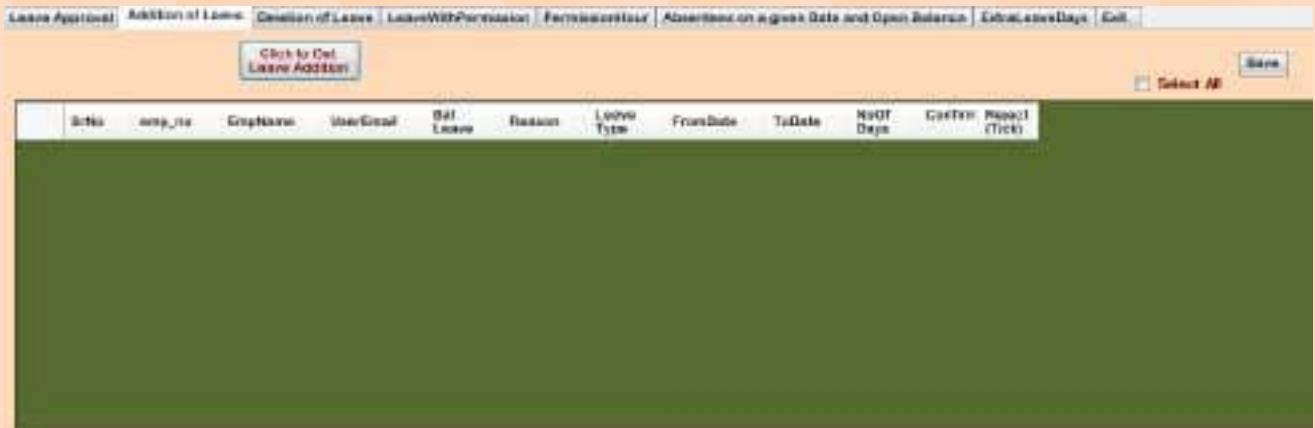
Sl No	Sl Code	Emp No	Employee	Sl Leave	Leave Taken	Reason	Leave Type	No. of Days	Fromdate	Todate	Leave Code	Confirm Tick	Reject Tick	Cancel Tick	Permitted Tick
1	25411	00	0452	H BOIRIBHARYA	10.0	5.0	PROG (MORNING)	CL	1.0	2024-03-04	2024-03-04	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Principal Approval:** After HOD approves the leave, principal can approve or reject the leave. If the leave is rejected it is deleted. Once approved the leave day's deduction takes place. Leave transaction is closed.

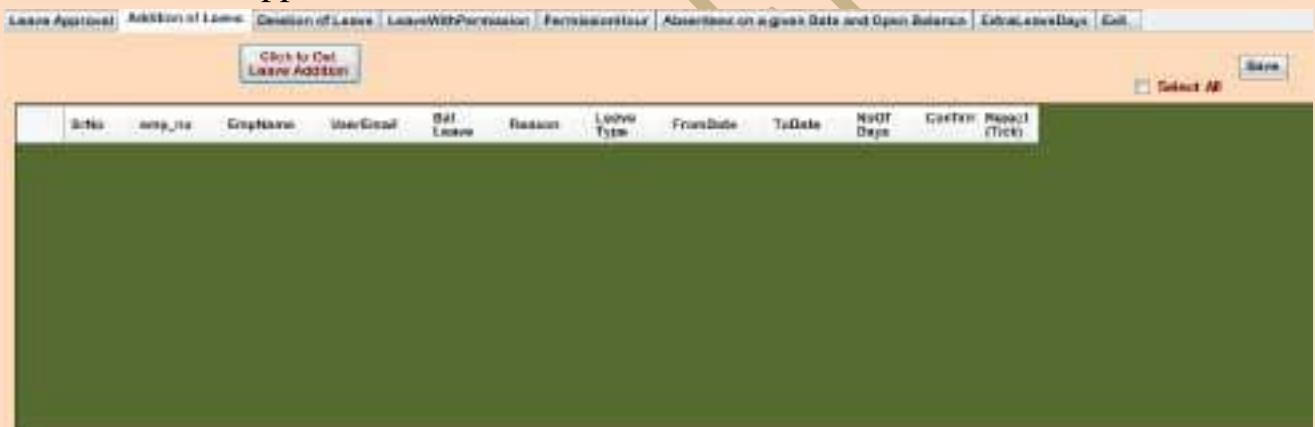
Sl No	Sl Code	Emp No	Employee	Sl Leave	Leave Taken	Reason	Leave Type	No. of Days	Fromdate	Todate	Leave Code	Confirm Tick	Reject Tick	Cancel Tick	Permitted Tick
1	25234	00	0008	RAVIRAMIAK	13.0	3.0	Personal	CL	3.0	2024-02-14	2024-02-16	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	25231	05	0020	SHANAJIA	13.0	3.0	personal work	CL	3.0	2024-02-23	2024-02-25	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	25232	05	0023	SHARADA	13.0	3.0	Sabbath leave	CL	1.0	2024-03-01	2024-03-01	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	25409	00	0102	KUNIM KUMAR	12.0	3.0	Personal Work	CL	3.0	2024-03-04	2024-03-04	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	25412	00	0141	NAVITA KUMARI SHETTSAR	12.0	2.5	Medical Certificate	CL	0.5	2024-03-04	2024-03-04	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	25233	04	0131	CHIRUKANNA GHETTY	12.0	3.0	personal (leave management)	CL	3.0	2024-03-18	2024-03-20	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	25417	00	0204	MADHURAMA MAYAN	21.0	0.0	VL Vacation	VL	1.0	2024-03-05	2024-03-05	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	25418	00	0207	ANANTH MEGHAN BANUVA	12.0	1.0	VL Vacation	VL	2.0	2024-03-11	2024-03-12	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	25240	00	0208	RAJITH K	12.0	3.0	VL Vacation	VL	1.0	2024-03-02	2024-03-02	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	25275	05	0437	RAJALAKSHI	10.0	5.0	personal work	CL	2.5	2024-03-21	2024-03-21	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	25283	00	0437	RAJALAKSHI	10.0	3.0	personal work	CL	1.0	2024-03-24	2024-03-24	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	25284	00	0450	SURESHAN U	8.0	6.0	PROG (MORNING)	CL	1.0	2024-02-15	2024-02-15	N	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Addition of leave:** In this option we have 2 accesses. One is HOD approval and the other is Principal approval based on the user access.

**HOD Approval:** In this option HOD may approve or reject the leave. If the leave is rejected, the leave will be deleted. If the leave is approved it will then appear to principal.



**Principal Approval:** After HOD approves the leave, principal can approve or reject the leave. Once approved the leave is closed.



**Leave with Permission:** If the leave type is required to take permission (EL) prior to applying the leave it is called as leave with permission. This separate tab so that the principal will come know who has taken the leave with permission.

In this option we have 2 accesses. One is HOD approval and the other is Principal approval based on the user access.

**HOD Approval:**



**Principal Approval:** After the HOD approves the leave, principal can confirm or reject the leave. If rejected the leave is deleted. Once confirmed the leave deduction take place and the leave transaction will be closed.



**Permitted Hours:** Every month employees can have 2 permitted hours. Permitted hour is limited to one hour. After the staff submits the permitted hour, HOD can approve or reject the transaction. Once approved the transaction is closed. In case of HOD, the permitted hour is approved by the principal.

**HOD Approval:**



**Principal Approval:**



**Absentees on a given date and Leave open Balance (Report):**

**Absent Date:** This is a report for the HOD/Principal to know who is absent on certain date and also can check for the leave balance of the employees.



## Leave Balance (report):

Leave Approval | Addition of Leave | Deletion of Leave | LeaveWithPermission | PermissionHour | Absentees in a given Date and Open Balance | ExtraLeaveDays | Exit

Enter the Absentee Date: 06/03/2024

Leave Report Option:  
 Absentee Day  
 Leave Balance  
 Year: 2024

#	tr_ceda	wfp_no	FNAME	Year	LeaveType	BALLeave	Leave Type
1	CS	0017	SURESH RAD U	2024	CL	11.0	4.8
2	CS	0017	SURESH RAD U	2024	CML	50.0	0.0
3	CS	0017	SURESH RAD U	2024	EL	48.0	6.8
4	CS	0017	SURESH RAD U	2024	HPL	0.0	0.0
5	CS	0017	SURESH RAD U	2024	LOP	0.8	0.8
6	CS	0017	SURESH RAD U	2024	ML	0.0	0.0
7	CS	0017	SURESH RAD U	2024	DL	0.8	0.8
8	CS	0017	SURESH RAD U	2024	OOD	0.0	0.0
9	CS	0017	SURESH RAD U	2024	PL	0.8	1.8
10	CS	0017	SURESH RAD U	2024	PH	2.0	0.0
11	CS	0017	SURESH RAD U	2024	SL	27.0	0.8
12	CS	0017	SURESH RAD U	2024	VL	10.0	0.0
13	CS	0088	SADANANDA MOOLYA	2024	CL	13.0	2.8
14	CS	0088	SADANANDA MOOLYA	2024	CML	19.0	1.0

