SVCEBENGALURU

SRI VENKATESHWARA COLLEGE OF ENGINEERING — Affiliated to VTU, Approved by AICTE, Recognised by UGC u/s 2(f) & 12(B)—

Ref.No.:SVCE/EST/2022-23/121

Date: 22-07-2023

OFFICE ORDER

Dr. B VENKATA KRISHNA REDDY Assicoate Professor,
Department of Physics & is assigned Additional responsibilities of Unnat
Bharat Abhiyan (UBA) Coordinator.

All staff & students are informed to cooperate with him for the smooth functioning of all UBA activities.



To: Dr. B VENKATA KRISHNA REDDY

Associate Professor Department of Physics

Copy To: Establishment Section

E-Circulation To:

- 1. HODs: ECE CSE ISE ME EEE/MT CE CA BS MBA
- 2. Dean Academics, Registrar, Controller of Examination,
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- 4. Honorable CED Sir for kind information

PRINCIPAL Dr. NAGESWARA GUPTHA M.

PRINCIPAL
Sri Venkateshwara College of Engineering
Vidyanagar, Bangalore-562 157



PROPOSALS (TECHNOLOGY DEVELOPMENT) Upper Cap Funding Rs.1,00,000



SEG Name	 Sustainable Agriculture System	

SEG Contact Details Dr. R.N. Padaria, Indian Agricultural Research Institute, New Delhi.

Proposal Id C-1381/KA/BUR/SASM/1LAKH/2

Title of the Technology Smart Hydroponic Farming through innovation

Amount Requested For 100000

Date of Proposal Submitted 23-07-2023

PI Contact Details Dr. B Venkata Krishna Reddy,

grides@sycengg.edu.in, 7411286578

State Karnataka

District Bengalury Urban

Village Name Bettahalasur

Current Status Proposal assign to Expert for review

Indian Institute of Science Proposal submitted by Sri Venkateshwara College of RCI Engineering, Bangalore Bangalore AISHE Code:-U-0220) Name of Sri Venkateshwara College of State Karnataka College/Institution Engineering, Bangalore (AISHE Code:-C-1381) **Village Name** Bettahalasur District Bengaluru Urban Date of submission 23-07-2023 Block Email ID Dr. B Venkata Krishna Reddy **Coordinator Name** grides@svcengg.edu.in Principal Investigator Mobile No 7411286578 DR PRATHIMA VR

Mobile No of Principal

Investigator

Proposal Overview

Email of Principal

Investigator

Subject Expert Group:	Sustainable Agriculture System
Title Of Technology:	Technology Development
Village where it is to be implemented	Bettahalasur
Background of the Project (Priority Need)	

