



CITY ENGINEERING COLLEGE
 Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
 Doddakallasandra, Off Kanakapura Main Road,
 Next to Gokulam Apartment, Bangalore - 560 062.



Grants received from Government and non-governmental agencies for research projects during the last five years.

Year 2023-24

Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/non-Government)
DIGITAL ASSISTANT FOR LEGAL AWARENESS	Mrs. Ambika P R Mrs. Archana Bhat	Computer science engineering	2024	Rs.4500	6months	KSCST	Government
WASTE DETECTION USING COMPUTER VISION	Mrs. Varalakshmi R Mrs. Swetha A	Computer science engineering	2024	Rs.4500	6months	KSCST	Government
HARVESTING TOMORROW'S POWER - IOT DRIVEN SMART AUTOMATION USING RENEWABLE ENERGY RESOURCES	Mrs. Shruthi Vijay Mrs. Harshvardhan U	Computer science engineering	2024	Rs.5000	6months	KSCST	Government
VECTOR 1 F1 DECISION SUPPORT SYSTEM	Dr Vagdevi S	Artificial Intelligence and Machine Learning	2024	Rs.4000	6months	KSCST	Government

Year 2022-23

USER FRIENDLY DEVICES FOR AGED OR PHYSICALLY CHALLENGED PEOPLE	Mrs. Archana Bhat Mrs. Ambika P R	Computer science engineering	2023	Rs.5000	6 months	KSCST	Government
PROSTHETIC ARM ANF HOME APPLIENCES CONTROLLED BY MIND THOUGHTS AND EYE BLINKS	Mrs. Sangeetha Rao S Mrs. Tejaswini B N	Computer science engineering	2023	Rs.4000	6 months	KSCST	Government

Year 2021-22

AI-BASED CROP EXHORTATION IN THE CLOUD	Dr. N Rajashekar Reddy Mrs. Laxmi M C	Computer science engineering	2022	Rs.6000	6 months	KSCST	Government
--	--	------------------------------	------	---------	----------	-------	------------

SWIRL TECHNOLOGY & MULTITUDINAL FARMLAND MAINTENANCE WITH INTEGRATED AGRI-BOT	Dr. Shalini Prasad	Electronics and Communication	2022	Rs.8000	6 months	KSCST	Government
SMART ON WHEELS WITH FACE DETECTION USING RASPBERRY PI AND HEALTH MONITORING SYSTEM	Mr. G S Mallikarjuna	Electronics and Communication	2021-2022	Rs.5000	1year	VTU	Government
AUTOMATIC WASTE SEGREGATION	Mr. Vishva Kiran	Electronics and Communication	2021-2022	Rs.5000	1year	VTU	Government
DESIGN OF SMART SOLUTION SYSTEM FOR AGRICULTURE LANDS TO PROTECT CROPS FROM RAIN	Mr. Sampath	Mechanical Engineering	2021-2022	Rs.5000	1year	VTU	Government
TRAIN TRACK CRACK DETECTION AND ACCIDENT DETECTION SYSTEM	Mr. Anil	Mechanical Engineering	2021-2022	Rs.5000	1year	VTU	Government
TRAFFIC CONGESTION AND POSSIBLE SOLUTIONS IN URBAN TRANSPORTATION SYSTEM	Mr. Jayanth K S	Civil Engineering	2021-2022	Rs.5000	1year	VTU	Government
ECO FRIENDLY ALTERNATIVES TO TRADITIONAL CONCRETE.	Mr. Manjunath K E	Civil Engineering	2021-2022	Rs.5000	1year	VTU	Government
SMART FARMING AND COTTON LEAF DISEASE DETECTION USING AI	Dr A N Nandakumar	Computer science engineering	2021-2022	Rs.5000	1year	VTU	Government
A SMART WEARABLE DEVICE USING IOT AND AI FOR ASSISTING BLIND AND RETARDED PEOPLE	Dr S Vagdevi	Computer science engineering	2021-2022	Rs.5000	1year	VTU	Government
Year 2020-21							
SMARTAGRONOMIC SYSTEM WITH GLOBAL STORAGEACCESS USING IOT	Ms. Deepika R Mrs. Ambika P R	Computer science engineering	2020-2021	Rs.6000	6 Months	KSCST	Government
VISION BASED BANKNOTE RECOGNITION SYSTEM	Mrs. Archana Bhat	Computer science engineering	2020-2021	Rs.5000	1year	VTU	Government

SMARTAGRONOMIC SYSTEM WITH GLOBAL STORAGEACCESS USING IOT	Ms. Deepika R	Computer science engineering	2020-2021	Rs.5000	1year	VTU	Government
SMART FARMING	Mrs. . Deepa Mathew	Electronics and Communication	2020-2021	Rs.5000	1year	VTU	Government
GARBAGE SEGREGATION AND MONITORING SYSTEM	Mr. Mallikarjuna G S	Electronics and Communication	2020-2021	Rs.5000	1year	VTU	Government
DESIGN & FABRICATION OF CONTROLLED WIRELESS AGRO SPRAYER	Mr Sampath H P	Mechanical Engineering	2020-2021	Rs.5000	1year	VTU	Government
AUTOMATED CIRCULAR STORAGE AND RETRIVAL SYSTEM CONTROLLED BY CNC SHIELD		Mechanical Engineering	2020-2021	Rs.5000	1year	VTU	Government
RECYCLING OF WASTE PLASTICS TO BIOFUEL USING PYROLYSIS	Mr. Vinay kumar S N	Civil Engineering	2020-2021	Rs.5000	1year	VTU	Government
AN EXPERIMENTAL STUDY ON PROPERTIES OF SILICA FUME BASED HYBRID FIBER REINFORCED CONCRETE WITH DIFFERENT ASPECT RATIO	Ms. Vidyadhare C V	Civil Engineering	2020-2021	Rs.5000	1year	VTU	Government



CITY ENGINEERING COLLEGE

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
Doddakallasandra, Off Kanakapura Main Road,
Next to Gokulam Apartment, Bangalore - 560 062.



Criteria 3- Research, Innovations and Extension

Key Indicator: 3.2- Innovation Ecosystem

Metric Number: 3.2.1 QIM.

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation center and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident.

ACADEMIC YEAR:2023-2024

KSCST Grants Details



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. U T Vijay

Executive Secretary

19th April, 2024

Ref: 7.1.01/SPP/37

To,
The Principal
City Engineering College
Doddakallasandra Kanakapura Main Road Vasanthapura
Bengaluru – 560 062

Dear Sir/Madam,

Sub : Sanction of Student Project - 47th Series: Year 2023-2024

Project Proposal Reference No. : 47S_BE_2592

Ref : Project Proposal entitled **DIGITAL ASSISTANT FOR LEGAL AWARENESS**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 47th Series". The project details are as below:

Student(s)	Mr. ABHINAV KUMAR SINGH	Department	COMPUTER SCIENCE AND ENGINEERING
	Mr. ADARSH MISHRA		
	Mr. AJAY ANUPAM		
	Mr. RAVI KUMAR		
Guide(s)	Mrs. AMBIKA P. R.	Sanctioned Amount (in Rs.)	4,500.00
	Mrs. ARCHANA BHAT		

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/6s8hq5XbScsBMv3G9>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. U T Vijay

Executive Secretary

19th April, 2024

Ref: 7.1.01/SPP/37

To,
The Principal
City Engineering College
Doddakallasandra Kanakapura Main Road Vasanthapura
Bengaluru – 560 062

Dear Sir/Madam,

Sub : Sanction of Student Project - 47th Series: Year 2023-2024

Project Proposal Reference No. : 47S_BE_2875

Ref : Project Proposal entitled **WASTE DETECTION USING COMPUTER VISION**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 47th Series". The project details are as below:

Student(s)	Ms. LIKITHA R.	Department	COMPUTER SCIENCE AND ENGINEERING
	Mr. SUJAY V.		
	Mr. IMRAN KHAN N.		
	Mr. R. A. RAAJESH		
Guide(s)	Prof. VARALAKSHMI P.	Sanctioned Amount (in Rs.)	4,500.00
	Prof. SWETHA A.		

Instructions:

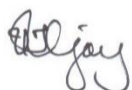
- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/6s8hq5XbScsBMv3G9>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)

- 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held **third week of May 2024** onwards through Online Mode and the details of the same will be intimated shortly by email / Website
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/Mi446v1U5fdFcMD99>. The report should be prepared in the format prescribed by the university.
 - i) The **Utilization Certificate and Statement of Expenditure duly signed by competent authority** of consolidated sanctioned projects from your institution need to be submitted **20 August 2024** without fail.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(U T Vijay)

Copy to:

- 1) The HoD
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Prof. VARALAKSHMI P. Prof. SWETHA A.
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. U T Vijay

Executive Secretary

19th April, 2024

Ref: 7.1.01/SPP/37

To,
The Principal
City Engineering College
Doddakallasandra Kanakapura Main Road Vasanthapura
Bengaluru – 560 062

Dear Sir/Madam,

Sub : Sanction of Student Project - 47th Series: Year 2023-2024

Project Proposal Reference No. : 47S_BE_0903

Ref : Project Proposal entitled **HARVESTING TOMORROW'S POWER - IOT DRIVEN SMART AUTOMATION USING RENEWABLE ENERGY RESOURCES**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 47th Series". The project details are as below:

Student(s)	Ms. BHARGAVI N. PRAKASH	Department	COMPUTER SCIENCE AND ENGINEERING
	Ms. ANANYA B. C.		
	Ms. DEEPASHREE N.		
	Ms. B. DHANALAKSHMI BAI		
Guide(s)	Prof. SHRUTHI VIJAY	Sanctioned Amount (in Rs.)	5,000.00
	Prof. HARSHA VARDHAN U.		

Instructions:

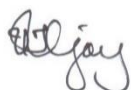
- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/6s8hq5XbScsBMv3G9>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)

- 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held **third week of May 2024** onwards through Online Mode and the details of the same will be intimated shortly by email / Website
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/Mi446v1U5fdFcMD99>. The report should be prepared in the format prescribed by the university.
 - i) The **Utilization Certificate and Statement of Expenditure duly signed by competent authority** of consolidated sanctioned projects from your institution need to be submitted **20 August 2024** without fail.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(U T Vijay)

Copy to:

- 1) The HoD
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Prof. SHRUTHI VIJAY Prof. HARSHA VARDHAN U.
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. U T Vijay

Executive Secretary

19th April, 2024

Ref: 7.1.01/SPP/37

To,
The Principal
City Engineering College
Doddakallasandra Kanakapura Main Road Vasanthapura
Bengaluru – 560 062

Dear Sir/Madam,

Sub : Sanction of Student Project - 47th Series: Year 2023-2024

Project Proposal Reference No. : 47S_BE_5398

Ref : Project Proposal entitled **VECTOR 1 F1 DECISION SUPPORT SYSTEM**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 47th Series". The project details are as below:

Student(s)	Mr. KEDAR JOSHI	Department	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
	Ms. KOKILA K. R.		
	Mr. SUHAS GAJANANA		
Guide(s)	Prof. VAGDEVI S.	Sanctioned Amount (in Rs.)	4,000.00

Instructions:

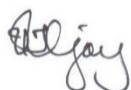
- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/6s8hq5XbScsBMv3G9>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)

- 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held **third week of May 2024** onwards through Online Mode and the details of the same will be intimated shortly by email / Website
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/Mi446v1U5fdFcMD99>. The report should be prepared in the format prescribed by the university.
 - i) The **Utilization Certificate and Statement of Expenditure duly signed by competent authority** of consolidated sanctioned projects from your institution need to be submitted **20 August 2024** without fail.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(U T Vijay)

Copy to:

- 1) The HoD
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Prof. VAGDEVI S.
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



CITY

ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

FORM GFR 19-A UTILIZATION CERTIFICATE KSCST : STUDENT PROJECT PROGRAMME – 47th SERIES

Sl. No.	Letter No. and date	Amount (Rs.)	Certified that KSCST has provided partial financial support of Rs. 18,000/- towards Student Project Programme - 47 th Series
1	Ref: 7.1.01/SPP/37 Dated 19 th April 2024	Rs. 18,000/- (5000+4500+ 4500+4000)	A sum of Rs. 18,000/- only has been utilized for the purpose of Student Project Programme for which it was sanctioned.

Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly / are being fulfilled and that I have exercised the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of Checks exercised.