Print Report

Employee Leave Balance

CS

Year 2024	CL	CML	EL	HPL	LOP	ML	DL	OOD	PL	PH	SL												
	OPEN BAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE	OPEN BAL SAL LEAVE												
AMRITA	153	120	173	220	140	440	65	33	33	03	33	403	03	33	60	33	33	03	33	33	20	303	
CHANDRANATH M	153	120			150	20															23	20	303
CHANDRANATH M	153	120			30	33															23	20	303
CHANDRANATH M	153	120																			23	20	303
CHANDRANATH M	153	120	453	472	260	300	65	33	33	03	33	403	03	33	60	33	33	03	33	23	20	303	
CHANDRANATH M	153	120			30	33															23	20	303
CHANDRANATH M	153	120	123	213	160	200															23	20	303
CHANDRANATH M	153	120	260	300	1000	2400			33	03	33	403	03	33	60	33	33	03	33	23	20	303	
CHANDRANATH M	153	120	200	250	60	250	65	33	33	03	33	403	03	33	60	33	33	03	33	23	20	303	
CHANDRANATH M	153	120	300	350	200	450	65	33	33	03	33	403	03	33	60	33	33	03	33	23	20	303	
CHANDRANATH M	153	120			30	33															23	20	303
CHANDRANATH M	153	120																			23	20	303
CHANDRANATH M	153	120																			23	20	303
CHANDRANATH M	153	120																			23	20	303

## Yearly Holidays:

**Objective:** In this module yearly leave is being updated.

**Module Type:** Master

**Module Used by:** Office Superintendent

**Location/Link:** Master → Yearly Holidays

Sl No	Holiday Descr	Holiday	Type
1	National Games	15-01-2024	F
2	Pongal	15-01-2024	F
3	Good Friday	15-04-2024	F
4	Eid	15-05-2024	F
5	Christmas	25-12-2023	F
6	New Year	01-01-2024	F
7	...	...	...
8	...	...	...
9	...	...	...
10	...	...	...
11	...	...	...
12	...	...	...
13	...	...	...
14	...	...	...
15	...	...	...
16	...	...	...
17	...	...	...
18	...	...	...
19	...	...	...
20	...	...	...
21	...	...	...
22	...	...	...
23	...	...	...
24	...	...	...
25	...	...	...

**Description:** We have 4 different types of yearly holidays.

- 1) Festival (F)
- 2) Restricted (R)
- 3) Saturday (S)
- 4) Linking (L)

Here we enter holiday description, holiday date, holiday type (F/R/S/L)

Once transaction is completed, press the [Save] button.

## Room Master:

**Objective:** In this module room details is being Updated.

**Module Type:** Master

**Module Used by:** Office Superintendent

**Location/Link:** Master→Room master



**Description:** We need rooms to conduct the VTU exams. Here we can change any data except the room no as it is the primary information. You can double click the right hand side grid to display/Update the room. You can enter a new room by entering the room no.

There are 2 check boxes. First one is for whether the theory exam conducted. The second check box is whether this room is the service center for the assets. Next enter the room location. Select the branch from drop down list in order to confirm that this room belongs to this branch. We have Room type radio button. One is used for theory exams and the other for lab exams. We can active or de-active the room by the Item Status radio button. We need to enter the room capacity.

Once transaction is completed, press the **[Update]** button.

To delete a room no, first choose the room no from the right hand side grid by double clicking. Once the room to be deleted is displayed, then you can press the **[Delete]** button to delete the room no permanently.

## Lab exam Allocation:

**Objective:** In this module room details is being Updated.

**Module Type:** Transaction

**Module Used by:** Office Assistant

**Location/Link:** Transaction → Exam Transaction → Lab Allocation Batch by batch

**Description:** All staff who is involved in the lab examination and lab details of the ab is updated in this module.

The screenshot shows a web-based form titled "LAB ALLOCATION". The form is divided into several sections:

- Header:** Includes "Lab Examination Date", "Semester", "Lab Subject", "Batch Id", and "Academic Year".
- Batch Timings:** Fields for "From Time", "To Time", "Total Students", and "Absentees".
- External Examiner:** A dropdown menu for "External Examiner" and a text field for "New External Examiner (In case of New Examiner)".
- Staff Roles:** Fields for "Main Attender", "Sub Attender", and "Lab Attender".
- Additional Fields:** Fields for "External Examiner Name", "External Examiner", and "External Examiner".

**Note:** Exam date + Semester + Lab Subject + Batch Id forms the unique key.

Select the exam date and semester from the semester dropdown list. Select the lab subject from the lab subject dropdown list. Enter the batch Id. This batch id is required since there can be different batches for the same exam date, semester, lab subject. Enter the academic year, semester type (Even/Odd). Enter the batch timings from and to time. Enter the total no. of students appearing for the lab examination. Enter 0 if there are no absentees else enter the no. of absentees. Enter all the USN appearing for the lab examination. Enter the external examiner from the drop down list. If it is new External then add the name in the column

**New External Examiner**  
(In case of New Examiner)




This will automatically add the new external to the External dropdown list. Enter the external college name. Enter the details for PAN, A/C no. and IFSC code. Select the internal examiner branch from the dropdown list and also the faculty from the dropdown list. Select the supervisor branch from the dropdown list and also the lab assistant/Non-teaching staff from the dropdown list. Select the technician branch from the dropdown list and also the lab assistant/Non-teaching staff from the dropdown list. Select the attender branch from the dropdown list and also the lab assistant/Non-teaching staff from the dropdown list.

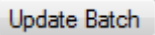
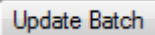
If you need extra supervisor, click the extra Supervisor check box. You can the select the employee from the dropdown list.

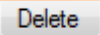

If you need extra technician, click the extra technician check box. You can the select the employee from the dropdown list.

If you need extra attender, click the extra attender check box. You can the select the employee from the dropdown list.

Sometimes we need extra attender (Eg:-Civil branch). In this case click the multi-attender check box. Click the extra Supervisor check box. You can the select the employee from the Multi attender-1dropdown list/ select the employee from the Multi attender-2dropdown list/ select the employee from the Multi attender-3dropdown list/ select the employee from the Multi attender-4dropdown list.

Once completed, press  button to update.

 . This button is used to rename the batch. First we need to get the transaction and then give new batch id. Press  button. The old batch-id will be replaced by new batch-id.

 . This button will delete the particular batch-id. First we need to get the transaction and press  button. The current record will be deleted.

## Manual Exam Date Allocation:

**Objective:** In this module we can manually allocate exam dates to faculties.

**Module Type:** Transaction

**Module Used by:** Office/Exam Section

**Location/Link:** Transaction → Exam transaction → Manual Exam Date Allocation

**Manual Staff Examination Duty Allocation**

Faculty: 0000 - VEERANAGATHYARATHILLASA      ASHWNIK-0004      Slots Allocated to the User: 4

Staff System Allocation: 5      Manually Allocation: 1      Total Exams: 0      Open Allocation: Y      Total Slots: 320

Exam Details      Reset      Total Selected: 2      Save      Exit      Schedule      Total Allocated: 211      Balance Slots: 9

exam_date	evening	AVAILABLE	Tick To Select
2024-02-04	A	3	<input type="checkbox"/>
2024-02-05	A	7	<input checked="" type="checkbox"/>

EmpID	staffname	exam_date	session
0004	ASHWNIK	2024-01-31	Morning
0004	ASHWNIK	2024-02-08	Afternoon
0004	ASHWNIK	2024-02-16	Afternoon
0004	ASHWNIK	2024-03-13	Afternoon
0004	ASHWNIK	2024-03-15	Afternoon
0004	ASHWNIK	2024-03-30	Afternoon

**Description:** In this module we can allocate faculty with exam dates. Select faculty from faculty dropdown list. Once you select the faculty, system displays the no. of slots allocated for the user, Total Slots available, total slots Allocated and the balance unallocated. Press the button [**Exam Details**]. We get list of all exam dates which has not been allocated. You need to tick for which exam dates preferred. Press the [**save**] button once you have completed.

[**Reset**] button is used to clear the data in the screen.

[**Schedule**] button is used to get the details of the exam dates allocated to this faculty.

## Exam Duty Date Exchange:

**Objective:** In this module we can change the exam dates for a particular faculty/DCS that has already been allocated exam date.

**Module Type:** Transaction

**Module Used by:** Office Superintendent

**Location/Link:** Transaction → Exam transaction → Exam Duty Date Exchange

**Staff Exam Duty Change**

Duty Type:  Faculty  DCS      Staff: 0155 - ARJUN

Max Slots Allocation: 25

EmpNo	StaffName	exam_date	Session
0155	ARJUN	2024-02-04	Afternoon
0155	ARJUN	2024-02-08	Afternoon
0155	ARJUN	2024-02-13	Afternoon
0155	ARJUN	2024-02-29	Morning
0155	ARJUN	2024-03-20	Afternoon

**Description:** This module is used for swap the duty of particular faculty with another faculty. There are 2 types of duties, one is for DCS and other is faculty duty. Select the respective duty type and press the [**Get Staff**] button to get all the duty allocated for that particular faculty. Change the Employee No. to another faculty Employee No. A check is done for the new faculty allotment to check whether he has duty on that particular day and session. If yes, system throws an error saying that slot has already been allocated.

Once transaction is completed, press the [**Save**] button.