prathima.vr_cse@svcengg.edu.in

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Brief Objective/s of the Project	In order to reduce consumption of vegetables containing harmful chemicals, this project intends to start and promote the culture of hydroponics farming in Ahero and greater Kisumu county. Ahero is known for its rice plantations with little cultivation of vegetables. Growing vegetables a worthy opportunity to explore. Hydroponics offers a new way of cultivation which promotesall aspects of sustainable agriculture as an alternative to organic farming. It will reduce the extentof using pesticides. Products of hydroponics farming can be produced with no land or limited land. It needs little training and hand holding.
Methodology to be Adopted	The second secon
Funds Raised from Gram Panchayat	Local Administration
Details of the funds raised from other agencies	horticulture
Describe your role at various stage of the Project	1)To create awareness among the working force and non-workers about the existing problems and potentials to overcome. 2)To create awareness about the environmental and health impacts caused by the conventional waste managing practices like burning of agricultural waste 3)To establish hydroponics framework for livelihood enhancement of cultivators and an alternate livelihood for agricultural labourers and other workers, thereby improve their socio-economic status 4)To provide technical and skill development training to the unemployed, literate youth in Hydroponics, Biochar manufacture and compost making 5)To provide training in segregation of waste for employability of both illiterate men and women
Describe your role at various stage of the project	Problem formulation, Review of Literature, Design,Implementation, Testing, Deployment at Site, Maintainence
Impact on village/ Beneficiaries	Needs No Soil 2. Conserves Water 3. Facilitates a Micro-Climate 4. Predictability and Seasonality 5. Crops Grow Faster 6. Maximizes Space 7. Produces Higher Yields 8. Require Less Labor 9. Shortens the Supply Chain 10. Produces Higher Quality Food
How to maintain future sustainability of installed technology in the village	Hydroponics will be fully automated and the parameters required for effective farming will be monitored and controlled. The ambient conditions that required to be controlled are light, humidity, temperature and water circulatory system. In addition, there is a necessity to monitor and control the nutrients in the water to have an optimized growth of the plant and vegetables. The proper ratio of the nutrients for particular plant/vegetables can be measured using pH and electrical conductivity of the nutrient solution.
Impact of this work on learning of Students	Students will learn to grow plants and vegetables by this technique which will be free from pesticides and have good nutritional values. Z.Teacher will be engaged with life long learning process for the societal benefit which will use an "install-and-forget" irrigation system refereed as response drip irrigation.
Impact of this work on learning of Teacher	
duration	The complete management and integrity of the design, conduct, and reporting of the research project and for managing, monitoring, and ensuring the integrity of collaborative relationships
Duration of monitoring by PI Post Completion of the project	
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S.No	Categories of Fund	Total cost of the Product / Technology
1	Site Preparation Cost	20000
2	Equipment/Machinery cost	25000
3	Running Cost	25000
4	Manpower Cost	15000
5	Electricity Cost	10000
6	Miscellaneous Expense	5000
Total		100000

Observation / Comments

Comment By SEG	Please review the proposal and do the needful.
	Qate:01-12-2023
Comment By PI	All documents are submitted. Please verify.
	Date:23-07-2023

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Sri Venkateshwara College of Engineering Vidyanagar, Bengaluru-562 157



PROPOSALs (TECHNOLOGY DEVELOPMENT) Upper Cap Funding Rs.1,00,000



SEG Name

Rural Livelihood and Entrepreneurship Development

SEG Contact Details

NCI JITD.

Proposal Id

C-1381/KA/BUR/RLED/1LAKH/1

Title of the Technology

Women Entrepreneurship Development in Medicinal and Aromatic

Plants-An eco friendly approach towards rural growth

Amount Requested For

95000

Date of Proposal Submitted

26-07-2023

PI Contact Details

Dr. B Venkata Krishna Reddy,

qrides@svcengg.edu.in, 7411286578

State

Karnataka

District

Bengaluru Urban

Village Name

Bettahalasur

Current Status

Forward to SEG

Proposal submitted by	Sri Venkateshwara College of Engineering, Bangalore	RCI	Indian Institute of Science Bangalore (AISHE Code:-U-0220)
Name of College/Institution	Sri Venkateshwara College of Engineering, Bangalore (AISHE Code:-C-1381)	State	Karnataka
District	Bengaluru Urban	Village Name	Bettahalasur
Block		Date of submission	26-07-2023
Coordinator Name	Dr. B Venkata Krishna Reddy	Email ID	qrides@svcengg.edu.in
Mobile No	7411286578	Principal Investigator	DR NIRMALA S GUPTHA
Email of Principal Investigator	nirmala.s.guptha_cse@svcengg.edu.in	Mobile No of Principal Investigator	9845113174

Proposal Overview

Subject Expert Group:	Rural Livelihood and Entrepreneurship Development
Title Of Technology:	Technology Development
Village where it is to be implemented	Bettahalasur
Background of the Project (Priority Need)	×

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Brief Objective/s of the Project