01. Cash Book ✓
02. Vouchers ✓

Sl No	Project Proposal Ref. No.	Title of the Project	Department/ Guide	Amount Sanctioned by KSCST	Amount Utilized by the College	Balance if any to be refunded to KSCST
1.	47S_BE_0903	HARVESTING TOMORROW'S POWER - IOT DRIVEN SMART AUTOMATION USING RENEWABLE ENERGY RESOURCES	COMPUTER SCIENCE & ENGINEERING/ Mrs. SHRUTHI VIJAY Mr. HARSHA VARDHAN U	5,000/-	5,000/-	NIL
2.	47S_BE_2592	DIGITAL ASSISTANT FOR LEGAL AWARENESS	COMPUTER SCIENCE & ENGINEERING/ Dr. AMBIKA P R Mrs. ARCHANA BHAT	4,500/-	4,500/-	NIL
3.	47S_BE_2875	WASTE DETECTION USING COMPUTER VISION	COMPUTER SCIENCE & ENGINEERING/ Mrs. VARALAKSHMI P Mrs. SWETHA A	4,500/-	4,500/-	NIL
4.	47S_BE_5398	VECTOR 1 F1 DECISION SUPPORT SYSTEM	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING/ Dr. VAGDEVI S	4,000/-	4,000/-	NIL

Skandhan

Signature of the Principal
with Seal

PRINCIPAL

CITY ENGINEERING COLLEGE

Date: 7th August 2024
Place: Bengaluru

Shashi.R

Signature of the Finance / Accounts Officer
with Seal





CITY ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

STATEMENT OF EXPENDITURE

KSCST : STUDENT PROJECT PROGRAMME – 47th SERIES

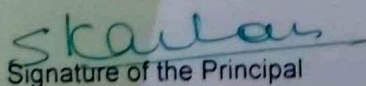
Date: 7th August 2024

This is to certify that **CITY ENGINEERING COLLEGE** having its office / institution near Doddakallasandra Metro Railway Station, Kanakapura Main Road, Bengaluru-560062, Karnataka has been granted a sum of **Rs. 18,000/-** (Rupees Eighteen thousand only) has been credited vide NEFT: **P136240322802652** dated **15th May 2024** to **Bank of India** Account No. **896110210000004** from Karnataka State Council for Science and Technology (KSCST) vide their Grant sanction letter **Ref. No. 7.1.01/SPP/37** dated **19th April 2024** towards 47th Series Student Project Programme (SPP) - 1) Project reference No. **47S_BE_0903** 2) Project reference No. **47S_BE_2592** 3) Project reference No. **47S_BE_2875** 4) Project reference No. **47S_BE_5398**.

The college has incurred the expenditure of **Rs. 18,000/-** (Rupees Eighteen thousand only) towards the said project/s.

All the expenditure voucher / invoices are duly accounted by the college and is authenticated by the Principal and Accounts Officer / Finance Officer of our institution.

The above information is extracted from the books of accounts and documents produced before us and information and explanations provided to us. We further certify that, we have verified the relevant books of accounts and documents / bills / vouchers and found that the said amount has been utilized for the purposes as laid down by the Karnataka State Council for Science and Technology (KSCST). This certificate is provided by us at the specific request of Karnataka State Council for Science and Technology (KSCST) to evidence the utilization of grants in terms of above referred grant sanction letter dated **19th April 2024**.


Signature of the Principal

with Seal

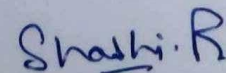
PRINCIPAL

CITY ENGINEERING COLLEGE

Kanakapura Main Road, BANGALORE - 560 061

Date: 7th August 2024

Place: Bengaluru


Signature of the Finance / Accounts Officer

with Seal





CITY ENGINEERING COLLEGE

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
Doddakallasandra, Off Kanakapura Main Road,
Next to Gokulam Apartment, Bangalore - 560 062.



Criteria 3- Research, Innovations and Extension

Key Indicator: 3.2- Innovation Ecosystem

Metric Number: 3.2.1 QIM.

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation center and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident.

ACADEMIC YEAR: 2022-2023

KSCST Grants Details



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in Website: www.kscst.iisc.emet.in, www.kscst.org.in

Dr. U T Vijay
Executive Secretary

24th April, 2023

Ref: 7.1.01/SPP/33

To,
The Principal,
City Engineering College,
Doddakallasandra, Kanakapura Main Road, Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 46th Series: Year 2022-2023

Project Proposal Reference No. : 46S_BE_4387

Ref : Project Proposal entitled **PROSTHETIC ARM AND HOME APPLIANCES CONTROLLED BY MIND-THOUGHTS AND EYE-BLINKS**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 46th Series". The project details are as below:

Student(s)	Mr. B. M. PUNEETH	Department	COMPUTER SCIENCE AND ENGINEERING
	Mr. AMITH SINGH M		
	Ms. KRUTTIKA KIRANKUMAR BHOMKAR		
	Mr. AFRID PASHA H P		
Guide(s)	Mrs. SANGEETHA RAO S	Sanctioned Amount (in Rs.)	4,000.00
	Mrs. TEGASWINI B N		

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/nWTaJjyrwzp3Wmvt6>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061



ATTESTED COPY

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. U T Vijay
Executive Secretary

Ref: 7.1.01/SPP/33

24th April, 2023

To,
The Principal,
City Engineering College,
Doddakallasandra, Kanakapura Main Road, Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 46th Series: Year 2022-2023

Project Proposal Reference No. : 46S_BE_4458

Ref : Project Proposal entitled

**USER FRIENDLY DEVICES FOR AGED OR PHYSICALLY
CHALLENGED PEOPLE**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 46th Series". The project details are as below:

Student(s)	Mr. VIVEK B U	Department	COMPUTER SCIENCE AND ENGINEERING
	Ms. SAHANA GOPAL KRISHNA HEBBAR		
	Mr. SAMBANGI SAITEJA		
	Mr. RAHUL K R		
Guide(s)	Mrs. ARCHANA BHAT	Sanctioned Amount (in Rs.)	5,000.00
	Mrs. AMBIKA PR		

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/nWtaJjvrwzp3Wmvt6>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords
 - Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - Objectives (about 10 lines)




PRINCIPAL

CITY ENGINEERING COLLEGE

Kanakapura Main Road, BANGALORE - 560 061

ATTESTED COPY


PRINCIPAL

CITY ENGINEERING COLLEGE

Kanakapura Main Road, BANGALORE - 560 061



CITY ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

FORM GFR 19-A

UTILIZATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 46th SERIES

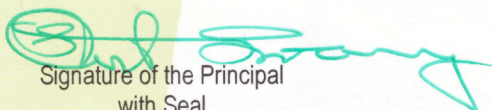
Sl. No.	Letter No. and date	Amount (Rs.)	Certified that KSCST has provided partial financial support of Rs. 9,000 towards Student Project Programme - 46 th Series
1	Ref. No:7.1.01/SPP/33 Dated 24 th April 2023	Rs. 9,000/- (4,000+5000)	A sum of Rs 9,000/- only has been utilized for the purpose of Student Project Programme for which it was sanctioned.

Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly / are being fulfilled and that I have exercised the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of Checks exercised.

01. Cash Book ✓
02. Vouchers ✓

Sl No	Project Proposal Ref. No.	Title of the Project	Department/ Guide	Amount Sanctioned by KSCST	Amount Utilized by the College	Balance if any to be refunded to KSCST
1.	46S_BE_4387	PROSTHETIC ARM AND HOME APPLIANCES CONTROLLED BY MIND-THOUGHTS AND EYE-BLINKS	COMPUTER SCIENCE AND ENGINEERING/ Mrs. SANGEETHA RAO S Mrs. TEGASWINI B N	4,000/-	4,000/-	NIL
2.	46S_BE_4458	USER FRIENDLY DEVICES FOR AGED OR PHYSICALLY CHALLENGED PEOPLE	COMPUTER SCIENCE AND ENGINEERING/ Mrs. ARCHANA BHAT Mrs. AMBIKA PR	5,000/-	5,000/-	NIL

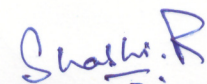

Signature of the Principal
with Seal

PRINCIPAL
CITY ENGINEERING COLLEGE

Kanakapura Main Road, BANGALORE - 560 061

Date: 05th October 2023

Place: Bengaluru


Signature of the Finance / Accounts Officer
with Seal





CITY ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

UTILISATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 46th SERIES

Date: 05th October 2023

This is to certify that CITY ENGINEERING COLLEGE having its office / institution at Near Doddakallasandra Metro Railway Station, Kanakapura Main Road, Bengaluru-560062, Karnataka has been granted a sum of Rs. 9,000/- (Rupees Nine Thousand Only) has been credited vide NEFT: P132230240891943 dated 12th May 2023 to Bank of India Account No. 896110210000004 from Karnataka State Council for Science and Technology (KSCST) vide their Grant sanction letter Ref. No. 7.1.03/SPP/33 dated 24th April 2023 towards 46th Series Student Project Programme (SPP) - 1) Project reference No. 46S_BE_4387 2) Project reference No. 46S_BE_4458

The college has incurred the expenditure of Rs. 9,000/- (Rupees Nine Thousand Only) towards the said project/s.

All the expenditure voucher / invoices are duly accounted by the college and is authenticated by the Principal and Accounts Officer / Finance Officer of our institution.

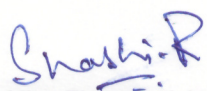
The above information is extracted from the books of accounts and documents produced before us and information and explanations provided to us. We further certify that, we have verified the relevant books of accounts and documents / bills / vouchers and found that the said amount has been utilized for the purposes as laid down by the Karnataka State Council for Science and Technology (KSCST). This certificate is provided by us at the specific request of Karnataka State Council for Science and Technology (KSCST) to evidence the utilization of grants in terms of above referred grant sanction letter dated 24th April 2023.


Signature of the Principal
with Seal

PRINCIPAL
CITY ENGINEERING COLLEGE

Date: 05th October 2023

Place: Bengaluru


Signature of the Finance / Accounts Officer
with Seal





CITY ENGINEERING COLLEGE

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
Doddakallasandra, Off Kanakapura Main Road,
Next to Gokulam Apartment, Bangalore - 560 062.



Criteria 3- Research, Innovations and Extension

Key Indicator: 3.2- Innovation Ecosystem

Metric Number: 3.2.1 QIM.

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation center and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident.

ACADEMIC YEAR: 2021-2022

KSCST / VTU Grants Details



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@isc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar

Executive Secretary

11th May, 2022

Ref: 7.1.01/SPP/91

The Principal,
City Engineering College,
Doddakallasandra,
Kanakapura Main Road,
Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 45th Series: Year 2021-2022

Project Proposal Reference No. : 45S_BE_2308

Ref : Project Proposal entitled **SWIRL TECHNOLOGY & MULTITUDINAL FARMLAND MAINTENANCE WITH INTEGRATED AGRI-BOT**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 45th Series". The project details are as below:

Student(s)	Mr. ANKIT KUMAR	Department	ELECTRONICS AND COMMUNICATION ENGINEERING
	Mr. AMARJITH V S		
	Mr. SRIVATHSA G		
Guide(s)	Dr. SHALINI PRASAD	Sanctioned Amount (in Rs.)	8,000.00

Comments / Suggestions of the Experts

Demo should be shown as per the proposal

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/YMn9K7XETu96i8KbA>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department

- 4) Name of the students & Guide(s)
 - 5) Keywords
 - 6) Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - 7) Objectives (about 10 lines)
 - 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held in the Nodal Centre/Online Mode and the details of the same will be intimated shortly by email / Website announcement.
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/PciAaAVisn6bn8AM7>. The report should be prepared in the format prescribed by the university.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The HoD
ELECTRONICS AND COMMUNICATION ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Dr. SHALINI PRASAD
ELECTRONICS AND COMMUNICATION ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@isc.ac.in, office@kscst.org.in • Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar

Executive Secretary

11th May, 2022

Ref: 7.1.01/SPP/91

The Principal,
City Engineering College,
Doddakallasandra,
Kanakapura Main Road,
Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 45th Series: Year 2021-2022

Project Proposal Reference No. : 45S_BE_2433

Ref : Project Proposal entitled **AI-BASED CROP EXHORTATION IN THE CLOUD**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 45th Series". The project details are as below:

Student(s)	Ms. RENUKA SURESH	Department	COMPUTER SCIENCE AND ENGINEERING
	Mr. PRASHANTH KUMAR N		
	Ms. SAHANA M R		
	Ms.AISHWARYA H S		
Guide(s)	Dr. N. RAJASHEKAR REDDY	Sanctioned Amount (in Rs.)	6,000.00
	Mrs. LAXMI M C		

Comments / Suggestions of the Experts

Verify the data with web data

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/YMn9K7XETu96i8KbA>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department

- 4) Name of the students & Guide(s)
 - 5) Keywords
 - 6) Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - 7) Objectives (about 10 lines)
 - 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held in the Nodal Centre/Online Mode and the details of the same will be intimated shortly by email / Website announcement.
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/PciAaAVisn6bn8AM7>. The report should be prepared in the format prescribed by the university.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The HoD
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Dr. N. RAJASHEKAR REDDY Mrs. LAXMI M C
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



CITY ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

FORM GFR 19-A

UTILIZATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 45th SERIES

Sl. No.	Letter No. and date	Amount (Rs.)	Certified that KSCST has provided partial financial support of Rs.14,000/- towards Student Project Programme - 45 th Series
1	No.7.1.01/SPP/100 Dated 17 th May 2022	14,000/- (6,000/- + 8,000/-)	A sum of Rs 14,000/- only has been utilized for the purpose of Student Project Programme for which it was sanctioned.

Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly / are being fulfilled and that I have exercised the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of Checks exercised.

01. Cash Book ✓
02. Vouchers ✓

Sl No	Project Proposal Ref. No.	Title of the Project	Department/ Guide	Amount Sanctioned by KSCST	Amount Utilized by the College	Balance if any to be refunded to KSCST
1.	45S_BE_2433	AI-BASED CROP EXHORTATION IN THE CLOUD	Computer Science & Engineering Dr. N. Rajashekar Reddy Mrs. Laxmi M C	6,000/-	6,000/-	Nil
2.	45S_BE_2308	SWIRL TECHNOLOGY & MULTITUDINAL FARMLAND MAINTENANCE WITH INTEGRATED AGRI-BOT	Dr. Shalini Prasad	8,000/-	8,000/-	Nil

Signature of the Principal
with Seal

Signature of the Finance / Accounts Officer
with Seal

CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road
Vasanthapura. BANGALORE 560 061

Date: 20th September 2022

Place: Bengaluru

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

Doddakallasandra, off Kanakapura Main Road, Bangalore 560 061.

Email: cityengineering123@gmail.com Website: www.cityengineeringcollege.ac.in

Ph: 080 - 22560313/314/315. Telefax: 080-2256 0314. Admissions Mob: 92428 92734 / 73490 32929



CITY

ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



UTILISATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 45th SERIES

Date: 20th September 2022


This is to certify that **CITY ENGINEERING COLLEGE** having its office / institution at near Doddakallasandra Metro Railway Station, Off. Kanakapura Main Road, Near Gokulam Apartment, Bengaluru-560061 Karnataka has been granted a sum of **Rs. 14,000/-** (Rupees Fourteen Thousand Only) has been credited vide NEFT: **P139220170115978** dated **19th May 2022** to Bank of India Account No. 896110210000004 from Karnataka State Council for Science and Technology (KSCST) vide their Grant sanction letter Ref. No. 7.1.01/SPP/100 dated 17th May 2022 towards 45th Series Student Project Programme (SPP) - 1) Project reference No. **45S_BE_2433** 2) Project reference No. **45S_BE_2308**.

The college has incurred the expenditure of **Rs.14,000/-** (Rupees Fourteen Thousand Only/-) towards the said project/s.

All the expenditure voucher / invoices are duly accounted by the college and is authenticated by the Principal and Accounts Officer / Finance Officer of our institution.

The above information is extracted from the books of accounts and documents produced before us and information and explanations provided to us. We further certify that, we have verified the relevant books of accounts and documents / bills / vouchers and found that the said amount has been utilized for the purposes as laid down by the Karnataka State Council for Science and Technology (KSCST). This certificate is provided by us at the specific request of Karnataka State Council for Science and Technology (KSCST) to evidence the utilization of grants in terms of above referred grant sanction letter dated **17th May 2022**.


Signature of the Principal
with Seal


Signature of the Finance / Accounts Officer
with Seal

Date: 20th September 2022

Place: Bengaluru

CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road,
Vasanthapura, BANGALORE - 560 061

CEC-22-23					
KARNATAKA STATE COUNCIL FOR SCIENCE & TECHNOLOGY					
Ledger Account					
1-Apr-2022 to 23-Sep-2022					
Date	Particulars	Vch Type	Vch No.	Debit	Credit
19-05-2022	Dr BOI - 896110210000004 - UNIV	Receipt			14000.00
	<i>NEFT RECED FROM KSCST NEFT - P139220170115978,PROJECT CSE-Dr. N RAJA REDDY GUIDE -RENUKA SURESH, PRASHANTH KUMAR N,SAHANA M R,AISHWARYA H S , PROJECT EC - Dr. SHALINI PRASAD GUIDE - ANKIT KUMAR, AMARJITH V S, SRIVASTHSA G (6000 + 8000=14000)</i>				
25-08-2022	Cr BOI - 896110210000004 - UNIV	Payment	785	6000.00	
	<i>BEING CHQ ISSUED IN FAVOUR OF RENUKA SURESH TOWARDS FINANCIAL ASSISTANCE FOR STUDENTS OF CSE DEPT FOR AI-BASED CROP EXHORTATION IN THE CLOUD UNDER THE GUIDANCE OF Dr. RAJASHEKAR REDDY & LAXMI M C</i>				
13-09-2022	Cr BOI - 896110210000004 - UNIV	Payment	837	8000.00	
	<i>BEING CHQ ISSUED IN FAVOUR OF ANKIT KUMAR TOWARDS FINANCIAL ASSISTANCE FOR STUDENTS OF EC DEPT FOR SWIRL TECHNOLOGY & MULTITUDINAL FARMLAD MAINTENANCE WITH INTEGRATED AGRIBOT UNDER THE GUIDANCE OF Dr. SHALINI PRASAD</i>				
	TOTAL		14000.00		14000.00

CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road,
Vasanthapura, BANGALORE - 560 081



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama", Belagavi-590018, Karnataka, India

Prof. B.E. Rangaswamy Ph.D.

Phone:(0831)2405468

Registrar

Fax: (0831)2405467

Ref. No. VTU/Aca/2022-23/06/99

Date:

3 APR 2023

To

The Principal

City Engineering College, Bengaluru

Sir/Madam,

Sub: Sanction of Financial Assistance for 2021-2022 to the Innovative Project of UG Final Year Students of your Institution...reg.

- Ref: 1) No. VTU/BGM/Aca/A-12/VTU-FA/2021-22/1366 dated 7-6-2022
2) Vice-Chancellor's Order dated 14-2-2023

With reference to the above, please find enclosed herewith D.D. No. 473645154 dated 3/27/2023 (mm/dd/yyyy) for Rs.40000 /- towards the sanction of financial assistance to the selected Innovative projects of UG final year students of BE/B.Tech.

Further, you are hereby informed to distributed the amount to the concerned students and get an acknowledgement for the same.

Original copy of the acknowledgement should be submitted to the undersigned on or before April 10th 2023.

Yours faithfully,

Registrar


Encl: as above



	<p>Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225, 2405454</p>
---	--

VTU Sponsored Student Project Proposal Format

01	Academic Year	2021-2022	
02	Semester	8 TH	
03	Name of the College	CITY ENGINEERING COLLEGE	
04	Branch:	ELECTRONICS AND COMMUNICATION ENGINEERING	
05	Project Title:	Smart on Wheels With Face Detection using Raspberry Pi and Health Monitoring System	
06	Project Discipline:	Health Monitoring System	
07	Principal	Name:	Dr. T N THIPPESWAMY
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	-
		Contact No:	-
		Email id:	-
11	Project Committee Coordinator (Identified by the college):	Name:	Dr. Shalini Prasad
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege.ac.in

12	Name of the project group Members	
1.Group leader and Member		
Name: Joyeeta Sarkar USN No: 1CE18EC006		
Contact: No:9741931070		
Email ID: sarkarjoyeeta2000@gmail.com		
2.Member		
Name: Akanksha G Kulkarni USN No: 1CE18EC002		
Contact No: 9742620145		
Email ID: akanksha.kul812@gmail.com		
3.Member		
Name: Shrinidhi B Cherekar USN No: 1CE18EC021		
Contact No: 8217641351		
Email ID: shrinidhi1932@gmail.com		
4.Member		
Name:		
USN No:		
Contact No:		
Email ID:		
13	Processing Fee details	Bank Name: Branch: DD number with date: OR Cheque no with date:
14	Scope/Object of the project	<ul style="list-style-type: none"> • Smart wheelchair collects information by using sensors and/or cameras to provide feedback on the user's health condition and also safely navigate itself in its environment. • Data provided from user can be used in form of health monitoring and keeping the in charge updated.

15	Methodology of work: (Including diagram flow chart And design calculations)	<ul style="list-style-type: none">•The camera mounted on the wheelchair helps to detect obstacles, as well as to identify people known to the user.• The user can interact with the chair through AI voice• The pulse oximeter module is placed on the chair to monitor the user's health by keeping a track of the variation in their oxygen level and BPM.• The user can control the direction of the wheelchair with the help of voice using Bluetooth.
----	---	---

16	Expected Outcome of the project:	<ul style="list-style-type: none"> • Voice controlled wheelchair movement • Health monitoring using pulse-oximeter • Joystick controlled manual movement • Anti-theft using face detection. • AI Voice interaction. • App controlled movement of the chair 																								
17	Application of the Project:	To monitor the health of the user and keep the person in charge updated about their status, while making the user's life easier.																								
18	Budget details with Materials required:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Materials</th> </tr> <tr> <th style="width: 80%;"></th> <th style="text-align: right;">Price</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td>Components</td> <td style="text-align: right;">12000</td> </tr> <tr> <td>Power supply</td> <td style="text-align: right;">1000</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td>GPS and GSM</td> <td style="text-align: right;">1000</td> </tr> <tr> <td>Framework</td> <td style="text-align: right;">950</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td>Miscellaneous</td> <td style="text-align: right;">1500</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">16450</td> </tr> </tbody> </table>	Materials			Price			Components	12000	Power supply	1000			GPS and GSM	1000	Framework	950			Miscellaneous	1500			Total	16450
Materials																										
	Price																									
Components	12000																									
Power supply	1000																									
GPS and GSM	1000																									
Framework	950																									
Miscellaneous	1500																									
Total	16450																									

19	Date of commencement of the project:	20-12-2021
20	Probable date of completion of the project:	20-05-2022
21	Duration of project work:	6
22	Per chart for completion of the project in said duration as per planned activities:	


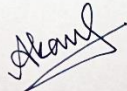

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our' knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately




We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the student	Signature with date
01	Joyeeta Sarkar	
02	Akanksha G Kulkarni	
03	Shrinidhi B Cherekar	

	<p>Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225, 2405454</p>
---	--

VTU Sponsored Student Project Proposal Format

01	Academic Year	2021-2022	
02	Semester	8 TH	
03	Name of the College	CITY ENGINEERING COLLEGE	
04	Branch:	ELECTRONICS AND COMMUNICATION ENGINEERING	
05	Project Title:	Automatic Waste Segregation	
06	Project Discipline:	Industrial Waste	
07	Principal	Name:	Dr. T N THIPPESWAMY
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof Vishva Kiran
		Contact No:	9972372314
		Email id:	vishvakiran@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	-
		Contact No:	-
		Email id:	-
11	Project Committee Coordinator (Identified by the college):	Name:	Dr. Shalini Prasad
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege.ac.in

12	Name of the project group Members	
1.Group leader and Member		
Name: Mohammed Imranulla Khan USN No: 1CE18EC011		
Contact: No:9380644270		
Email ID: ziyaullakhan.m@gmail.com		
2.Member		
Name:		
USN No: 1CE18EC017		
Contact No: 6363357561		
Email ID: sagarsash9@gmail.com		
3.Member		
Name: Gangadhar P Upar		
USN No: 1CE18EC005		
Contact No: 9513154306		
Email ID: pgangadhar599@gmail.com		
4.Member		
Name:		
USN No:		
Contact No:		
Email ID:		
13	Processing Fee details	Bank Name: Branch: DD number with date: OR Cheque no with date:
14	Scope/Object of the project	Segregator and monitoring system” sorts wastes into three different categories i. metal, ii. dry(plastic, glass, paper) iii. the wet (organic) waste.