## VTU Exam Date Change:

**Objective:** In this module we can change the VTU exam dates to another new date

**Module Type:** Transaction

**Module Used by:** Office Superintendent/Exam Section.

**Location/Link:** Transaction → Exam transaction → VTU Exam Date Change

**Change of of Exam Date from VTU**

Exam Date: 2024-03-18    Session: Morning    Changed Exam Date: 10/01/2024    Change Session: Morning

Transaction Option:  
 Entire     Single Faculty

Staff Type:  
 Faculty     Attender

Sr	EmpNo	Employee_name	br_code	EXAM_DATE	Session	Type	NewDate
1	0001	RIVIPRAHAR	BS	2024-03-18	Afternoon	Faculty	10/01/2024
2	0040	BEAGTALASSI	BS	2024-03-18	Afternoon	Faculty	10/01/2024
3	0003	SUSHMI	MC	2024-03-18	Afternoon	Faculty	10/01/2024
4	0007	BAHASA KAKASIH	CS	2024-03-18	Afternoon	Faculty	10/01/2024
5	0211	SIBIL HALDANKAR	CV	2024-03-18	Afternoon	Faculty	10/01/2024
6	0230	MAHESWARA KASAE	ME	2024-03-18	Afternoon	Faculty	10/01/2024
7	0401	SAVITHA A SHENOY	CS	2024-03-18	Afternoon	Faculty	10/01/2024
8	0421	ZAVARANI YASASBI	CV	2024-03-18	Afternoon	Faculty	10/01/2024
9	0422	AKSHATHA RAD L	EC	2024-03-18	Afternoon	Faculty	10/01/2024
10	0431	YOGESHWARI B B	EC	2024-03-18	Afternoon	Faculty	10/01/2024
11	0440	GIHUPRASAD	EC	2024-03-18	Afternoon	Faculty	10/01/2024
12	0441	REKHA	BS	2024-03-18	Afternoon	Faculty	10/01/2024
13	0446	VAJALATHA DEWADBA	EC	2024-03-18	Afternoon	Faculty	10/01/2024
14	0470	RESHMA	CS	2024-03-18	Afternoon	Faculty	10/01/2024
15	0481	RAGHAVENDRA G E	CS	2024-03-18	Afternoon	Faculty	10/01/2024
16	0490	SANTARBYE	CS	2024-03-18	Afternoon	Faculty	10/01/2024

**Description:** This module is used when the VTU postpones a particular exam date to another date. In this case the entire faculty allocated for that date needs to be shifted to new date.

Select the exam dates and session which needs to be postponed. Select new date postponed date and session. There are 2 options. One to shift the entire allocated faculty to the new date and the other we can shift single allocated faculty to the new date. Select the staff type (Faculty/Attender) and then press [**get Staff**] button to get the entire faculty for that date and session. Press the [**Apply**] button to reflect the changes.

Once transaction is completed, press the [**Update**] button.

## Reliever Exam Duty:

**Objective:** In this module we can allocate certain faculty as reliever.

**Module Type:** Transaction

**Module Used by:** Office Superintendent

**Location/Link:** Transaction → Exam transaction → Reliving Exam Duty

**Exam Duty Reliever Allocation**

Exam Date: 2024-01-25

Staff Type:  Faculty  Attender

All Dates

EmpNo	Employee_name	br_code	Reli	EXAM_DATE	Session	Type	Reliever(Tick)
0009	RAVPRABHA K	BS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0046	BIHAGYALAKSHI	BS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0052	USHA PANTATHI A	BS	N	2024-01-25	Morning	Faculty	<input checked="" type="checkbox"/>
0073	SANDHYA	BS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0422	AKSHATHARAO L	EC	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0429	SACHIN PRABHU K	EC	N	2024-01-25	Morning	Faculty	<input checked="" type="checkbox"/>
0447	REKHA	BS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0448	BREETHI M	CS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>
0478	RESHMA	CS	N	2024-01-25	Morning	Faculty	<input type="checkbox"/>

**Description:** Reliever is the one who will substitute the examiner for a short period, so that the examiner can go to the wash room or can go to the canteen to have some food. Select the exam date for which the reliever is required from the Exam Date dropdown list. Choose the session either morning/afternoon/both. There are 2 types of reliever. One is Faculty and other is attender. Select the required Staff type. Press the [**Get Staff**] button to get all the staff on that particular date. Tick against a particular faculty whom need to be a reliever.

Once transaction is completed, press the [**Save**] button.

## **DCS Exam Date Selection:**

**Objective:** In this module we can manually allocate DCS exam duty to senior faculties/Dean/HOD

**Module Type:** Transaction

**Module Used by:** Office Superintendent

Not Been Used

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## DCS manual Allocation:

**Objective:** In this module we can manually allocate DCS exam duty to senior faculties/Dean/HOD

**Module Type:** Transaction

**Module Used by:** Exam Section/Office Superintendent

**Location/Link:** Transaction → Exam transaction → DCS manual Allocation

Exam No.	Faculty Name	Exam Date	Status
001	DEPT HEAD	2024-01-01	Missing
002	DEPT HEAD	2024-01-02	Missing
003	DEPT HEAD	2024-01-01	Workshop
004	DEPT HEAD	2024-01-01	Missing
005	DEPT HEAD	2024-01-01	Workshop
006	DEPT HEAD	2024-01-02	Missing
007	DEPT HEAD	2024-01-01	Workshop
008	DEPT HEAD	2024-01-01	Missing

**Description:** In this module we can allocate senior faculty/Dean/HOD with exam dates. Select faculty from faculty dropdown list. Once you select the faculty, system displays the no. of slots allocated for the user, Total Slots available, total slots Allocated and the balance unallocated. Press the button [**Exam Details**]. We get list of all exam dates which has not been allocated. You need to tick for which exam dates preferred. Press the [**save**] button once you have completed.

[**Reset**] button is used to clear the data in the screen.

[**Schedule**] button is used to get the details of the exam dates allocated to this faculty.

Once transaction is completed, press the [**Save**] button.

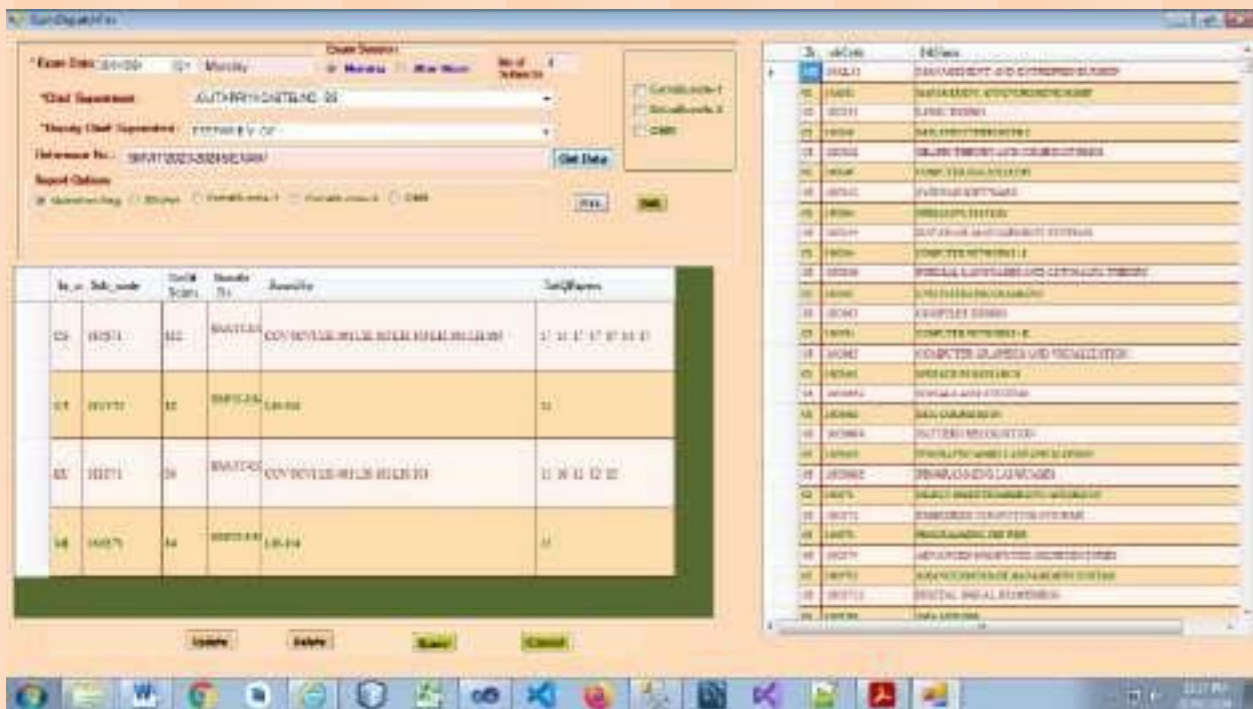
## Dispatch Entry:

**Objective:** This module is used to print the Question paper bag, Sticker, etc.

**Module Type:** Transaction

**Module Used by:** Office Superintendent

**Location/Link:** Transaction → Exam transaction → Dispatch Entry



**Description:** This module is used for Question paper bag, extra bundle1, extra bundle2, OMR and sticker.

Select the exam date and session. No of subjects is fetched and displayed. If the exam date is invalid then error occurs **There are No Records for this Date / Session ...**

Select the Chief superintendent from the chief superintendent dropdown list. Select the Deputy Chief superintendent from the deputy chief superintendent dropdown list. Enter the reference no. Press **Get Data** to get the data in grid. If there is no data then a blank grid with no. of rows equal to total subject for that exam date and session.