Methodology to be Adopted

Given that women constitute the larger percentage of the world's populace and their motherly instincts, one would expect that effective participation of female in entrepreneurial activities will offer a far reaching impact on the economy, yet their contribution is scarcely apparent regardless of the widespread recognition that female entrepreneurship plays an important part in financial development, their level of development has remained on a downward trend. Literature aground has attested to the fact that there is urgent need for concerted efforts of female businesspersons themselves, government, development community, the social order, their household, scholars and other shareholders to fight against the challenges hindering sustainability of women entrepreneurship in contemporary business undertakings. A large proportion of women run their enterprises from their homes due to a lack of practical physical buildings, difficulties in securing markets for their products particularly those from remote areas, and poor client consumption aptitude. Problems faced by women entrepreneurs can be categorized as "objective and subjective ones". "Objective" ones are initiated by problems in striking a stability amongst entrepreneurial activity and, in this case, individual lifetime comprises household, childcare and household duties. Subjective difficulties emanate from socio-cultural biases, official, lawful and tax gaps in the law making of various nations, as well as present typecasts related to the role of females, particularly in male-controlled cultures. Entrepreneurship development in medicinal and aromatic plants is an approach of developing human resource and train the youth for taking risk and managing resources in efficient way. The objective of the study is to understand the current situation, trends and potential of medicinal and aromatic plants for development of entrepreneurship. Entrepreneurship in medicinal and aromatic plant includes production, processing, marketing, trade, and distribution of raw materials, also including supply of Inputs and services. Medicinal and aromatic plants are demanded by herbal industries and pharmaceutical industry. The study will help in identifying entrepreneurship apportunities in medicinal and aromatic plants and challenges associated with it. Technical guidance and consultancy provided to the farmers by the qualified entrepreneurs and establishing testing facilities and agriclinics are some of the important areas of emerging opportunities in this sector. The study will also help in identifying the constraints that affect the spread of cultivation of medicinal and aromatic crops.

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Funds Raised from Gram Panchayat	Others
Details of the funds raised from other agencies	Upon discussions with villagers, farmers
Describe your role at various stage of the Project	The complete management and integrity of the design, conduct, and reporting of the research project and for managing, monitoring, and ensuring the integrity of collaborative relationships
Describe your role at various stage of the project	Planning, design, implementation, verification, validation, maintainence
Impact on village/ Beneficiaries	1) Awareness among the rural women working force and non-workers about the existing problems and potentials to overcome. 2) Awareness about the environmental and health impacts caused by the conventional practices and to overcome it naturally with cultivation process of medicinal plants. 3) To establish framework for livelihood enhancement of rural women cultivators and an alternate livelihood for agricultural labourers and other workers, thereby improving their socioeconomic status 4) To provide technical and skill development training to the unemployed rural women, provide literacy to women towards growth of medicinal and aromatic plants using smart technologies. 5) To

illiterate men and women

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provide training in segregation of waste for employability of both

How to maintain future sustainability of installed technology in the village	1) Awareness among the rural women working force and non-workers about the existing problems and potentials to overcome. 2) Awareness about the environmental and health impacts caused by the conventional practices and to overcome it naturally with cultivation process of medicinal plants. 3) To establish framework for livelihood enhancement of rural women cultivators and an alternate livelihood for agricultural labourers and other workers, thereby improving their socioeconomic status 4) To provide technical and skill development training to the unemployed rural women, provide literacy to women towards growth of medicinal and aromatic plants using smart technologies. 5) To provide training in segregation of waste for employability of both illiterate men and women
Impact of this work on learning of Students	Student will gain an exposure to cultivate medicinal and aromatic plantseac Teacher will be with continuous research and development acitivities for societal benefit
Impact of this work on learning of Teacher	
Role of PI after compilation of the project duration	Testing and maintainence as and when the need arises
Duration of monitoring by PI Post Completion of the project	
Supporting Document	View Document

S.No	Categories of Fund	Total cost of the Product / Technology
1	Site Preparation Cost	20000
2	Equipment/Machinery cost	10000
3	Running Cost	20000
4	Manpower Cost	25000
5	Electricity Cost	10000
6	Miscellaneous Expense	10000
Total		95000

Observation / Comments

Comment By PI	All documents are submitted. Please verify.
	Date:26-07-2023

Sri Venkaleshwara College of Engineering Vidyanagar, Bengaluru-562 157



PROPOSALS (TECHNOLOGY DEVELOPMENT) Upper Cap Funding Rs.1,00,000



SEG Name

Rural Energy Systems

SEG Contact Details

Prof. P. M. V. Subbarao.