15	Methodology of work: (Including diagram flow chart And design calculations)	<ol style="list-style-type: none">1. Drop the waste into the pipe.2. IR sensor will sense the waste if (sensor =0) and it will rest on the bottom plate i., Object detected3. Now the sensor on the plate will sense the waste as in 3 categories Metallic or wet.4.If (Inductive sensor == 1) then the waste is metallic then the mechanism will bring the metal collecting bin below the pipe and the servo will let the waste fall into the bin.5. Similarly, If (The Rain drop sensor <700) then the waste is wet waste then the mechanism will bring the wet collecting bin below the pipe and the servo will let the waste fall into the bin.6. If ((Inductive sensor == 0) && (The Rain drop sensor >700)) the sensor does not activate then the waste will be detected as dry waste.
----	---	--

16	Expected Outcome of the project:	The Outcome of the project is to segregate Industrial waste mainly, like metal which is found commonly in most of the industries and this can be done by the help of Inductive sensor which senses only metal. Other wastes are segregated as dry and wet waste with the help of IR sensor and Rain drop sensor.																						
17	Application of the Project:	To segregate the waste appropriately so that it can be processed accordingly instead of being dumped at the dumping yard.																						
18	Budget details with Materials required:	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="785 667 1482 701">Materials</th> </tr> <tr> <th data-bbox="785 701 1145 745"></th> <th data-bbox="1145 701 1482 745">Price</th> </tr> </thead> <tbody> <tr> <td data-bbox="785 745 1145 835">Components</td> <td data-bbox="1145 745 1482 835">6000</td> </tr> <tr> <td data-bbox="785 835 1145 1048">SMPS power supply (12v)</td> <td data-bbox="1145 835 1482 1048">1500</td> </tr> <tr> <td data-bbox="785 1048 1145 1104">IR sensor</td> <td data-bbox="1145 1048 1482 1104">500</td> </tr> <tr> <td data-bbox="785 1104 1145 1149">Rain Drop sensor</td> <td data-bbox="1145 1104 1482 1149">700</td> </tr> <tr> <td data-bbox="785 1149 1145 1193">Inductive sensor</td> <td data-bbox="1145 1149 1482 1193">1200</td> </tr> <tr> <td data-bbox="785 1193 1145 1238">Containers</td> <td data-bbox="1145 1193 1482 1238">500</td> </tr> <tr> <td data-bbox="785 1238 1145 1283">Stepper motor</td> <td data-bbox="1145 1238 1482 1283">1100</td> </tr> <tr> <td data-bbox="785 1283 1145 1373">Miscellaneous</td> <td data-bbox="1145 1283 1482 1373">3000</td> </tr> <tr> <td data-bbox="785 1373 1145 1417">Total</td> <td data-bbox="1145 1373 1482 1417">14500</td> </tr> </tbody> </table>	Materials			Price	Components	6000	SMPS power supply (12v)	1500	IR sensor	500	Rain Drop sensor	700	Inductive sensor	1200	Containers	500	Stepper motor	1100	Miscellaneous	3000	Total	14500
Materials																								
	Price																							
Components	6000																							
SMPS power supply (12v)	1500																							
IR sensor	500																							
Rain Drop sensor	700																							
Inductive sensor	1200																							
Containers	500																							
Stepper motor	1100																							
Miscellaneous	3000																							
Total	14500																							

19	Date of commencement of the project:	20-12-2021
20	Probable date of completion of the project:	20-05-2022
21	Duration of project work:	6
22	Per chart for completion of the project in said duration as per planned activities:	


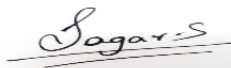
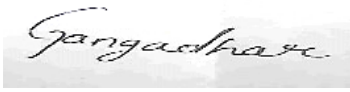
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our' knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL. No	Name of the student	Signature with date
01	Mohammed Imranulla Khan	
02	Sagar S	
03	Gangadhar P UPAR	



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ 1994" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - 590 018 ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU -FA /2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 41 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under "Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2021-22.

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes
Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling
 - ✓ Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.
6. University will not accept the Project proposals of following categories.

Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

- i) Principal -Chairman
- ii) HoD of the respective Branch - Member
- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
- iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).

9. All the selected projects would be invited for State Level Project Exhibition at VTU.

10. Selected project team along with the guide shall participate in the exhibition.

11. During the state level project exhibition “Best Project of the Year” will be awarded.

The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR



To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi




Copy FWCs to:

- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	City engineering college	
04	Branch:	Civil	
05	Project Title:	TRAFFIC CONGESTION AND POSSIBLE SOLUTIONS IN URBAN TRANSPORTATION SYSTEM	
06	Project Discipline:	Civil	
07	Principal	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
09	Project Guide	Name:	Jayanth K S
		Contact No:	9964458944
		Email id:	jayanthkatte@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

Name of project group Members				
1.Group leader and Member				
Name: Punith kumar s				
USN No. : 1CE16CV032				
Contact No: 7259281814				
Email id: punithreddy2345@gmail.com				
2.Member				
Name: Rashmi k				
USN No. : 1CE17CV026				
Contact No: 9945735269				
Email id: rashmigowda0994@gmail.com				
3.Member				
Name: George Genes Assey				
USN No. : 1CE18CV400				
Contact No: 7829142089				
Email id: mrgeges@gmail.com				
4.Member				
Name:	Passport size photo			
USN No. :				
Contact No:				
Email id:				
5.Member(If any)				
Name:	Passport size photo			
USN No. :				
Contact No:				
Email id:				
13	<table border="1"> <tr> <td rowspan="2">Processing Fee Details</td> <td>Bank name :</td> </tr> <tr> <td>Branch :</td> </tr> </table>	Processing Fee Details	Bank name :	Branch :
Processing Fee Details	Bank name :			
	Branch :			

		DD number with date : OR Cheque no with date :
14	Scope / Objectives of the project:	<ul style="list-style-type: none">• To evaluating road network, parking facilities and pedestrian facilities in relation to congestion (identifying the congestion and mobility problem)• To give solution that is capable of predicting traffic volumes in current and future infrastructure network.• To propose long term solution for traffic congestion.

15	Methodology of work: (Including diagram, flow chart and design calculations)	<ol style="list-style-type: none">1. This is generated on the basis of primary and secondary data. The first step selecting the indicator to highlight the congestion that is the flow diagram, and snapping the images.2. To carry out primary data the data will be collected through survey method-counting the vehicles movements from 9.30a.m to 10.30a.m comprising a total no of vehicles, standing on the different meeting points of study area to show volume of movements.3. Snapping the images at peak hour and also non-peak hour to show comparison of different situation on different time. To know the actual situation and get possible suggestions about the problem no of listed questions will be asked among 60 peoples randomly which are pedestrians, bus drivers, vehicle owners, and retailers since 4 days.4. The secondary data will be collected from journals available on internet, R.T.O Office, Bus Association Office about vehicles number, Bus number are running on city road for daily purpose. All the methods are carried out in systematic way first data collection, data processing, data analysis, and last presenting the data in a right way.
----	--	---

		<pre> graph LR Methodology --> Primary_data[Primary data] Methodology --> Secondary_data[Secondary data] Primary_data --> Road_survey["Road survey (INVENTORY SURVEY)"] Secondary_data --> Journals[journals] Secondary_data --> RTO_office["RTO office BUS admin office"] </pre>
<p>16</p>	<p>Expected Outcome of the project:</p>	<ol style="list-style-type: none"> 1. Clear the footpath The enforced concentration of small shop along the foot path shorting the main road. So clearing the footpath will give a solution. Regular monitoring by administration will prevent such kind of occupancy. 2. Proper parking system Set up one or two multistory building and arrange a vacant place will give the solution of random parking and parking congestion. 3. Separate market area should be constructed ,so that the road is cleared from stopping of vehicles. 4. Selective transport mode At the office hour. Public Transport should be encouraged instead of Private Vehicles. 5. Minimum bus stoppage should be along the main bus route to avoid congestion. 6. Use of Metro should be encouraged. which helps in controlling the traffic and less pollution is caused. 7. The divider can be Extended as the vehicles , are restricted to take a U turn , thus congestion can be avoided.

17	Application of the project :	<ul style="list-style-type: none">• This system helps in improving the efficiency of congested highways. The roadways are configured with the help of movable barriers that help in changing the vehicle lanes based on traffic demand. This helps in a real-time increase of the road capacity which will help in reducing the road congestion.• Optimizing traffic flow on arterial and freeway networks. reducing congestion within and between cities. co-ordinating agency traffic/transit operations. managing incidents, reducing delays and adverse effects of incidents and congestion, weather, roadwork, special events, emergencies and disaster situations.
18	Budget details with Materials required:	Transportation and food charges, Labor charges for activities Total sum amount = 8000/-

19	Date of commencement of the Project :	04/04/2022
20	Probable date of completion of the project :	28/06/2022
21	Duration of project work :	3 months
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/Week	2 Month/Week	3 Month/Week
01	Literaturereview			
02	Planning/ Designing			
03	Assembly/ Fabricationwork			
04	Final Testing			
05	Result & Calculation/ Conclusion			
06	Preparation of Report & Submission			



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU-FA/2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 4.1 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under "Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2021-22.

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes
Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling
✓ Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.
6. University will not accept the Project proposals of following categories.

Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

- i) Principal -Chairman
- ii) HoD of the respective Branch - Member
- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
- iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).

9. All the selected projects would be invited for State Level Project Exhibition at VTU.

10. Selected project team along with the guide shall participate in the exhibition.

11. During the state level project exhibition “**Best Project of the Year**” will be awarded.

The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR
js/ 10.9.20

To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi

Copy FWCs to:





- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project



Visvesvaraya Technological University
“JnanaSangama”
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	City engineering college	
04	Branch:	Civil	
05	Project Title:	ECO FRIENDLY ALTERNATIVES TO TRADITIONAL CONCRETE.	
06	Project Discipline:	Civil	
07	Principal	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
09	Project Guide	Name:	Manjunath KE
		Contact No:	7259897112
		Email id:	Manju1994@cityengineeringcollege.ac.in
11	Project Committee coordinator (Identified by the college):	Name:	Dr.Sowmya Naik P T
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in

12	Name of project group Members	
	1.Group leader and Member	
	Name: Jagadish v	
	USN No. :1ce18cv011	
	Contact No:8123440116	
	Email id: jagadeeshroayl47@gmail.com	
	2.Member	
	Name: Mahadev Prasad S A	
	USN No. :1ce18cv005	
	Contact No:7760379919	
	Email id: mahadevprasad0703@gmail.com	
	3.Member	
	Name: Sangamesh	
	USN No. :1ce17cv028	
	Contact No:9113002309	
	Email id: sangamesdevani39@gmail.com	
4.Member		
Name: Owais Ahmad Khanday		
USN No. :1ce18cv006		
Contact No:7006641613		
Email id: owaisahmadkhanday@gmail.com		
13	Processing Fee Details	Bank name:
		Branch:

		DD number with date: OR Cheque no with date:
14	Scope / Objectives of the project:	<ul style="list-style-type: none"> • To reduce greenhouse gas emissions, i.e., carbon dioxide emissions from the cement industry. • To reduce the usage of pure resources such as limestone, clay, shale, natural river sand, natural rocks that are being used to making conventional concrete. • Also, reduce the wastage materials in the concrete leading to air, land and water pollution. • It has sufficient strength and durability in comparison with standard concrete. • Also has distinctive resistance to corrosion and also effectively prevents acid rain. • Buildings made of green concrete use less energy because they are more resistant to temperature changes, thus saving heating and cooling costs.