In the grid we need to enter branch code, subject code, No of Scripts, bundle no, room no and total question papers for each room.

Once transaction is completed press [Update] button.



## Report Options:

### Question Bag

2024-03-04 A						
Room No : A106						
Date	Time	Br	Seat	Sub Code	Subject Name	CPapers
2024-03-04	2:00 PM TO 5:00 PM	ME	V	18ME55	Fluid Power Engineering	1
		CV	V	18CV55	Municipal Wastewater Engineering	1
		CS	V	18CS55	Application Development using Python	11
		EC	V	18EC55	Electromagnetic Waves	12

### Sticker

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

**EXAMINATION CENTRE : SRI MADHWA VADIRAJA INSTITUTE OF  
TECHNOLOGY AND MANAGEMENT, BANTAKAL**

**CENTRE CODE : MW**

**SMVIT-UG-99**

**EXAMINATION : B.E.**

**SEMESTER : IV**

**BRANCH : CIVIL ENGINEERING**

**SUBJECT : Analysis of Determinate Structures**

**SUBJECT CODE : 15CV42**

**TOTAL NO OF SCRIPTS : 1**

**DATE : 22/02/2024**

**TIME : 2.00PM TO 5.00 PM**

**To**

**DR. APPASAB L V**  
**Chief Coordinator**  
**VTU Digitization Centre**  
**“Jnana Sangama”**  
**Belagavi-590 018**

**From**

**THE CHIEF SUPERINTENDENT**  
**SMVITM, VISHWOTHAMA NAGAR**  
**BANTAKAL -574 115, UDUPI**

**Deputy Chief Superintendent**

**Chief Superintendent**

Signature with date :

**DR.SUDARSHAN RAO K**

**DR.THIRUMALESHWARA BHAT**

SMVITM SOI

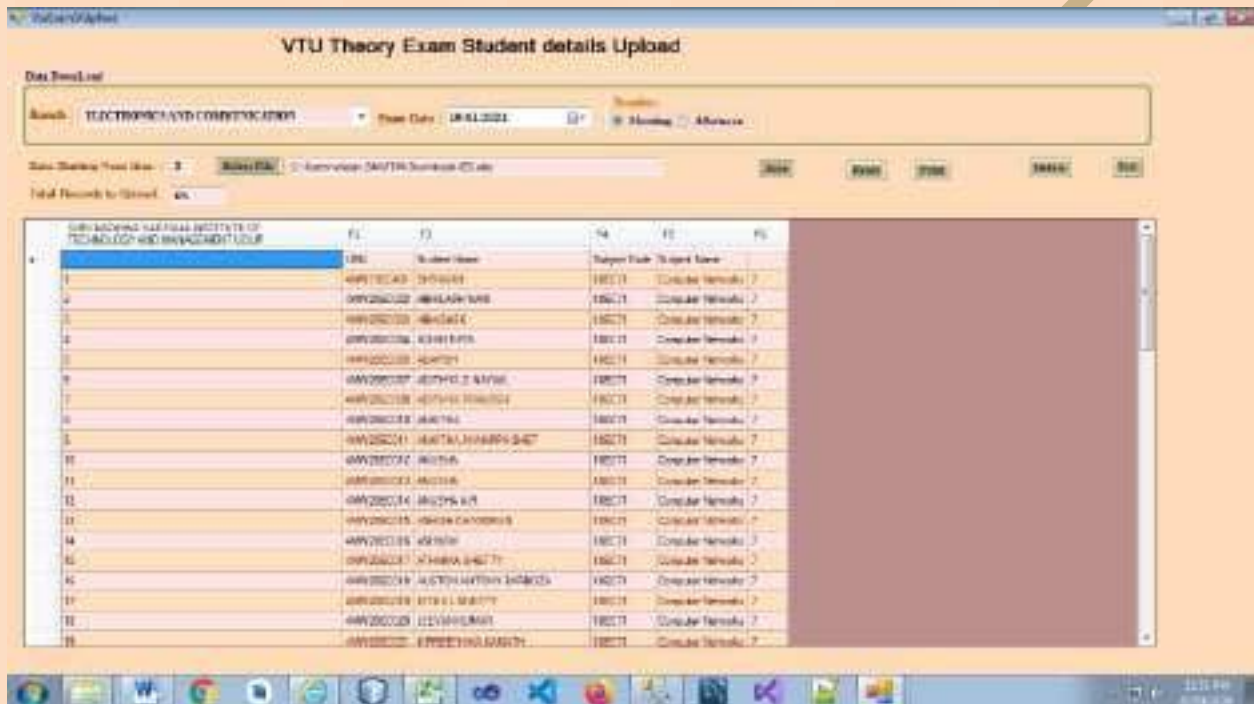
## VTU Student Appearing List Upload:

**Objective:** In this module we are downloading the appearing list from VTU site as excel sheet.

**Module Type:** Transaction

**Module Used by:** Exam Section

**Location/Link:** Transaction → Exam transaction → VTU Student Appearing List Upload



**Description:** We first download the appearing list from VTU site as excel sheet.

Select the branch from dropdown list. Select the date of examination and session (Morning/Afternoon). Click the [Select File] in order to select the VTU appearing excel sheet. The Data will be filled in the grid as shown in the figure.

Press the [**Save**] button to save the data.

Press the [**Reset**] button to clear the data from the screen.

Press the [**Print**] button to print the data.

Press the [**Delete**] button to delete the data for that branch, exam date and session.

## VTU Room Allocation:

**Objective:** In this module we allocate students to a particular room taking into consideration of different branches and different subjects.

**Module Type:** Transaction

**Module Used by:** Office

**Location/Link:** Transaction → Exam transaction → VTU Room Allocation

Roll No.	Roll Name	Branch	Exam Date	Exam Time	Exam Room	Exam Subject	Exam Marks	Exam Status
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%
20240125	A. JAYANTH	CS	2024-03-28	10:00	A108	Artificial Intelligence and Machine Learning IIP	7000	100%

**Description:** Allocating the students to examination rooms with different combination such that to avoid copying by looking at others students answer sheet. We allocate the students from different branch and also different subjects.

Select the branch from branch dropdown list. Select the examination date and also the session (Morning/Afternoon). Select the room from the room dropdown list. Select the subject from subject dropdown list. Enter total no. of students to be allocated for that room and for that subject. (Here you can decide how much students can be allocated in that particular room and for particular subject and allocate the same). Press [**Get Data**] button to get the students data for that branch, Exam date, session, room and subject.

Press the [**Save**] button to save the data.

### Initialization

If you want to initialize the data for that set of students and for that branch, Exam date, session, room and subject.


Press **Report** to get the report.

29-01-2024 Morning

					Total
	18CS71	18CV71	18EC71	18ME71	
A101	17	0	12	0	29
A102	17	0	12	0	29
A103	17	0	12	0	29
A104	14	0	0	15	29
A106	17	12	0	0	29
A302	14	0	16	0	30
A306	17	0	13	0	30
<b>Total</b>	<b>113</b>	<b>12</b>	<b>65</b>	<b>15</b>	<b>205</b>

Press **PrintBForm** to get the B-Form.

FORM-B


**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI.**  
 ATTENDANCE & ROOM SUPERVISOR'S/EXAMINER'S REPORT (In Triplicate)

B.E.(B.Arch/MBA/MCA/M.Tech/Ph.D/M.Sc(Res)) VII Semester Examination January - 2024  
 Branch / Title of the Course COMPUTER SCIENCE - B.E. Centre : SMVTM, BANTAKAL  
 Subject : Artificial Intelligence and Machine Learning Subject code: 18C-571  
 Date : 29-01-2024 Time : 9:30 AM to 12:30 PM

USN	Booklet / Dwg. Sheet Number	Signature	Attd. Booklet / drawing / graph sheet Number	Total
4MW20CS063				
4MW20CS064				
4MW20CS065				
4MW20CS066				
4MW20CS067				
4MW20CS068				
4MW20CS069				
4MW20CS070				
4MW20CS071				
4MW20CS072				
4MW20CS073				
4MW20CS074				
4MW20CS075				
4MW20CS076				
4MW20CS077				
4MW20CS078				
4MW20CS079				

USN (absentees) :

USN (candidates b /u Malpractice) :

Room Superintendent / Examiner - 1

Chief/deputy Superintendent

Signature :

with date :

\_\_\_\_\_

\_\_\_\_\_

Name

\_\_\_\_\_

\_\_\_\_\_

Affiliation

:

\_\_\_\_\_

\_\_\_\_\_

NOTE : ANSWER PAPER BUNDLES TO BE SENT TO REGIONAL OFFICE ONLY .