Indian Institute of Technology, Delhi

Proposal Id

C-1381/KA/BUR/RESS/1LAKH/1

Title of the Technology

Stabilised soll housing construction

Amount Requested For

80000

Date of Proposal Submitted

22-07-2023

PI Contact Details

Dr. B Venkata Krishna Reddy,

qrides@svcengg.edu.in, 7411286578

State

Karnataka

District

Bengaluru Urban

Village Name

Bettahalasur

Current Status

Forward to NCI to assign to concern SEG

Proposal submitted by	Sri Venkateshwara College of Engineering, Bangalore	RCI	Indian Institute of Science, Bangalore (AISHE Code:-U-0220)
Name of College/Institution	Sri Venkateshwara College of Engineering, Bangalore (AISHE Code:-C-1381)	State	Karnataka
District	Bengaluru Urban	Village Name	Bettahalasur
Block		Date of submission	22-07-2023
Coordinator Name	Dr. B Venkata Krishna Reddy	Email ID	qrides@svcengg.edu.in
Mobile No	7411286578	Principal Investigator	Dr Latha M S
Email of Principal Investigator	lathamsm@yahoo.co.in	Mobile No of Principal Investigator	9986054960

Proposal Overview

Subject Expert Group:	Rural Energy Systems	
Title Of Technology:	Technology Development	
Village where it is to be implemented	Bettahalasur	

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Background of the Project (Priority Need)	
Brief Objective/s of the Project	To provide sustainable soil block construction
Methodology to be Adopted	
Funds Raised from Gram Panchayat	Gram Panchayat
Details of the funds raised from other agencies	Towards the material purchase for the construction
Describe your role at various stage of the Project	Step1: Collection of soil sample and physical testing Step2: Type of stabiliser Step 3: Proportion of design mix Step 4: Manufacture of stabilised soil blocks in 24 hours Step 5: Construction of housing for needy rural background people
Describe your role at various stage of the project	Month 1: Collection of soil sample Month 2: Manufacture of stabilised soil blocks in 24 hours Month 3: Construction of houses for rural background people
Impact on village/ Beneficiaries	
How to maintain future sustainability of installed technology in the village	Since the material used is earth, the sustainability of the material is ensured in future.
Impact of this work on learning of Students	Impact of the work leads to large production of low carbon stabilised soil blocks and due to its speedy construction, enhances the dwelling facility in low urbanisation.
Impact of this work on learning of Teacher	
Role of PI after compilation of the project duration	Propagate or disseminate to many more gram panchayats.
Duration of monitoring by PI Post Completion of the project	
Supporting Document	View Document View Prototype

S.No	Categories of Fund	Total cost of the Product / Technology
1	Site Preparation Cost	0
2	Equipment/Machinery cost	50000
3	Running Cost	0
4	Manpower Cost	20000
5	Electricity Cost	0
6	Miscellaneous Expense	10000
Total		80000

Observation / Comments

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Comment By SEG	This proposal is not fit in Rural Energy Systems. Please transfer this proposal to Rural Infrastructure SEG.
	Date:10-08-2023
Comment By Pl	All documents are submitted. Please verify.
	Date:22-07-2023

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PRINCIPAL
Sri Venkateshwara College of Engineering
Vidyanagar, Bengaluru-562 157



PROPOSALS (TECHNOLOGY DEVELOPMENT) Upper Cap Funding Rs.1,00,000



SEG Name

Sustainable Agriculture System

SEG Contact Details

Dr. R.N. Padaria,

Indian Agricultural Research Institute, New Deihi.