<p>15</p>	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	<p>Fig. 1 A chart depicting the methods to develop green concrete</p> <p>The following methodology was framed to incorporate all the aspects of the proposed thesis work:</p> <ul style="list-style-type: none"> • To collect and prepare the Demolition materials & Residual materials • Binder materials as Fly ash & Portland pozzolana cement Sieve analysis and Grading of aggregates • Preparation of green concrete at different proportions • Preparation of cubes and Testing the compressive strength of cubes at 7 days and 28 days correspondingly.
<p>16</p>	<p>Expected Outcome of the project:</p>	<p>The conventional natural coarse aggregate used in concrete can be replaced with green concrete partially mixed with fly ash to attain the essential compressive strength.</p> <ul style="list-style-type: none"> • The outcome of compressive strength tests for two mixes (M7.5 and M15) subsequent to 7 days and 28 days, correspondingly, with different fly ash percentage of 15%, 20%, and 25% were taken and recorded. • The use of fly ash in place of PPC must be limited to some percentage as the green concrete has to keep with certain qualities. • The increased usage of green aggregate in place cement concrete will lead to reduced cement usage and less coarse aggregate utilization in the extended run. • The use of minimum coarse aggregate/grit may lead to minimum power consumption. • The extended usage of green concrete will help in decreasing the percentage greenhouse gases and carbon dioxide thus, it is having many environmental benefits,

17	Application of the project:	<ul style="list-style-type: none"> • It is used in the construction of bridges, dams, retaining walls, etc. • Green concrete is widely used in the building construction • It is used in the construction of column • Green concrete can be used in the road construction
18	Budget details with Materials required:	Cement: Fine aggregate: Coarse Aggregate: Glass powder Brick powder Fly ash Transportation Sum amount 8000

19	Date of commencement of the Project:	02/04/2022
20	Probable date of completion of the project:	01/07/2022
21	Duration of project work:	3 months
22	Pert chart for completion of the project in said duration as perplanned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week
01	Literature review			
02	Planning/ Designing			
03	Assembly/ Fabrication work			
04	Final Testing			
05	Result & Calculation/ Conclusion			
06	Preparation of Report & Submission			



Visvesvaraya Technological University
 “JnanaSangama”
 Belagavi: 590018
 Karnataka, India.
 Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	CITY ENGINEERING COLLEGE	
04	Branch:	COMPUTER SCIENCE AND ENGINEERING	
05	Project Title:	SMART FARMING AND COTTON LEAF DISEASE DETECTION USING AI.	
06	Project Discipline:	Computer Science	
07	Principal	Name:	Dr Thippeswamy HN
		Contact No:	9844344925
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr Sowmya Naik PT
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in
09	Project Guide	Name:	Dr AN NANDAKUMAR
		Contact No:	9945833977
		Email id:	anandakumar53@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	NA
		Contact No:	NA
		Email id:	NA
11	Project Committee coordinator (Identified by the college) :	Name:	Dr Sowmya Naik PT
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in

Name of project group Members

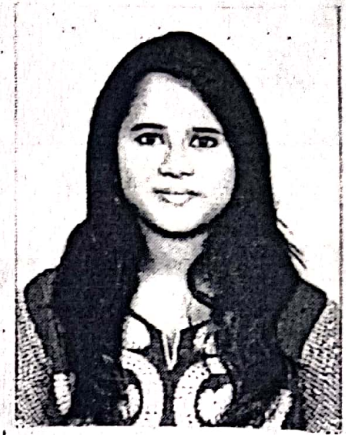
1. Group leader and Member

Name: NAMRATHA S

USN No. : ICE18CS046

Contact No: 8861887794

Email id: namrathas1207@gmail.com



2. Member

Name: USHA N

USN No. : ICE18CS092

Contact No: 9148187626

Email id: ushaprasadn2000@gmail.com



3. Member

Name: VINUTH S

USN No. : ICE18CS101

Contact No: 9743880882

Email id: vinuthgowda85@gmail.com



4. Member

Name:

USN No. :

Contact No:

Email id:

Passport size photo

5. Member (If any)

Name:

USN No. :

Contact No:

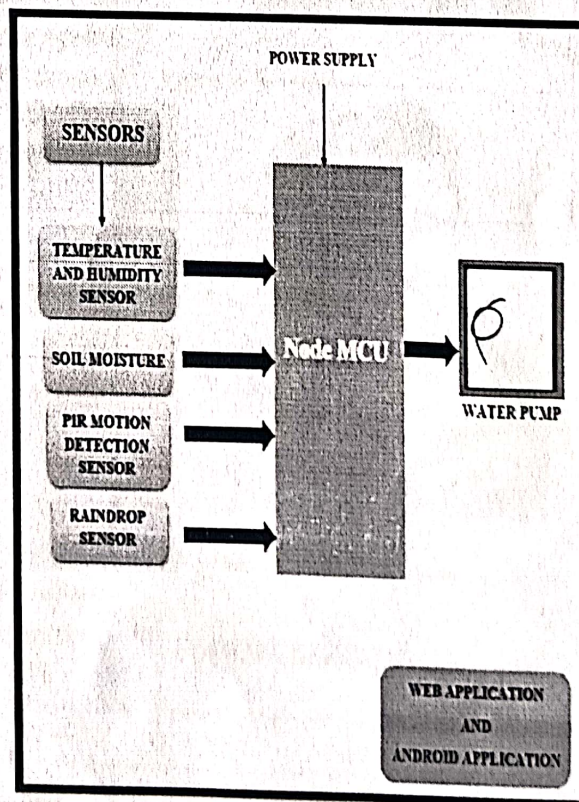
Email id:

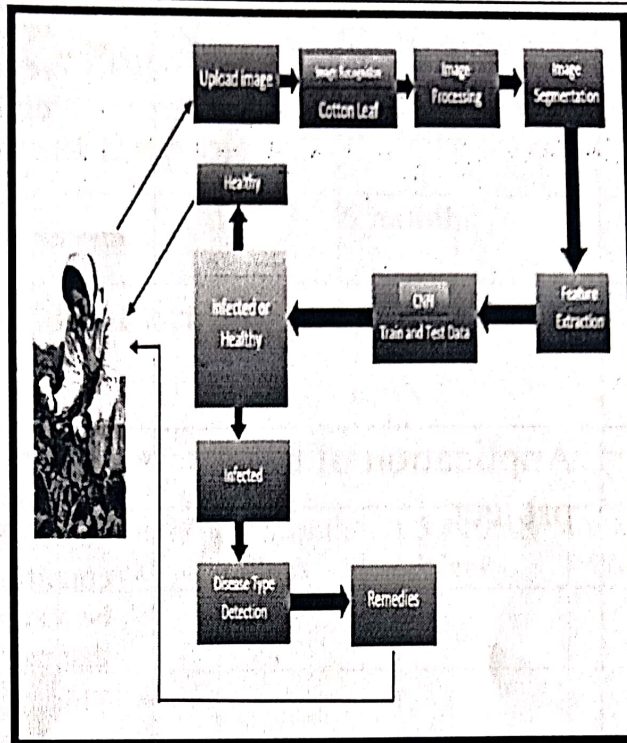
Passport size photo

13	Processing Fee Details	Bank name : Branch : DD number with date : OR Cheque no with date :
14	Scope / Objectives of the project:	To provide efficient decision support system using sensor network which handle different activities of farm and gives useful information related to farm like soil moisture, temperature, humidity content and animal intrusion. So, we have proposed an IOT-based farmland monitoring and control system which consists of sensors and android app with cloud technology. We have developed a smart farming application that focuses to solve the issues and suggests the farmers about the traditional farming methods based on soil moisture and control agriculture tools. Water level is managed by farmers manually using mobile application which is comfortable to farmers. This system also includes cotton leaf disease detection which is based on the infected images of cotton leaf. Images of the infected plants are processed using image segmentation techniques to detect infected parts of the leaf. This helps the farmers in improving the agriculture production.

15 Methodology of work:
(Including diagram, flow chart and design calculations)

- We have proposed a hardware system which integrates with software that consists of the sensors and an android application based on IoT. The working of our proposed system is interfaced with IoT and android application. It is classified into three divisions such as system sensors, data collection and analysis and android application which works together to solve the issues in the agriculture field through smart farming. System sensors are used to detect the characteristics of soil. The soil moisture, temperature, humidity, water level, rain detector and animal intrusion are monitored using sensors in the farmland. Android application remotely monitor and control irrigation system as farmer needs.
- This system used image processing technique for disease detection. The user needs to upload the cotton plant leaf image. The system can preprocess the uploaded image and then apply CNN technique. By using CNN technique system can test the image with trained dataset and extract the features.





The above diagrams are the flow diagram of smart farming and cotton leaf disease detection using AI.

16 Expected Outcome of the project:

- IoT based smart farming system that is very helpful for farmers since over as well as less irrigation is not good for farming. Threshold values for climatic conditions like humidity, temperature, moisture can be viewed based on the environmental conditions of that particular region.
- A web-based system has been successfully implemented for crop disease detection for cotton leaves using Convolutional Neural Network. Two diseases which are Leaf sucking and Chewing pests and Bacterial Blight are successfully being detected by system with training accuracy 98% using training dataset of 1951 images for each disease. Healthy leaf image set of 324 images is also used for detecting healthy images. This System successfully takes image input from user and provides output in the form of disease detected, preventive measures, corrective measures, to suggest the farmer. System can be extended to any other crops having availability of enough large dataset for that crop. Number of other diseases can be included for detection. System also can implement hardware using IOT for Image capturing in fields. The Web interface can also

		<p>involve a forum for formers to have discussions regarding the current trends they are facing in different diseases.</p>
<p>17</p>	<p>Application of the project:</p>	<ul style="list-style-type: none"> • IoT based smart farming system that is very helpful for farmers since over as well as less irrigation is not good for farming. Threshold values for climatic conditions like humidity, temperature, moisture can be viewed based on the environmental conditions of that particular region. • This System successfully takes image input from user and provides output in the form of disease detected, preventive measures, corrective measures, to suggest the farmer. System can be extended to any other crops having availability of enough large dataset for that crop. Number of other diseases can be included for detection.
<p>18</p>	<p>Budget details with Materials required:</p>	<p>Sensors cost Transportation and Food charges Labor charges Total sum amount = 8000/-</p>

19	Date of commencement of the Project :	05/01/2022
20	Probable date of completion of the project :	28/06/2022
21	Duration of project work :	6 months
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

Handwritten signature

Handwritten signature

Handwritten signature

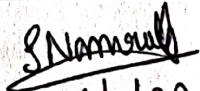
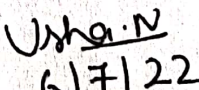

Handwritten signature

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Namuratha.S	 6/7/22
02	Usha.N	 6/7/22
03	Vinuth.S	 6/7/22
04		
05		

ENDORSEMENT

(Endorsement to be taken in the institution on Department Letter head)

This is to certify that 1] .Namyaama .S

2] .Usha .N..

3] .Vinuth .S.

4]

Are bonafide students of Department in COMPUTER SCIENCE AND ENGINEERING of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
<i>A. N. Nanda Kumar</i> 5/7/22	.	
Name: A. N. NANDA KUMAR	Name:	Name:



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU-FA/2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 4.1 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under "Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2021-22.

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes
Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling
✓ Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.
6. University will not accept the Project proposals of following categories.

Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

- i) Principal -Chairman
- ii) HoD of the respective Branch - Member
- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
- iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).