1. Seperate sheet to be used for each subject. 2. Statement shall be sent to a) Regional office, b) Registrar (Evaluation), c) Retained at the College

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## VTU Student Seat Allocation:

**Objective:** This module is used to allocate each student with the seat no.

**Module Type:** Transaction

**Module Used by:** Office Superintendent

**Location/Link:** Transaction → Exam transaction → VTU Student Seat Allocation

Sl. No.	Br. Code	Sub. Code	Seat No.	Branch	Registration	Course
1	23	18011	1	14702	1	M
2	23	18011	2	14702	2	M
3	23	18011	3	14702	3	M
4	23	18011	4	14702	4	M
5	23	18011	5	14702	5	M
6	23	18011	6	14702	6	M
7	23	18011	7	14702	7	M
8	23	18011	8	14702	8	M
9	23	18011	9	14702	9	M
10	23	18011	10	14702	10	M
11	23	18011	11	14702	11	M
12	23	18011	12	14702	12	M
13	23	18011	13	14702	13	M
14	23	18011	14	14702	14	M
15	23	18011	15	14702	15	M

**Description:** Seating arrangement of every student for that particular exam date, session and room no.

Select the exam date from the exam dropdown list. Select the session from session radio button. Pick the room from the room dropdown list. Press [Get Data] button to get all the allocated students. All the fields are read only except the Seat No. The system is optimized so that student cannot copy (different branch with different subject). You can still able to do the changes by reallocating the seat no.

Press the [Save] button to save the data.

There are 2 report options:

- 1) Notice Board
- 2) Seat Allotment



**SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

A Unit of Shri Sadavadiraja Math Education Trust(R), Udupi  
 Affiliated to the Jyoti Vaidyanatha Technological University, Bengaluru  
 Approved by AICTE, New Delhi & Recognized by Govt. of Karnataka

Phone : 0820-2589187/183  
 Fax : 0820-2589184  
 Website : www.sode.edu.in

**DATE: 29-01-2024 Morning Time:9:30 AM to 12:30 PM**

	CS	CV	EC	ME	Total
18CS71-Artificial Intelligence and Machine Learn	113				113
18CV71-Quality Surveying and Contract Manage		12			12
18EC71-Computer Networks			65		65
18ME71-Control Engineering				15	15
<b>Total</b>	<b>113</b>	<b>12</b>	<b>65</b>	<b>15</b>	<b>205</b>

**RoomNo:A101**

18CS71-Artificial Intelligence and Machine Learning						Total Candidate : 17
4MW17CS084	4MW19CS063	4MW19CS123	4MW20CS001	4MW20CS002	4MW20CS003	
4MW20CS004	4MW20CS005	4MW20CS006	4MW20CS007	4MW20CS008	4MW20CS009	
4MW20CS010	4MW20CS011	4MW20CS012	4MW20CS013	4MW20CS014		
18EC71-Computer Networks						Total Candidate : 12
4MW19EC401	4MW20EC002	4MW20EC003	4MW20EC004	4MW20EC005	4MW20EC007	
4MW20EC008	4MW20EC010	4MW20EC011	4MW20EC012	4MW20EC013	4MW20EC014	

**RoomNo:A103**

18CS71-Artificial Intelligence and Machine Learning						Total Candidate : 17
4MW20CS032	4MW20CS033	4MW20CS034	4MW20CS035	4MW20CS036	4MW20CS037	
4MW20CS038	4MW20CS039	4MW20CS040	4MW20CS041	4MW20CS042	4MW20CS043	
4MW20CS044	4MW20CS045	4MW20CS046	4MW20CS047	4MW20CS048		
18EC71-Computer Networks						Total Candidate : 12
4MW20EC028	4MW20EC029	4MW20EC030	4MW20EC031	4MW20EC032	4MW20EC033	
4MW20EC034	4MW20EC035	4MW20EC036	4MW20EC037	4MW20EC038	4MW20EC040	

**RoomNo:A104**

18CS71-Artificial Intelligence and Machine Learning						Total Candidate : 14
4MW20CS049	4MW20CS050	4MW20CS051	4MW20CS052	4MW20CS053	4MW20CS054	
4MW20CS055	4MW20CS056	4MW20CS057	4MW20CS058	4MW20CS059	4MW20CS060	
4MW20CS061	4MW20CS062					
18ME71-Control Engineering						Total Candidate : 15
4MW17ME051	4MW18ME009	4MW18ME029	4MW20ME001	4MW20ME002	4MW20ME003	
4MW20ME004	4MW20ME005	4MW20ME006	4MW20ME007	4MW20ME008	4MW20ME009	
4MW20ME010	4MW20ME011	4MW20ME012				



**Date:** 20-01-2024 Morning **SEATING ARRANGEMENTS** A101 -Admin Block 1st Floor

Note: Please Mark Absententees [Roundup]

**Name & Signature:**

1	4MW17CS084	9	4MW20CS002	17	4MW20CS006	25	4MW20CS010
2	4MW19EC401	10	4MW20EC005	18	4MW20EC011	26	4MW20CS011
3	4MW19CS063	11	4MW20CS003	19	4MW20CS007	27	4MW20CS012
4	4MW20EC002	12	4MW20EC007	20	4MW20EC012	28	4MW20CS013
5	4MW19CS123	13	4MW20CS004	21	4MW20CS008	29	4MW20CS014
6	4MW20EC003	14	4MW20EC008	22	4MW20EC013		
7	4MW20CS001	15	4MW20CS005	23	4MW20CS009		
8	4MW20EC004	16	4MW20EC010	24	4MW20EC014		

SMVITM SOFTWARE

### VTU Exam Absentees:

**Objective:** In this module we capture the students who are absent for each subject.

**Module Type:** Transaction

**Module Used by:** Examination Section

**Location/Link:** Transaction → Exam transaction → VTU Exam Absentees

User: 3708 (30/06/2022 10:58:22 AM) Students Who are Absent for the VTU Theory Examinations

Search Record Entry

USN:  Roll No:

Subject:  Page No:

Exam Code	Sem	Sub Code	Sub Name
2019-01-01	M	110101	Digital Communication
2019-01-01	A	110101	Discrete Calculus, Fourier Series and Transforms
2019-01-01	M	110102	Mathematics and Statistics
2019-01-01	A	110102	Information Theory & Coding
2019-01-01	M	110103	Programming in JAVA

Sr No	Exam Code	Sem	Sub Code	Sr Name	Sr Code	Sub Code	Sub Name	Sem Type
1	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
2	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
3	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
4	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
5	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
6	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
7	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
8	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
9	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
10	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
11	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
12	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
13	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
14	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
15	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
16	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
17	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
18	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
19	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
20	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
21	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
22	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
23	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
24	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T
25	EC	EC	1	AMRITHA	10111	110101	Calculus and Linear Algebra	T

**Description:** Enter the students USN. Select the subject from subject dropdown list for which the student was absent.

Press the [Save] button to save the data.



**SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

4/UNE 01/2011 BODENHARAH MHE EDUCOR/1 TRUST/01/2011/01  
 Affiliated to the Vignansaranya Technological University, Bangalore  
 Approved by AICTE, New Delhi & Recognized by Govt. of Karnataka  
 Vidyashilpa Nagar, BARBAH-574 115, Udupi, KARNATAKA, INDIA

Phone : 0820-2589102/103  
 Extn : 294  
 Fax : 0820-2589184  
 E-Mail : office@smvita.edu.in  
 Website : www.smvita.edu.in

**May/June 2022- THEORY AND PRACTICAL EXAMINATION**

**STATEMENT OF CONSOLIDATED ABSENTEE'S LIST OF II SEMESTER (2010 SCHEME)**

Sr No	Sem No	Br	Subject Code	Subject Name	USN of Absentees	Remark
1	2	EC	BE0203	Basic Electronics for EEE Stream	4MW22EC006	
2	2	CS	BE0204B	Introduction to Electrical Engineering	4MW22CS003	
3	2	EC	BE0204E	Introduction to C Programming	4MW22EC006	
4	2	EC	BE0205C	Introduction to Nano Technology	4MW22EC004	
5	2	EC	DMATE201	Mathematics-II for EEE Stream	4MW22EC005	

Chief Supdt. of Exam

## Faculty Room Link:

**Objective:** In this module provides the link between faculties and room no.

**Module Type:** Transaction

**Module Used by:** Exam Section

**Location/Link:** Transaction → Exam transaction → Faculty Room link

**DateWise Staff Exam Duty Room Allocation**

Exam Date: 2024-01-28 Get Data

Staff Type:  Faculty  SDC  Assistant Get Staff Print Total Rooms: 7

EmpNo	Employee_name	Br_code	EXAM_DATE	Section	Type	Believer	RoomNo
8008	POPPABHAN	BE	2024-01-28	Homeg	Faculty	-	A107
8009	BEELCYLAKSE	BE	2024-01-28	Homeg	Faculty	-	A108
8012	LIHA KUMATHA J	BE	2024-01-28	Homeg	Faculty	-	A109
8013	BANDELL	BE	2024-01-28	Homeg	Faculty	-	A104
8422	ADHYAARAO L	BE	2024-01-28	Homeg	Faculty	-	A105
8423	SACHIN PRINDE K	BE	2024-01-28	Homeg	Faculty	-	A102
8421	REKHA	BE	2024-01-28	Homeg	Faculty	-	A106
8440	PREETHA	CS	2024-01-28	Homeg	Faculty	-	A103
8478	REKHA	CS	2024-01-28	Homeg	Faculty	-	A100

RoomNo	Cap
A100	3
A101	3
A102	3
A103	3
A104	3
A105	3
A106	3
A107	3
A108	3
A109	3

**Description:** System automatically allocates room no to the faculty. We can still swap the employee as per the requirement by editing the empNo field.