Proposal Id

C-1381/KA/BUR/SASM/1LAKH/1

Title of the Technology

Sustainable storage technology for perishable agricultural products

Amount Requested For

70000

Date of Proposal Submitted

22-07-2023

PI Contact Details

Dr. B Venkata Krishna Reddy.

qrides@svcengg.edu.in, 7411286578

State

Karnataka

District

Bengaluru Urban

Village Name

Bettahalasur

Current Status

Proposal assign to Expert for review

Proposal submitted by	Sri Venkateshwara College of Engineering, Bangalore	RCI	Indian Institute of Science Bangalore (AISHE Code:-U-0220)
Name of College/Institution	Sri Venkateshwara College of Engineering, Bangalore (AISHE Code:-C-1381)	State	Kamataka
District	Bengaluru Urban	Village Name	Bettahalasur
Block		Date of submission	22-07-2023
Coordinator Name	Dr. B Venkata Krishna Reddy	Email ID	grides@svcengg.edu in
Mobile No	7411286578	Principal Investigator	Dr Latha M S
Email of Principal Investigator	lathamsm@yahoo.co.in	Mobile No of Principal Investigator	9986054960

Proposal Overview

Subject Expert Group:	Sustainable Agriculture System
Title Of Technology:	Technology Development
Village where it is to be implemented	Bettahalasur

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Background of the Project (Priority Need)	
Brief Objective/s of the Project	To innovate sustainable storage technology for perishable agriculture products
Methodology to be Adopted	
Funds Raised from Gram Panchayat	Gram Panchayat
Details of the funds raised from other agencies	Not applicable
Describe your role at various stage of the Project	Step1: Collection of suitable soil material for the storage purpose Step2: Manufacture of stabilised mud blocks Stpe3: Construction of model room for the storage of perishable agricultural products Step4: Measuring the temperature variation
Describe your role at various stage of the project	Month 1: Suitable soil collection and stabiliser and physical laboratory test Month 2: Manufacturing of stabilised soil bricks and checking the suitability of bricks in compression. Month 3: Construction of storage room of size 1m x 1m x1m as model Month 4: Precise tabulation of temperature
mpact on village/ Beneficiaries	
low to maintain future sustainability of installed technology in the village	The sustainable storage for perishable agriculture goods is long lasting because of its durability, hence future sustainability is ever fasting.
mpact of this work on learning of Students	The technology can bring up changes in market demand of perishable goods, thus promoting farmers. This will lead to improvement of technology towards the introduction to students or teachers.
mpact of this work on learning of reacher	
Role of PI after compilation of the project duration	To meet farmers and explain the benefit of sustainable storage technology,
Duration of monitoring by PI Post Completion of the project	
Supporting Document	View Document View Prototype

S.No	Categories of Fund	Total cost of the Product / Technology
1	Site Preparation Cost	Ó
2	Equipment/Machinery cost	40000
3	Running Cost	0
4	Manpower Cost	20000
5	Electricity Cost	0
6	Miscellaneous Expense	10000
Total		70000

Observation / Comments

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Comment By SEG	Please review the proposal and do the needful.	
	Date:Q1-12-2Q23	
Comment By PI	All documents are submitted. Please verify.	
	Date:22-07-2023	

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Sri Venkaleshwara College of Engineerin-Vidyanagar, Bengaluru-562 157



PROPOSALs (TECHNOLOGY DEVELOPMENT) Upper Cap Funding Rs.1,00,000



SEG Name

Rural Energy Systems

SEG Contact Details

Prof. P. M. V. Subbarao,

Indian Institute of Technology, Delhi

Proposal Id

C-1381/KA/BUR/RESS/1LAKH/2

Title of the Technology

PHOTOVOLTAIC SMART WATER PUMPING SYSTEM FOR RURAL

DEVELOPMENT

Amount Requested For

100000

Date of Proposal Submitted

22-07-2023

PI Contact Details

Dr. B Venkata Krishna Reddy,

qrides@svcengg.edu.in,

7411286578

State

Karnataka

District

Bengaluru Urban

Village Name

Bettahalasur

Current Status

Rejected by SEG's

Proposal submitted by	Sri Venkateshwara College of Engineering, Bangalore	RCI	Indian Institute of Science, Bangalore (AISHE Code:-U-0220)
Name of College/Institution	Sri Venkateshwara College of Engineering, Bangalore (AISHE Code:-C-1381)	State	Karnataka
District	Béngaluru Urban	Village Name	Bettahalasur
Block		Date of submission	22-07-2023
Coordinator Name	Dr. B Venkata Krishna Reddy	Email ID	qrides@svcengg.edu.in
Mobile No	7411286578	Principal Investigator	Dr Poornima G R
Email of Principal Investigator	poornima.gr_ece@svcengg.edu.in	Mobile No of Principal Investigator	9886753829