9. All the selected projects would be invited for State Level Project Exhibition at VTU.

10. Selected project team along with the guide shall participate in the exhibition.

11. During the state level project exhibition “Best Project of the Year” will be awarded.

The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR

To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi




Copy FWCs to:

- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2022	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Computer Science	
05	Project Title:	A Smart Wearable Device using IOT and AI for Assisting Blind and Retarded People	
06	Project Discipline:		
07	Principal	Name:	Dr. THIPPESWAMY HN
		Contact No:	
		Email id:	
08	HOD	Name:	Dr. SOWMYA NAIK
		Contact No:	9902889898
		Email id:	
09	Project Guide	Name:	Dr. S.VAGDEVI
		Contact No:	8277343032
		Email id:	
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

12	Name of project group Members	
	1.Group leader and Member	
	Name: DK BHOOMIKA	
	USN No. : 1CE16CS029	
	Contact No: 8660244214	
	Email id: dkb.5398@gmail.com	
	2.Member	
	Name: NANDIKA MJ	Passport size photo
	USN No. : 1CE17CS072	
	Contact No: 8494934847	
	Email id: mjnandika@gmail.com	
	3.Member	
	Name: POKALA SESA SAI POOJA	
	USN No. : 1CE17CS082	
	Contact No: 8217897716	
	Email id: pokalapooja@gmail.com	
	4.Member	
Name: BELLARY NITIN PRASAD		
USN No. : 1CE17CS019		
Contact No: 9945031209		
Email id: nitinprasad88@gmail.com		
5.Member(If any)		
Name: --	Passport size photo	
USN No. : --		
Contact No: --		
Email id: --		
13	Processing Fee Details	Bank name :
		Branch :
		DD number with date :
		OR
		Cheque no with date :

14	Scope / Objectives of the project:	<ul style="list-style-type: none">• We designed stick to detect obstacles and is able to recognize and buzz loud accordingly, depending it is stair, hole, puddle or fire.• An ultrasonic sensor and lidar is used to transmit information to the blind. A buzzer is attached with the Stick which acts as a warning tone in order to make it user friendly.
----	------------------------------------	---

<p>15</p>	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	
<p>16</p>	<p>Expected Outcome of the project:</p>	<p>It Gives a suitable respect message through audio empowering blind to move twice his normal speed and it helps the visually impaired to guide the user to respective destination and avoiding to collide with obstacles</p>
<p>17</p>	<p>Application of the project :</p>	<p>The main objective is to provide an application for blind people to detect obstacles in various directions, detecting movable or non-movable objects on the road to make free to walk</p>

18	Budget details with Materials required:	Total cost of project is Rs 25,220/-	
		Raspberry pi 4 – 4gb ram	Rs 7000/-
		Memory Card 32GB	Rs 1200/-
		5V Power Cord	Rs 200/-
		Mini HDMI 2vga Cabel	Rs 400/-
		Lidar	Rs 4500
		Ultrasonic Sensor (x3)	Rs 450/-
		Water Sensor	Rs 400/-
		Vibration Sensor	Rs 120/-
		GPS	Rs 800/-
		Gyro Sensor	Rs 350/-
		Dht11	Rs 80/-
		Stick and Hat	Rs 650/-
		Web Cam	Rs 3000/-
		Pi Camera	Rs 1800/-
		Arduino UNO	Rs 450/-
		Wires	Rs 100/-
Soldering Kit	Rs 100/-		
Earphones	Rs 200/-		

19	Date of commencement of the Project :	01/11/2021
20	Probable date of completion of the project :	
21	Duration of project work :	
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						



CITY ENGINEERING COLLEGE

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
Doddakallasandra, Off Kanakapura Main Road,
Next to Gokulam Apartment, Bangalore - 560 062.



Criteria 3- Research, Innovations and Extension

Key Indicator: 3.2- Innovation Ecosystem

Metric Number: 3.2.1 QIM.

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation center and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident.

ACADEMIC YEAR: 2020-2021

KSCST / VTU Grants Details



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

20th April 2021

Ref: 7.1.01/SPP/10

The Principal,
City Engineering College
Kanakapura Rd near METRO Station Doddakallasandra Bikasipura
Bengaluru - 560062

Dear Sir/Madam,

Sub : Sanction of Student Project - 44th Series: Year 2020-2021

Your Project Proposal Reference No. : 44S_BE_4354

Ref : Your Project Proposal entitled " SMART AGRONOMIC SYSTEM WITH GLOBAL STORAGE
ACCESS USING IoT

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 44th Series" with a budgetary break-up as detailed below:

Students	Mr. Nischal Kothari M Mr. Pavan V Mr. Mohammed Shahid Ulla Ms. Krupa D	Budget	
		Particulars	Amount (Rs)
Guide/s	Prof. Deepika R	Travel	500.00
	Prof. Ambika P R	Miscellaneous	500.00
Department	Computer Science And Engineering	Report	500.00
		Total	6,000.00

SIX THOUSAND RUPEES ONLY

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and softcopy of the full report in a CD (single file .pdf format only) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- Important: After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following points:
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

ATTESTED COPY

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama", Belagavi-590 018, Karnataka State, India

Prof. A. S. Deshpande B.E., M.Tech., Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax: (0831) 2405467

Ref: VTU/Aca./A4/2021-22/ 2628/8

Date: 20 SEP 2021

To,

The Principal,
City Engineering College,
Doddakallasandra,
Kanakapura Main Road,
Bengaluru-560061.

Sir,

Sub: Sanction of Financial Assistance for 2020-21 to the
Innovative Project of UG Final Year students of your Institution..reg.
Ref: No.VTU/BGM/PS/2021-22/545, dated 06.05.2021

With reference to the above subject, please find herewith a D.D Bearing No 643508, dated 09.09.2021 of Rs. 40,000/- (Rupees Forty Thousand Only) towards the sanction of financial assistance to the selected Innovative projects of UG final year students of BE / B.Tech.

Further, you are hereby informed to distribute the amount to the concerned students and get an acknowledgement for the same.

Original copy of the acknowledgements should be submitted to the undersigned on or before 30th September 2021.

Encl: as above

Aad
P. Deshpande

25.09.2021



REGISTRAR
18/9/21

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

ATTESTED COPY

SKANAN

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

VTU Sponsored Student Project Proposal Format

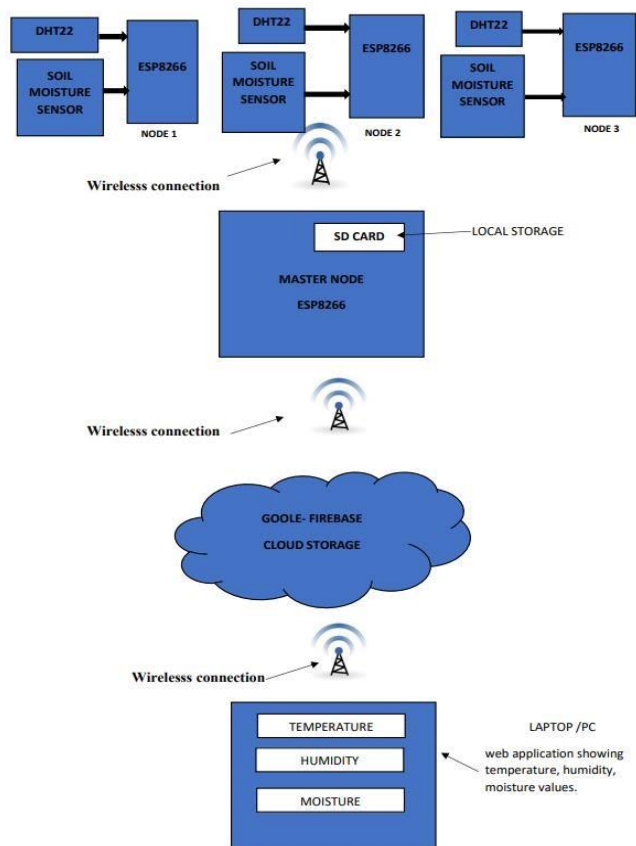
01	Academic Year :	2020-2021	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Computer Science and Engineering	
05	Project Title:	Smart Agronomic System with Global Storage Access Using Iot	
06	Project Discipline:	Advancement in Agriculture	
07	Principal	Name:	Dr. V.S. RAMAMURTHY
		Contact No:	080-22560313
		Email id:	cityengineering123@gmail.com
08	HOD	Name:	Prof. Vivekavardhana Reddy
		Contact No:	9900212462
		Email id:	hodcse@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof. Deepika R
		Contact No:	9113895423
		Email id:	deepikar@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	Prof.Ambika P R
		Contact No:	9945133228
		Email id:	ambikapr@cityengineeringcollege.ac.in
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

12	Name of project group Members	
	1.Group leader and Member	
	Name: Nischal Kothari M	
	USN No. : 1CE17CS074	
	Contact No: 9066466514	
	Email id: kotharinischal@gmail.com	
	2.Member	
	Name: Pavan V	
	USN No. : 1CE17CS081	
	Contact No: 9901607918	
	Email id: pavansrinivas017@gmail.com	
	3.Member	
	Name: Mohammed Shahid Ulla	
	USN No. : 1CE17CS064	
	Contact No: 9632725794	
	Email id: mohammedshahid80798@gmail.com	
4.Member		
Name: Krupa D		
USN No. : 1CE17CS052		
Contact No: 9945224055		
Email id: krupadinesh07@gmail.com		

13	Scope / Objectives of the project:	<ul style="list-style-type: none">❖ To create History in Agricultural Domain by making it one of the cheapest Product that costs a Farmer Rs. 5000*/- to Rs. 6000*/- which will cover an Acre of Land with 3 Nodes and one Master Node.❖ To program Node MCU with Double Tier Data Storage so as to access data by Locally as well as Globally with help of SD Card and Cloud respectively.❖ To create a System that will be known as the Future of Agricultural Domain and also as the Farmer's Friend by making it one of the most Qualitative and Quantitative Analyzer of an Agricultural Field. <p>To create a System where in a Farmer having less knowledge of Computers can also operate or anyone from anywhere in the world can also operate the system and collect the data using Real Time Data Accessibility.</p>
----	------------------------------------	--

14

Methodology of work:
(Including diagram, flow chart and design calculations)



As shown in the System Architecture :

❖ 4 nodes will be created, where in three

Nodes will be consisting of **Node MCU, DHT22 Sensors and a Soil Moisture Sensors**, whereas only the Master node will be given a **SD Card** for local data storage. Creation of Nodes will make the System **Highly Portable and Easily Maintainable**.

All these Nodes will be **Wirelessly** connected with Cloud storage for **Real Time Data Accessibility** on a Web Application which will have Global and Local Data Accessibility so that the field data can be accessed by anyone & anywhere around the Globe and round the Clock.

15	Expected Outcome of the project:	By collecting data from DHT22 and Soil Moisture Sensors , the data will be stored in Local Storage Tier that is SD card. This data will be transferred to Global Storage Tier that is Cloud Storage from which data is stored in Real Time Database – Firebase and can then be retrieved into a Web Application by Anyone & Anywhere around the Globe and round the Clock, henceforth the collected information can be conveyed to the farmer and then the Farmer can manage his field in accordance to the data collected.
16	Application of the project:	<p>a) This Proposed System will become farmer's friend if implemented on both large scale and small scale as the data can be retrieved by anyone.</p> <p>b) Data in this system is stored as two-tier data storage manner that is it is stored both locally and globally.</p> <p>c) The entire Drip Irrigation System has been dropped out so that a farmer can take his individual decisions independently.</p> <p>d) The cost of the entire system can be summed up to Rs. 5000/- where as cost in the existing system will be summed up to Rs. 25000 */- and above as one Raspberry Pi costs around Rs 4500/-*.</p> <p>Until and unless we don't have experience, no one can solve the issue, hence with experience we have made the actual required changes in the system</p>

17	Budget details with Materials required:	<table border="1" data-bbox="738 277 1383 562"> <thead> <tr> <th data-bbox="738 277 1129 315">Budget</th> <th data-bbox="1129 277 1383 315">Amount</th> </tr> </thead> <tbody> <tr> <td data-bbox="738 315 1129 360">a) Materials</td> <td data-bbox="1129 315 1383 360">3859.00</td> </tr> <tr> <td data-bbox="738 360 1129 405">b) Labor</td> <td data-bbox="1129 360 1383 405">1000.00</td> </tr> <tr> <td data-bbox="738 405 1129 450">c) Travel</td> <td data-bbox="1129 405 1383 450">500.00</td> </tr> <tr> <td data-bbox="738 450 1129 495">d) Report</td> <td data-bbox="1129 450 1383 495">1000.00</td> </tr> <tr> <td data-bbox="738 495 1129 539">e) Miscellaneous</td> <td data-bbox="1129 495 1383 539">500.00</td> </tr> <tr> <td data-bbox="738 539 1129 562">Total</td> <td data-bbox="1129 539 1383 562">6859.00</td> </tr> </tbody> </table> <p data-bbox="695 568 963 607">Materials Required :</p> <ul data-bbox="759 622 1155 1552" style="list-style-type: none"> • Resistor Kit • PCB • Connectors • Micro USB to USB cable • Single Stranded Wires • Multi Stranded Wires • DHT22 Sensors • Soil Moisture Sensors • SD Card Module • ESP8266-01 • Female DC Jack • 6V DC Adapter – 2A • 7805 IC • 1000uF Capacitor • Tp4056 + Boost Convertor • Node MCU 	Budget	Amount	a) Materials	3859.00	b) Labor	1000.00	c) Travel	500.00	d) Report	1000.00	e) Miscellaneous	500.00	Total	6859.00
Budget	Amount															
a) Materials	3859.00															
b) Labor	1000.00															
c) Travel	500.00															
d) Report	1000.00															
e) Miscellaneous	500.00															
Total	6859.00															

	Activities Planned	1 Month	2 Month	2 Month	2 Month	2 Month	1 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

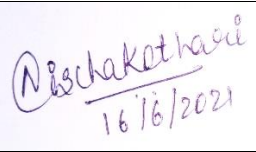


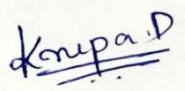
18	Date of commencement of the Project:	12/10/2020
19	Probable date of completion of the project:	17/07/2021
20	Duration of project work:	9 months
21	Pert chart for completion of the project in said duration as per	

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately.