Press the [**Save**] button to save the data.

## Deactivation of Faculty Exam Duty / Exam Dates:

**Objective:** In this module we can deactivate the exam dates or Faculty de-activation

**Module Type:** Transaction

**Module Used by:** Office Superintendent

There are 2 options in this module

- 1) Faculty De-Activation for theory Exam
- 2) Exam Dates

**Faculty De-Activation for theory Exam:**

**Location/Link:** Transaction → Exam transaction → Deactivation of Faculty Exam Duty/Exam Dates → Faculty De-Activation of Theory Exams

Deactivation of Exam Dates / Faculty

Deactivate the Exam Dates

Exam Dates  Faculty DeActivation for Theory Exams

Default Exam Duty

Faculty Branch:

Score Duty:

Exam Duty:

Get Data

Note: Tick for De-Activation of the Faculty

Emp_ID	Emp_Name	Fac Exam Duty
0100	CHANDRASEKHAR PADUKI PILLAI	Y
0112	DEEPAK	Y
0483	DR. SHANT PAULAN	Y
0378	SAVESH ATHAL	N
0507	LATHIKA M	Y
0489	NRINDEV	Y
0506	MS. SAKITHA ROODRAN	Y
0225	NAGHRA DHAT	N
0482	KAVUL SUDANARACHUDRAN	Y
0482	FRASITH M	Y
0482	KACONCHERYA	Y
0488	NAIRAFERDIA S	Y
0482	NAIRAFERDIA HINDU	Y
0478	RESHMA	Y
0547	RIKSHI BHAT B	Y
0418	SADMANIK L	Y
0507	SARMA KRANTH	Y
0487	SANTHA SHENOY	Y
0484	SOURYA J BHAT	N
0489	SOURYA B H	Y

Update

Print

**Description:** Due to some personal reason or medical issues, some of the faculty may not take the exam duty. Hence we need to de-activate them.

Click on the radio button called  **Faculty DeActivation for Theory Exams**

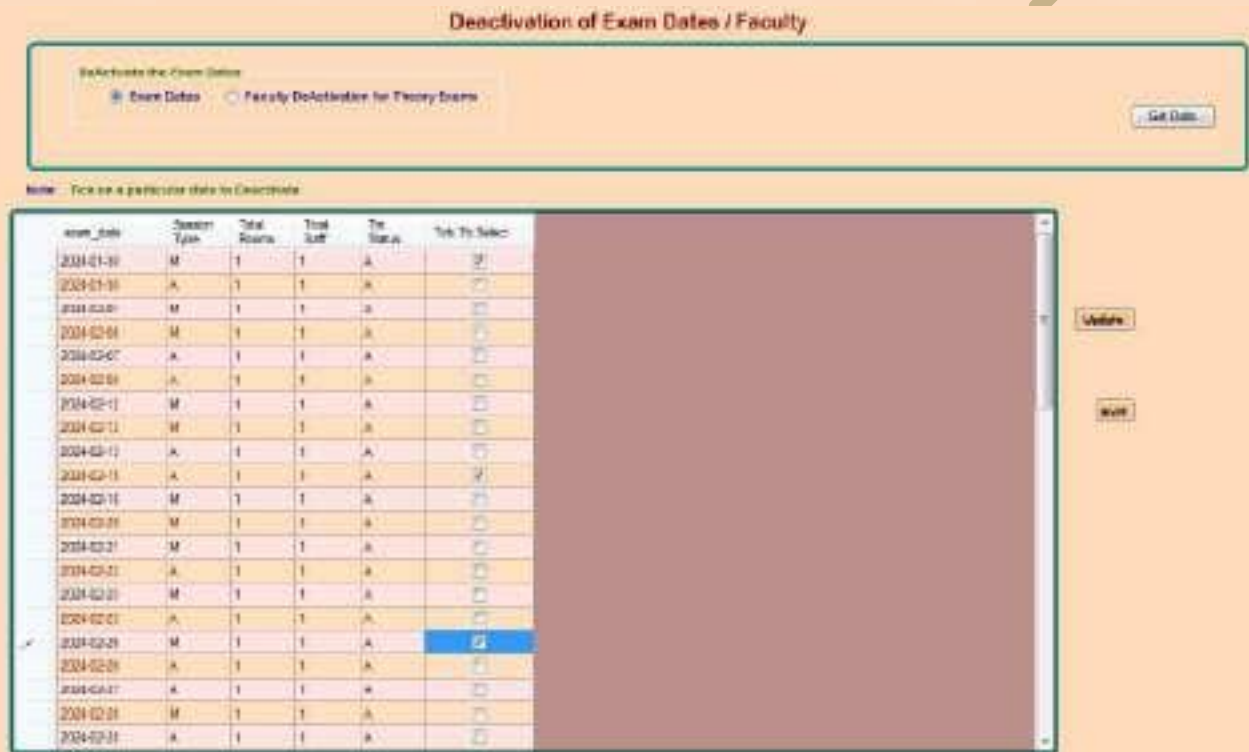
There is a check box  **Default Exam Duty**. If check this option then you can have a default value for the status of the employees who are invigilator for the theory exam. Select the branch from branch dropdown list. Press [Get Data] button to get the entire teaching faculty for that branch.

In the column for FacExamStatus we can have values like 'D' for DCS duty, 'Y' for faculty Duty and 'N' for No duty.

Press the [Update] button to save the data.

### Exam Dates:

**Location/Link:** Transaction → Exam transaction → Deactivation of Faculty Exam Duty/Exam Dates → Exam Dates



**Description:** Here we can deactivate the exam dates.

Click the  Exam Dates radio button. We get all the exam dates. Tick to select which exam dates needs to be de-activated.

## Leave Transaction:

**Objective:** Leave transaction module is a workflow. The employees will submit their leave. After the submission of leave it will appear to the HOD to approve. Employees can delete the leave before HOD approves, once the leave is approved by the HOD employees cannot delete the leave. In case HOD applied for leave then it directly goes for principal approval. HOD can approve or reject the leave. Once approved by the HOD, this leave will appear for the principal for the final approval. Principal can approve or reject the leave. Once the principal approves, the leave gets deducted and the leave transaction is completed.

**Module Type:** Transaction

**Module Used by:** All employees

**Location/Link:** Transaction → Leave Transaction



**Description:** In this module, we can submit the leave or we can add leave. Sometimes the employees will be working other than working days. This type of leave is called Leave addition where you can take leave on some other day within one month.

**Leave Submission:** In this we can take leave different types of leave. In case of Non-teaching the valid leave types are CL, CML, HCL, EL and RH. In case of teaching staff the valid leave types are CL, CML, HCL, VL, SCL and RH. Maternity leave is only for the female staff. If the employee does not have enough leave then he/she avail Loss of Pay (LOP).

## **Leaves Details:**

### **Leave Submission:**

**CL:** This is called casual leave. Employee need not take prior notice, but must inform the HOD. CL cannot be clubbed with another leave. Total CL available to the employee is 15 days per year. This leave cannot be carried to the next year. CL cannot be taken more than 7 days before July. This leave applies to all employees. Here the minimum day is half day

**CML:** This is called as committed leave. Every permanent employee will have 10 days per year. This leave can be carried to next year. This will be given by HR department after joining date. Here the minimum day is 1 day. This leave applies to all employees.

**EL:** This leave is called earned leave. Every Non-teaching permanent staff will have 20 days per year. This will be given by HR department after joining date. This leave has a notice period. We need to apply the EL 15 days before the leave days. Here the minimum days is 3 days. She/he cannot take less than 3 days. Teaching faculty can have EL if they don't take the Vacation Leave (1 EL for 3 days VL).

**HPL:** This leave is Half Paid Leave. This comes under CML category. Here the minimum day can be half a day. If you avail this leave, the balance is deducted from CML. We are not using HPL frequently. This leave applies to all employees.

**LOP:** This leave is called as Loss of Pay. This leave is used in case you want to take leave but you don't enough Leave balance. Minimum day is 1. This leave applies to all employees.

**ML:** This leave is called Maternity leave. This used only for female staff for the delivery/after delivery purpose. Maximum Days are 180.

**RH:** This leave is called restricted holidays. You can select any 2 days in a set of holidays. This applies to all employees.

**SCL:** This leave is called special casual leave. This leave is given at the beginning of the year to faculty only (30 days). This is used usually for the VTU invigilation/ DCS/ Lab Duty/Workshop/FDP, etc.

### **Leave Addition:**

**OOD:** This leave is called as on Official Duty. This leave is used when the employee works outside the college for college purpose. In this case employee can avail any day as substitute for the work done. This leave needs to be taken within a month.

**PL:** This leave is called as Permitted Leave. Employee has worked in the college premises during the holidays or during the weekend. He needs to punch/Face attendance. This leave needs to be taken within a month.

**OL:** This general leave called as Other Leave. This leave was mainly created at the time of corona virus.

**Leave Submission:**



**Description:** Whenever the user submitted the Leave the status will be leave submitted. Once the HOD approve the status will be HOD approved and once the principal approves the status will be Principal Approved and the leave process is closed.