Proposal Overview

Subject Expert Group:	Rural Energy Systems
Title Of Technology:	Technology Development
Village where it is to be implemented	Bettahalasur
Background of the Project (Priority Need)

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Brief Objective/s of the Project	In India, rural area faces a lot of crisis on electricity availability. To solve the problem of this crisis, at day to day activities based on water conservation for house hold works. Some of the houses use overhead tanks without controller which causes overflow of water resulting in wastage of water as well as efectricity, we designed and developed an Arduino based automatic water level controller to overcome the limitations of existing AC pump. This water pumping system consists of a Solar panel, DC Source, DC pump, controller, sensor and a relay. When water waves are sensed by the floating switch, the sensor produces the signal to the controller and the motor pump is automatically turned on and which is in turn driven by a DC source. The water level is measured with the help of sensors. If the water level in the sump goes below the floating switch then the motor is switched off assuming the water is empty. If the water level in the tank goes above the floating switch then the sensor switches off the pump assuming the water is full. The device automatically monitors the water level and hence triggers the relay which in turn controls the motor operation. A prototype is developed under laboratory test bench condition and it was observed that the water pumped using a DC source was able to suffice the daily requirement of a rural household. The DC pump is able to pump 5 liters per minute under laboratory test condition.
Methodology to be Adopted	
Funds Raised from Gram Panchayat	Local Administration
Details of the funds raised from other agencies	Mahatma Gandhi Institute for Energy and Rural Development
Describe your role at various stage of the Project	Identifying the necessary requirements from the selected site, to prioritize the gathered requirements, overall execution and completion of the proposed work using modern tools and technologies
Describe your role at various stage of the project	1. Problem formulation for the selected site 2. Survey of identified site for number of beneficiary 3. Planning & blue print 4. Design and development of proposed model 5. Verification and validation of deployed model 6. Monitoring and Report formulation
Impact on village/ Beneficiaries	a. Saves power it can be used in places where there is problem of load Shedding or where there is no electricity access. It limits the amount of electricity, as it is automatically controlled. Today energy conservation is the utmost need and it our duty to save energy for future. b. Saves Money Automatic water level controller saves power, it saves money as well. Regulation of water is optimized using this system which means that the wastage of electricity and wastage of water are minimised. This also saves a huge amount of investment along without any manpower involved. c. Works Automatically The most advantage of water level controller is that it can work on its own. It is because of relay and timer used in the controller switches the On and Off operation automatically. d. Minimises Water wastage The water usage can be minimized with a water level controller. Water pumps are only used more during the day time. A water controller is helpful because it automatically provides more water during the day and less water at night. As a result, water remains at its appropriate level at all times.
How to maintain future sustainability of installed technology in the village	Frequent visits to site and wear and tear annual maintenance
mpact of this work on learning of Students	Student : Problem based solutions towards societal Problems Teacher. Enhances skill based adaptation through technology
mpact of this work on learning of	

Role of PI after compilation of the project

Duration of monitoring by PI Post Completion of the project

duration

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Overall supervision of the proposed model, design , implementation and installation at site level

Supporting Document

View Prototype View Prototype

Total cost of the Product / Technology

S.No	Categories of Fund	Total cost of the Product / Technolog
1	Site Preparation Cost	25000
2	Equipment/Machinery cost	20000
3	Running Cost	20000
4	Manpower Cost	20000
5	Electricity Cost	5000
6	Miscellaneous Expense	10000
Total		100000

Observation / Comments

Comment By SEG	Pl not reply the query and rejected Date:29-09-2023	
Comment By SEG	This section is Technology Development. Please provide which technology is developed by PL. The installation/ maintenance of systems is not covered in this section. The budget is not justified. Date:15-08-2023	
Comment By PI	All documents are submitted. Please verify. Date:22-07-2023	
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Sri Venkaleshwara College of Engineering Vidyanagar, Bengaluru-562 157