We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	NISCHAL KOTHARI M	 16/6/2021
02	PAVAN V	 16/6/21
03	MOHAMMED SHAHID ULLA	 16/06/2021
04	KRUPA D	 16/6/2021.

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

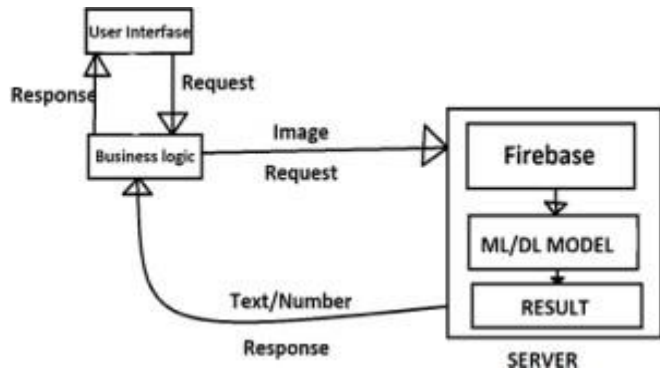
VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-2021	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Computer Science and Engineering	
05	Project Title:	Vision Based Banknote Recognition System	
06	Project Discipline:	User friendly devices for aged or physically challenged people	
07	Principal	Name:	Dr. V.S. RAMAMURTHY
		Contact No:	080-22560313
		Email id:	cityengineering123@gmail.com
08	HOD	Name:	Prof. Vivekavardhana Reddy
		Contact No:	9900212462
		Email id:	hodcse@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof. Archana Bhat
		Contact No:	9902381611
		Email id:	archanabhat@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

12	Name of project group Members	
	1.Group leader and Member	
	Name: Rahul Karmakar	
	USN No. : 1CE17CS093	
	Contact No: 9370966787	
	Email id: imrahul3610@gmail.com	
	2.Member	
	Name: Sridhar D N	
	USN No. : 1CE17CS127	
	Contact No: 9591784127	
	Email id: ajithsridhar007@gmail.com	
	3.Member	
	Name: Thejas Murthy R	
	USN No. : 1CE17CS137	
	Contact No: 9945796958	
	Email id: thejasmurthyr@gmail.com	
	4.Member	
	Name: Vidhyadhar Joshi	
	USN No. : 1CE17CS143	
	Contact No: 7022804892	
Email id: vidhyadhardec22@gmail.com		

13	Scope / Objectives of the project:	<ul style="list-style-type: none">• This application will help to overcome the problem faced by visually impaired people in exchanging denominations in their daily routines like groceries, and other activities.• Screen reading tools like VoiceOver (iOS) and TalkBack (Android) comes in-built within smartphones, so that users will be able to detect and identify the denominations with ease.• User-friendly application for technically weak people.• Flutter application overcomes the traditional limitations of cross-platform approaches and straight-forward integration with Firebase (Database).• Firebase (Real-time database) helps to store and synchronize data. It also has fast and secure web hosting.
----	------------------------------------	--

14 Methodology of work:
(Including diagram, flow chart and design calculations)



- Users will click on the button, where they can take an image of the denomination through their mobile camera and then the image will be sent to the backend (Firebase Server).
- In the Client-Side Server, Image will be zipped and sent to the server.
- In Firebase Server, it will unzip the image and feed the image to the model to detect and identify the bank note using DL (Deep Learning) model.
- Then the result will be zipped and sent back to UI/UX where it will be unzip and displayed on the screen with production of audio as output.

15	Expected Outcome of the project:	<ul style="list-style-type: none"> • Lightweight AI Powered Mobile Application for visually impaired people. • This application is to identify the denominations of Banknotes using in-built screen reader tools like TalkBack (Android) and VoiceOver (iOS) as well as audio feedback to ensure simple navigation. 														
16	Application of the project:	This application will help to overcome the problem faced by visually impaired people in exchanging denominations in their daily routines like groceries, and other activities.														
17	Budget details with Materials required:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%; text-align: center;">Budget</th> <th style="width: 40%; text-align: center;">Amount</th> </tr> </thead> <tbody> <tr> <td>a) Materials/Consumable</td> <td style="text-align: center;">2400.00</td> </tr> <tr> <td>b) Labor</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>c) Travel</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>d) Report</td> <td style="text-align: center;">1000.00</td> </tr> <tr> <td>e) Miscellaneous</td> <td style="text-align: center;">2000.00</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">5400.00</td> </tr> </tbody> </table>	Budget	Amount	a) Materials/Consumable	2400.00	b) Labor	0.00	c) Travel	0.00	d) Report	1000.00	e) Miscellaneous	2000.00	Total	5400.00
Budget	Amount															
a) Materials/Consumable	2400.00															
b) Labor	0.00															
c) Travel	0.00															
d) Report	1000.00															
e) Miscellaneous	2000.00															
Total	5400.00															

	planned activities:
--	---------------------

Sl.No	Activities Planned	1 Month	2 Month	2 Month	2 Month	2 Month	1 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

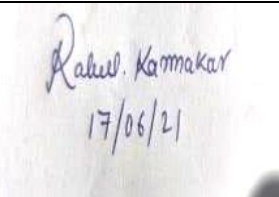
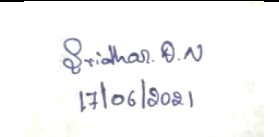
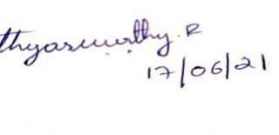
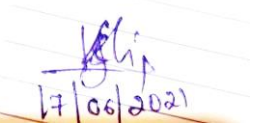
18	Date of commencement of the Project:	01/10/2020
19	Probable date of completion of the project:	01/08/2021
20	Duration of project work:	10 months
21	Pert chart for completion of the project in said duration as per	

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately.



We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Rahul Karmakar	 Rahul. Karmakar 17/06/21
02	Sridhar D N	 Sridhar. D.N 17/06/2021
03	Thejas Murthy R	 thyasurthy. R 17/06/21
04	Vidhyadhar Joshi	 Vidhyadhar 17/06/2021

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

VTU Sponsored Student Project Proposal Format

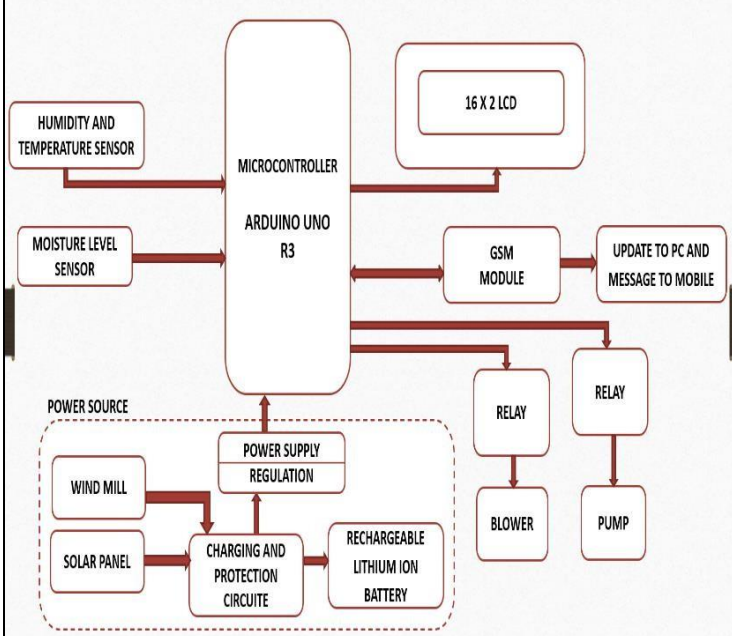
01	Academic Year :	2020-2021	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Electronics and Communications	
05	Project Title:	Smart Farming	
06	Project Discipline:	Advancement in Agriculture	
07	Principal	Name:	Dr. V.S. RAMAMURTHY
		Contact No:	080-22560313
		Email id:	cityengineering123@gmail.com
08	HOD	Name:	Prof. Mallikarjuna GS
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof. Deepa Mathew
		Contact No:	9632864033
		Email id:	deepamathew@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	Dr. Shalini Prasad
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege.ac.in

12	Name of project group Members	
	1.Group leader and Member	
	Name: Nimisha Prasad	
	USN No. : 1CE17EC036	
	Contact No: 9611604964	
	Email id: nimisha.pras@gmail.com	
	2.Member	
	Name: Divya S	
	USN No. : 1CE17EC024	
	Contact No: 9972626479	
	Email id: divyas1802@gmail.com	
	3.Member	
	Name: Rakesh S	
	USN No. : 1CE17EC045	
	Contact No: 8151959891	
	Email id: rakeshshashikumar007@gmail.com	
	4.Member	
Name:	Passport size photo	
USN No. :		
Contact No:		
Email id:		
5.Member(If any)		
Name:	Passport size photo	
USN No. :		
Contact No:		
Email id:		
13	Scope / Objectives of the project:	Smart Farming is an emerging concept that refers to managing farms using modern Information and Communication Technologies to increase the quantity and quality of products while optimizing the human labour required. Smart farming has a real potential to deliver a more productive and sustainable form of agricultural production, based on a more precise and resource-efficient approach. The solar and wind energy which are natural, clean and safe resources can be used for generating electricity.

14

Methodology of work:

(Including diagram, flow chart and design calculations)



- We are developing a smart farm where the water is supplied to the farm automatically by checking the water content in the soil and supplying according to the requirements of the crop, the power required for the process is achieved by converting the wind and solar energy.
- Arduino uno is the heart of our project. The board is used to program, and the program is flashed using Arduino IDE.
- The power supply unit supplies power to all the peripherals.
- We have windmill and solar panel setup which is natural, economic, clean and safe resources. It provides a considerable electrical energy production with less expense apart from the construction and maintenance budget.

		<ul style="list-style-type: none"> • The solar panel is used and the charging protection circuit is built to charge the batteries. This power can then be used to run the motor. • The windmill can be remotely monitored and also prolong the lifetime of the wind mill and also increase its productivity. • Everyday water has to be supplied to the crop in required amount, to check the water content in the soil we have a soil moisture sensor which will measure the volumetric water content in soil. • Once the moisture content is measured, this data will be sent to the system and the motor is switched on or off accordingly to the conditions. • We also have a DTH sensors which helps in knowing the temperature and humidity, the humidity sensor measures the humidity in the environment and converts its findings into a corresponding electrical signal. • The unfavorable weather conditions will affect the crops, greenhouse farming optimizes growing conditions and protects the crops from extreme weather conditions. • The blower is placed to maintain the temperature if the temperature is high the blower gets on and once the temperature is reduced then the blower gets off. • The GSM module is used to establish communication between the devices.
--	--	---

15	Expected Outcome of the project:	The batteries will get charged from the solar and wind energy, and this power will be utilized to run all the devices like motors in field. In the agricultural field the water will be supplied to the fields automatically according to the requirements of the crops and also the humidity and temperature will be maintained, every information regarding the agricultural field like moisture content in soil, temperature and humidity in the field, motor condition, blower condition will be updated to the pc and the mobile, in this way the field will be monitored remotely.
16	Application of the project:	<ul style="list-style-type: none"> • Electricity generation using solar energy and wind energy. • Agricultural fields.
17	Budget details with Materials required:	<p>Components Required:</p> <p>Sensor – Rs.400/-</p> <ul style="list-style-type: none"> • DHT11-Temperature n Humidity • Moisture sensor with driver board <p>Actuators - Rs.300/-</p> <ul style="list-style-type: none"> • 2 Dc Fan or 5V BLDC Small fan • DC Submersible water pump

		<p>Power Supply – Rs.600/-</p> <ul style="list-style-type: none"> • 12V 2A Adapter • Multipin board • 12V Relay - 2 <p>Wires - Rs.150/-</p> <ul style="list-style-type: none"> • Male to Female • Male to Male • Female to Male • Single strand wires <p>Power source - Rs.800/-</p> <ul style="list-style-type: none"> • Wind mill module • Solar panel • 18650 Li-ion Battery Charger • 18650 Li-ion Battery 3.7V • 18650 Battery Holder <p>Microcontroller Board: Aurdino UNO R3 with USB Cable - Rs.750/-</p> <p>Display Device: 16X2 LCD module - Rs.200/-</p> <p>Communication Device: GSM Module - Rs.900/-</p> <p>Project setup - Rs.2000/-</p> <p>Total budget - Rs.6100/-</p>
18	Date of commencement of the Project:	12/10/2020
19	Probable date of completion of the project:	17/07/2021
20	Duration of project work:	9 months
21	Pert chart for completion of the project in said duration as per	

	planned activities:
--	---------------------

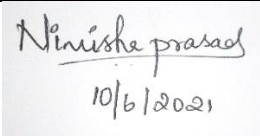
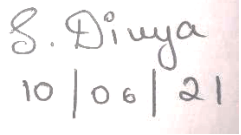
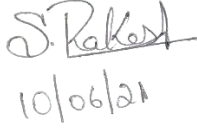
Sl.No	Activities Planned	1 Month	2 Month	2 Month	2 Month	2 Month	1 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately.