Choose Leave submission from the radio button. Select the leave type from the leave type dropdown list. Enter the start and end date. Pressing the tab button it will calculate the total leave days. It also displays the leave balance. If the leave balance is less than Total leave apply days then the system will throw error

Leave Balance is ZERO, Choose any other Leave Type or LOP .... and no action will take place. If there is enough balance then you need to provide the reason. Click **Process Leave** button. System will displays all the leave days and you need to give the substitute employee



for each leave day. You can see the entire available substitution employee on the right hand side grid. Once complete you can press the [Save](#) button.

If you want to see the leave applied day's status then click the [Leave History](#) button.

**Leave Details of an Employee** Year: 2024 [Refresh](#)

Note: Double Click on Leave Status to Delete the Leave Transaction. Leave Transaction can ONLY be deleted if the status is **Leave Submitted**

SrNo	emp_no	From Date	To Date	Leave Type	Leave Status	Amount	Day	BalLeave	Reason	Message
25246	0300	2024-02-26	2024-02-26	CML	Principal Approved	1.0	24.0		Personal	
25245	0300	2024-02-16	2024-02-16	CML	Principal Approved	1.0	25.0		Personal	
25115	0300	2024-02-28	2024-02-28	EL	Principal Approved	3.0	22.0		Personal	
25114	0300	2024-02-08	2024-02-08	CL	Principal Approved	1.0	14.0		Personal	
24975	0300	2024-01-27	2024-01-27	CML	Principal Approved	1.0	26.0		Personal	
24840	0300	2024-01-17	2024-01-17	CML	Principal Approved	1.0	27.0		Personal	
24805	0300	2024-01-13	2024-01-13	CML	Principal Approved	1.0	28.0		Personal Work	
24712	0300	2024-01-22	2024-01-24	EL	Principal Approved	3.0	25.0		Personal	
24710	0300	2024-01-04	2024-01-05	CML	Principal Approved	2.0	29.0		Personal	

SrNo	emp_no	LeaveType	Session	LeaveDate	LeaveAdd	fac1	Period1	fac2	Period2	fac3	Period3	fac4	Period4
25115	0300	EL	F	2024-02-28	N	0300	1	0300	2	0300	3	0300	4
25115	0300	EL	F	2024-02-27	N	0300	1	0300	2	0300	3	0300	4
25115	0300	EL	F	2024-02-26	N	0300	1	0300	2	0300	3	0300	4

[Leave History \(Deletion\)](#)

**Description:** When you want to delete the closed leave you need to send e-mail to the principal to delete the required leave. Principal has options to delete the closed leave. The user can see the deleted leave using the Leave History (deletion)

### Rejected Leave Deaths

Year: 2024

Refresh

SrNo	emp_no	From Date	To Date	Leave Type	leaveStatus	Overbal	Absent Day	Balance	Reason	Message
25115	0300	2024-02-26	2024-02-26	EL	Principal Approved		3.0		Permitted	

SrNo	emp_no	LeaveType	Session	LeaveDate	LeaveAdd	fac1	Period1	fac2	Period2	fac3	Period3	fac4	Period4
25115	0300	EL	F	2024-02-26	N	0300	1	0300	2	0300	3	0300	4
25115	0300	EL	F	2024-02-27	N	0300	1	0300	2	0300	3	0300	4
25115	0300	EL	F	2024-02-28	N	0300	1	0300	2	0300	3	0300	4

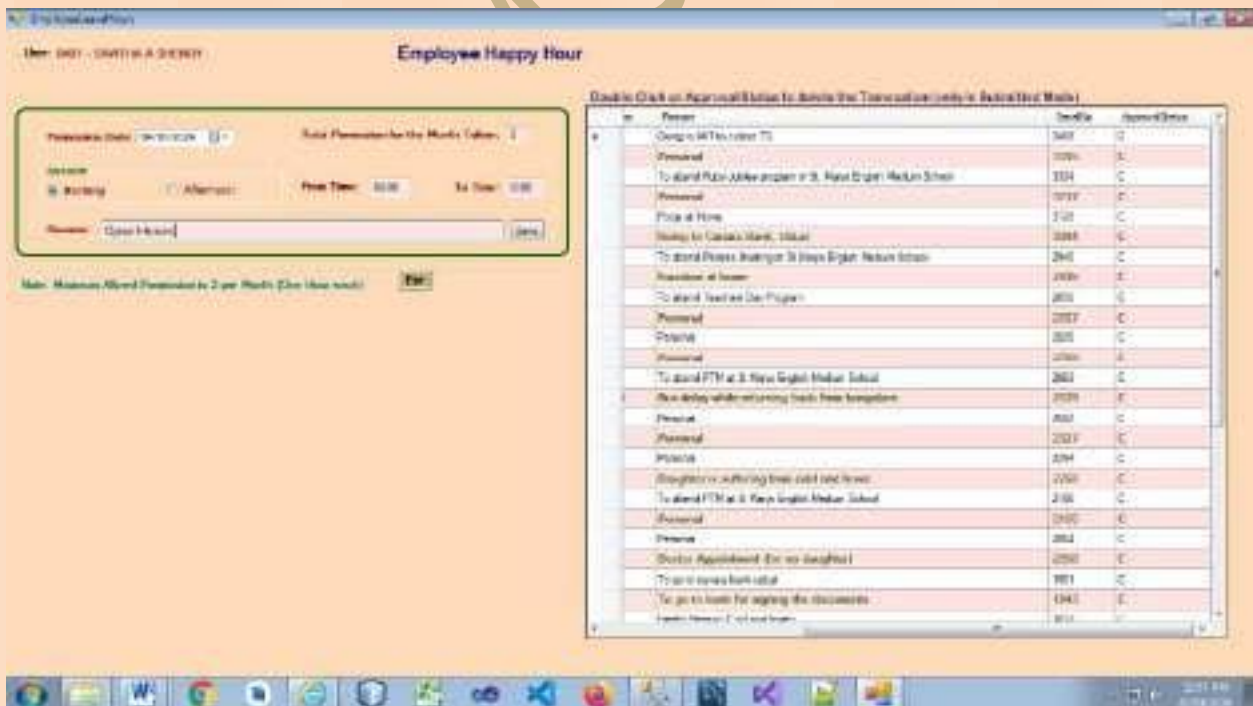
### Permitted Hours:

**Objective:** In this module system allows you to take monthly 2 permission of one hour each.

**Module Type:** Transaction

**Module Used by:** HOD/Faculty

**Location/Link:** Transaction → Permitted Hours



**Description:** Every month employees have the option to take 2 one hour permission each.

Select the date for which the permission is required. Select the session (Morning/Afternoon). Enter from time and to time. Enter the permission reason.

Press  button.

On the right hand side grid you can see all the permission taken. You can delete the permission before HOD approves by double clicking the Approval status.

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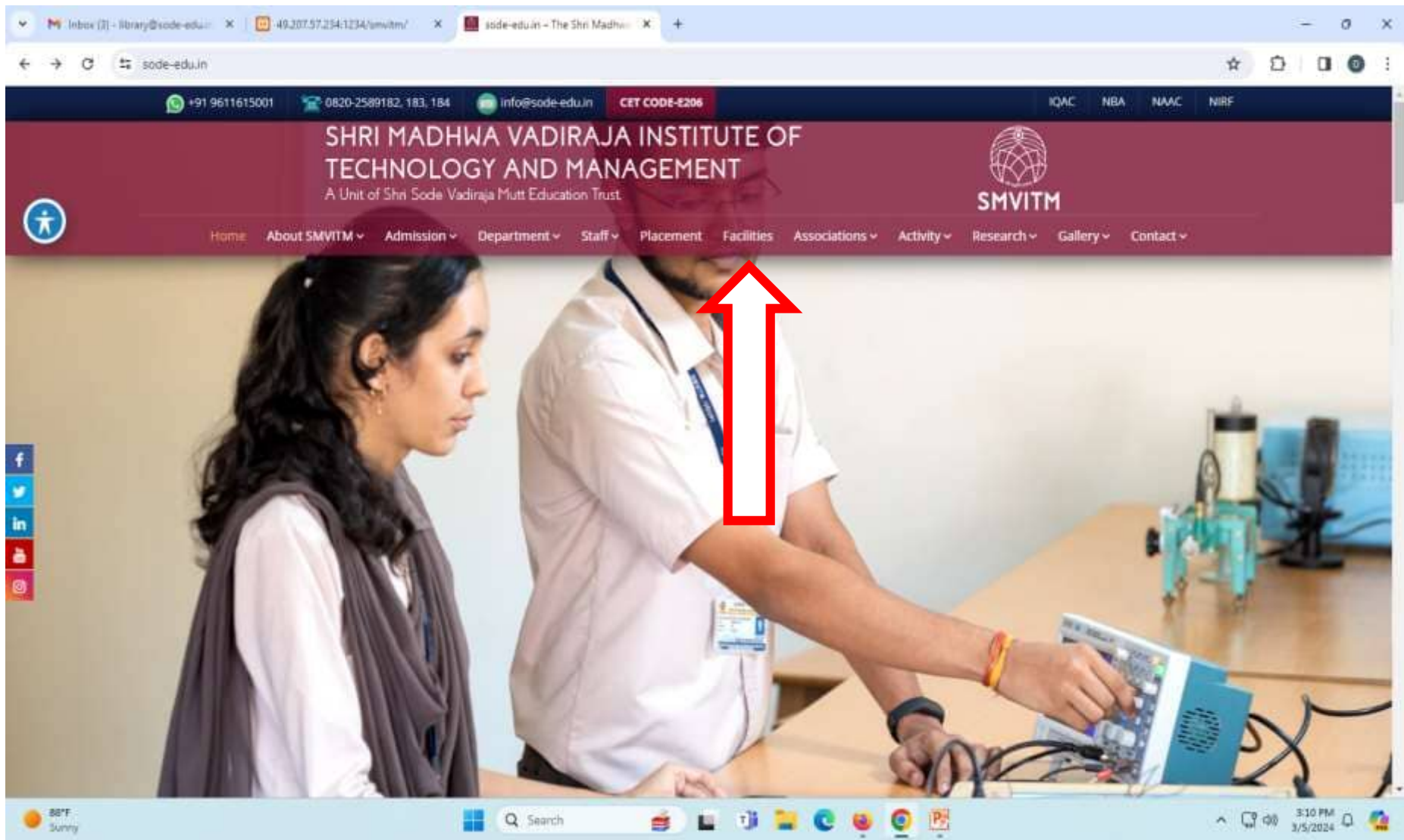
# Central Library

## How to request for new books in Easylib Software



[www.smvitm.easylib.net](http://www.smvitm.easylib.net)

Or through College Website



**STEP1: In college website click facilities section.**



Teaching-Learning

Central Library

Language Lab

Information and Communication Technology (ICT)

Sports Facility

#facility-2

Classrooms and Tutorial Rooms

adequate number of classrooms which is verified and approved by AICTE. The classrooms are well ventilated and have the provision for good lighting, thereby avoiding unnecessary expenditure on electricity consumption through lights, Fans and ACs.

The Institution has ICT enabled classrooms provided with LCD projectors. The facilities are created to enable an effective and efficient teaching-learning transaction.

Each department has tutorial classroom to conduct remedial classes and address the need of slow learners.

**STEP2: Then click on the 'Central Library' Section.**

Teaching-Learning

Central Library

Language Lab

Information and Communication  
Technology (ICT)

Sports Facility

Wi-Fi

Hostels

Cafeteria

Transportation

## SMVITM Central Library



The Central Library at SMVITM is housed in a spacious three-storey state of the art independent block. Two floors block are occupied exclusively by the Central Library. It has about 1300 square meters of built-up area.

**Facilities offered by SMVITM, Central Library...**



**STEP3: Next after the central library page opens click on the facilities offered by SMVITM, Central Library as shown in the picture above.**

+ Rules and Regulations ▾


+ Sections ▾

+ Facilities ▾

+ Committee Members ▾

+ Roles and Responsibilities ▾

+E-Resources ^

- **VTU-Consortium**
- **Knimbus**
- Shodhganga- Digital repository of thesis and dissertations
- NDL(National Digital Library of India)
- **OPAC (easylib)** 
- DelNet

**STEP4: From there go to the E-resources section and click on 'OPAC(Easylib)'.**




The screenshot displays the Easylib library management system homepage. At the top, there is a search bar with the text "Search for Books, Author and More..." and buttons for "Search" and "Clear". Below the search bar is a "Short-Cuts" section with a grid of book covers. A login form is overlaid on the page, titled "Welcome to Easylib". The form contains a "Username" field with the value "s0383" and a "Password" field with the value "\*\*\*\*". A red arrow points to the password field. Below the form are buttons for "Login as library user", "Login as library staff", "Login as vendor", "Clear", and "Guest". The background shows book covers for "Human Values professional ethics", "Communication Systems", "Introduction Python Programming", and "Fundamentals of Fibre optics in Telecommunication and Sensor". The footer includes a "Photo Gallery", "Announcements", and "E News Paper" section.

**STEP5: Once the easylib homepage gets opened it will ask for login id and password details. Please enter your employee ID as Login ID and password (ex: login ID: \*s0489\* and password: \*s0489\*) and then click on 'Login as Library user'.**

inbez (4) - library@code.edu > X | 49.207.57.234:1234/smvtm/ > X | 49.207.57.234:1234/SMVITM/ > X

Not secure 49.207.57.234:1234/SMVITM/

 Sri Madhwa Vadiraja Institute of Technology and Management  
Udupi

Deepak Logout  
Session Started @ 15:17:36

All Search for Books, Author and More Search Clear

Short-Cuts

A C D E IR P Q L M NA EBT EBC O F

Featured Books

Human Values professional ethics  
Communication Systems  
Introduction Python Programming  
Fundamentals of Fibre optics in Telecommunication and Sensor Systems

Photo Gallery  
talk on the topic "Accelerating research & career momentum through IEEE Publication" by Mr. MS

Announcements  
Central library of Sri Madhwa Vadiraja Institute of Technology and Management bantakal, Organizing a talk on the topic

E News Paper  
Deccan Herald

88°F Sunny Search 3:18 PM 3/5/2024

**STEP6: click on your respective name.**

Inbox (4) - library@sode-edu.in | 49.207.57.234:1234/smvitm/ | Welcome - Deepak

Not secure 49.207.57.234:1234/SMVITM/index.php/memberController

**easylib**  
Bringing Knowledge & People Closer

Sri Madhwa Vadiraja Institute of  
Udu

Welcome

See Your Activity

- My Details**
- Books Borrowed
- Books Requested
- My Favourites
- My Fine On Books
- My Documents
- My Digital Library
- My Feedbacks
- In-Out History
- Circulation History
- Change Password
- Change Personal Data
- Reservation list
- Assignmemnts
- Library FeedBacks
- My Quiz
- My Courses

Name	Deepak
MemberId	S0383
Department	Library
Branch	ADMINISTRATIVE OFFICE
UserProfile	Librarian
Address	

Library Contact Info  
08202589182  
library@sode-edu.in

Library Policy  
© Easylib Software Pvt Ltd

88°F Sunny

Search

**STEP7: Once you click on your name a new page will open where you will have to click on 'Books Requested'.**

Browser tabs: Inbox (4) - library@code.edu, 49.207.57.234:1234/smvitm/, Welcome Deepak

Address bar: Not secure 49.207.57.234:1234/SMVITM/index.php/memberController

Logo: **easylib** Empowering Knowledge & Facilitating Growth

Page Title: Sri Madhwa Vadiraja Institute of Technology and Management Udupi

User: Deepak Logout Session Started @ 15:17:38

Header: Welcome Deepak

Left Menu:

- See Your Activity
- My Details
- Books Borrowed
- Books Requested**
- My Favourites
- My Fine On Books
- My Documents
- My Digital Library
- My Feedbacks
- In-Out History
- Circulation History
- Change Password
- Change Personal Data
- Reservation list
- Assignments
- Library FeedBacks
- My Quiz
- My Courses

Section: **Your Requested Books**

Buttons: [Request For Books Here](#)

Sl No	Title	Author	ISBN	Book Type	Requested date	Status
-------	-------	--------	------	-----------	----------------	--------

Footer:

- Library Contact Info: 08202589182, library@code.edu.in
- Library Policy: © Easylib Software Pvt Ltd
- Library Teams: Version 6.4a
- Need Software Help?: +919844061710, info@easylibsoft.com

System Tray: 8:17 Sunny, Search, 3:20 PM 3/5/2024

**STEP8: Next click on 'Request for Books Here'.**

Inbox (4) - library@ode.edu... x 48.207.57.234/234/234/234/... x 48.207.57.234/SMVITM/... x +


Not secure 48.207.57.234/234/234/SMVITM/index.php/memberController/newBookRequest/memberid=50383&department=19

**Sri Madhwa Vadiraja Institute of Technology and Management**  
Udupi

Deepak Logout  
Session Started @ 15:17:36

### Requisition of Item(s)

Requisition No. (Item No.)*	6	<input type="button" value="Inquire"/>	Member Id	S0383	No. Of Copies	1
Item Type	Select Item Type		Title *			
Author *	Enter multiple authors by semicolon(,) separated		Req. Date	05-Mar-2024	Language	Select Language
Call No.			Class No.		ISBN	
No. of Pages			Edition	Select Edition	Volume	Select Volume
Department	Select Department		Publisher	Select Publisher	Subject	Select Subject
Keyword(s) *						



**STEP9:** Fill out all the details of the books to be requested(ex: No. of Copies, Item Type, Title, Author, Required date, Language, ISBN [if mentioned in the book], Edition, Volume[if mentioned in the book], Department, Publisher, Subject) and then click on 'Add'.

**The above shown procedure is to access Easylib through college website. The other way to access Easylib is to directly enter the url link: [www.smvitm.easylib.net](http://www.smvitm.easylib.net) in the browser and then you can proceed as shown from **STEP5** till **STEP9**. The list of Books requested will be sent to Central library via easylib which will be easy to keep track of the items requested. From now on, please use this method to request for new books.**

**THANK YOU**

## Green Campus Initiatives

The institute takes up green campus initiatives throughout year. During **Graduation day** the **branch toppers** will be doing **sampling** and the name of the topper will be given for the plant. The guest of all the programs will be doing sampling in the campus. This initiative has enhanced the plant growth and frequent sampling in the campus.

Department of Computer Science and Engineering



Principal

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## Department of Civil Engineering



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## Department of Electronics and Communication Engineering



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