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Ms. NIMISHA PRASAD	 10/6/2021
02	Ms. DIVYA S	 10/06/21
03	Mr. RAKESH S	 10/06/21

ENDORSEMENT

(Endorsement to be taken in the institution on Department Letter head)

This is to certify that 1] Ms. NIMISHA PRASAD

2] Ms. DIVYA S

3] Mr. RAKESH S




4]

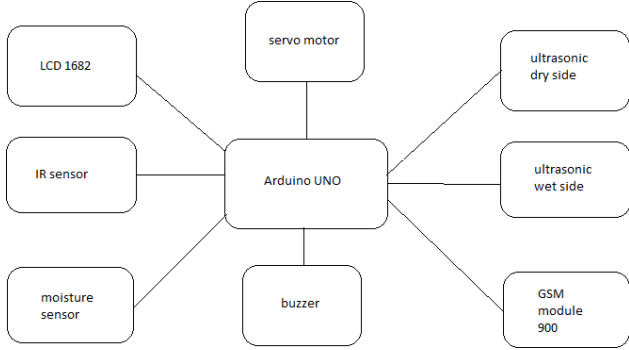
Are bonafide students of Department in Electronics and Communications, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

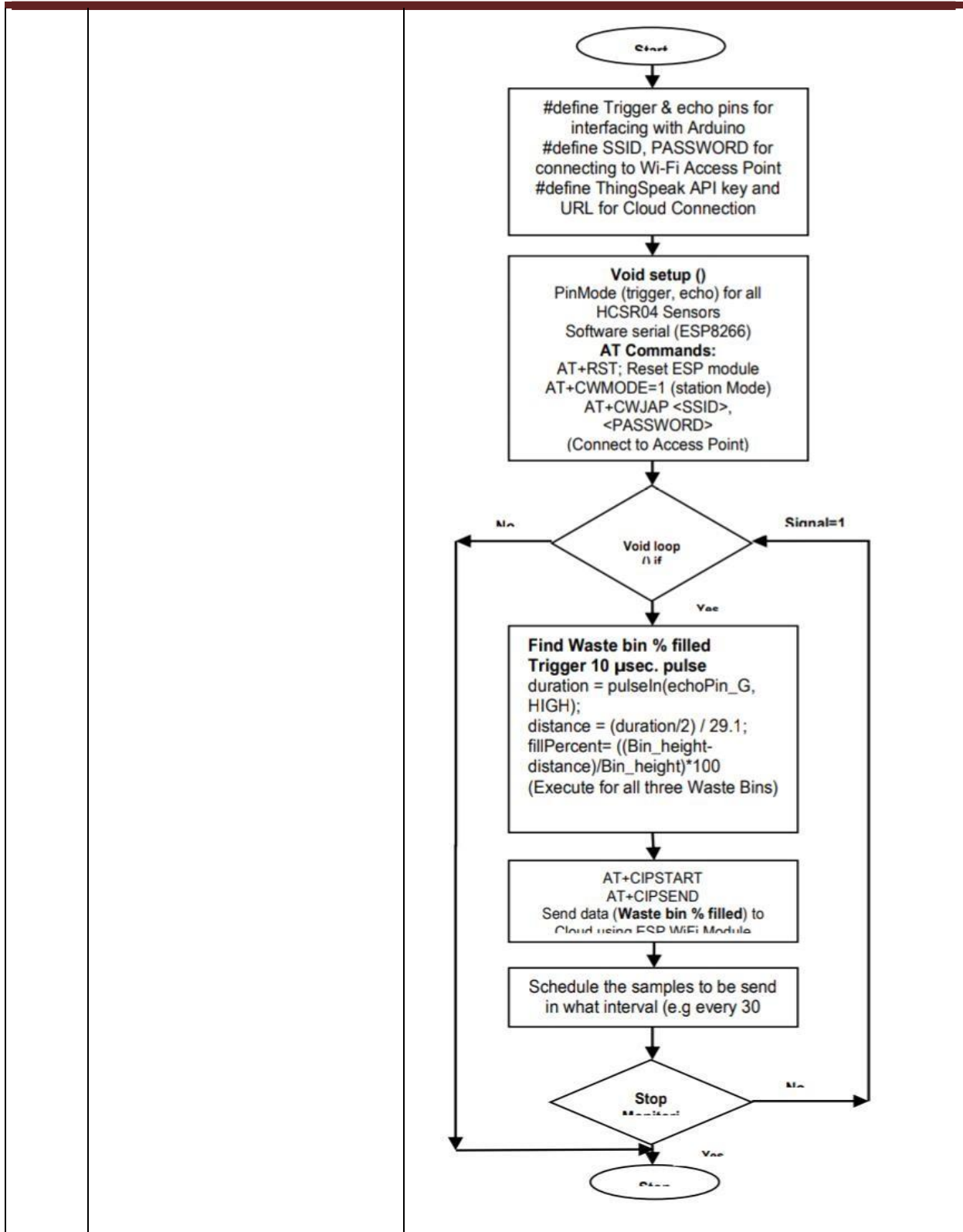
	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--


VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-2021	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Electronics and Communication	
05	Project Title:	Garbage Segregation and Monitoring System	
06	Project Discipline:	Waste Management/ Disposal	
07	Principal	Name:	DR V.S RAMAMURTHY
		Contact No:	080-22560313
		Email id:	cityengineering123@gmail.com
08	HOD	Name:	Prof MALLIKARJUNA GS
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof SHYLAJA K
		Contact No:	9916780169
		Email id:	
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	DR SHALINI PRASAD
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege.ac.in

12	Name of project group Members	
	1.Group leader and Member	
	Name: TOUSIF PASHA	
	USN No. :1CE17EC070	
	Contact No:8951232304	
	Email id:contact.to.tousif@gmail.com	
	2.Member	
	Name: TANUSHREE C	
	USN No. :1CE17EC067	
	Contact No:9066310370	
	Email id:tanushreecgowda@gamil.com	
	3.Member	
	Name: SYED SMAEER PASHA S B	
	USN No. :1CE17EC066	
	Contact No:9113983849	
Email id:syedsameerpasha582@gmail.com		
4.Member		
Name:	Passport size photo	
USN No. :		
Contact No:		
Email id:		
5.Member(If any)		
Name:	Passport size photo	
USN No. :		
Contact No:		
Email id:		

<p>13</p>	<p>Scope / Objectives of the project:</p>	<ul style="list-style-type: none"> • The proposed system would be able to automate the solid waste monitoring process and management of the overall collection process using IOT. • The Proposed system consist of main subsystems namely Smart Trash System (STS) and Smart Monitoring and Controlling Hut (SMCH). • In this proposed system, the received signal indicates the waste bin status at the monitoring and controlling system.
<p>14</p>	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	<p>BLOCK DIAGRAM:</p>  <pre> graph TD Arduino[Arduino UNO] --- LCD[LCD 1682] Arduino --- IR[IR sensor] Arduino --- Moisture[moisture sensor] Arduino --- Servo[servo motor] Arduino --- Buzzer[buzzer] Arduino --- USDry[ultrasonic dry side] Arduino --- USWet[ultrasonic wet side] Arduino --- GSM[GSM module 900] </pre> <p>Ultrasonic sensor: here we use two ultrasonic sensors, one at the wet side of the Bin and another is at the dry side of the Bin. It indicate the level of garbage inside the bin.</p> <p>IR sensor : It detect the garbage and activate the mechanism of segregation.</p> <p>Moisture sensor: sense whether the garbage is wet or dry (organic and inorganic).</p> <p>Servo motor : It flips the mechanical door toward its corresponding bin.</p> <p>GSM module 900 : It continuously monitor and sends message to the authorities if the bin is full.</p>



15	Expected Outcome of the project:	<ul style="list-style-type: none"> • Output will be display in mobile as – ‘your city engineering college bin organic side is full’ or ‘your city engineering college bin inorganic side is full’. 
16	Application of the project :	<ul style="list-style-type: none"> • It is used in the “Smart city”. • It helpful in the government project of “SWATCHH BHARAT ABHIYAN”. • The waste segregator can be improvised to include the separation of paper and plastic, safe segregation of biomedical waste generated at home, compact and aesthetic Mechanical design.
17	Budget details with Materials required:	<p>Arudino Uno, cable, Wifi esp8266, Servo motor, Ultrasonic, Wire, Adaptor 2amp, Lcd 16x2, 7805 circuit, Cardboard cutting pieces, Glue gun, Glue stick, Bug stick, Ir sensor. TOTAL – 6500/-</p>
18	Date of commencement of the Project :	November 2020
19	Probable date of completion of the project :	JULY 2021

20	Duration of project work :	9 MONTHS
21	Pert chart for completion of the project in said duration as per	

planned activities:



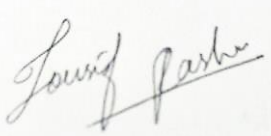
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VT Belagavi, the sponsored project amount will be returned back to VTU immediately





We also hereby, enclose the endorsement form to VTU, Belagavi.

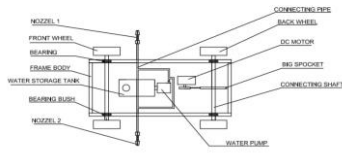
SL.No	Name of the Student	Signature with date
01	SYED SAMEER PASHA S B	
02	TANUSHREE C	
03	TOUSIF PASHA	
04		

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
---	--

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-2021	
02	Semester :	8th SEM	
03	Name of the College :	CITY ENGINEERING COLLEGE	
04	Branch:	MECHANICAL ENGINEERING	
05	Project Title:	DESIGN & FABRICATION OF CONTROLLED WIRELESS AGRO SPRAYER	
06	Project Discipline:	ADVANCED AGRICULTURAL EQUIPMENT	
07	Principal	Name:	DR V.S. RAMAMURTHY
		Contact No:	080-22560313
		Email id:	cityengineering123@gmail.com
08	HOD	Name:	Dr. S KARUNAKARA
		Contact No:	+91 9844065414
		Email id:	hodmech@cityengineeringcollege.ac.in
09	Project Guide	Name:	SAMPATH H P
		Contact No:	+91 9880001967
		Email id:	hpsampath.037@gmail.com
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

12	Name of project group Members	
	1.Group leader and Member	
	Name: MANOJ R S	
	USN No. : 1CE17ME011	
	Contact No: 9060774444	
	Email id: manojgowda9898@gmail.com	
	2.Member	
	Name: PRASHANT S KOTAGI	
	USN No. : 1CE17ME020	
	Contact No: 8050697479	
	Email id: prashantkotagi163@gmail.com	
	3.Member	
	Name: PAVAN KUMAR A	
	USN No. : 1CE17ME017	
	Contact No: 8867521538	
	Email id: pavankumar3964@gmail.com	
	4.Member	
Name: DHANUSH B R		
USN No. : 1CE17ME005		
Contact No: 8088549074		
Email id: dhanusharadhya5@gmail.com		
5.Member(If any)		
Name:	Passport size photo	
USN No. :		
Contact No:		
Email id:		
13	Processing Fee Details	Bank name : CENTRAL BANK OF INDIA
		Branch : JARAGANAHALLI
		DD number with date :
		OR
		Cheque no with date :
14	Scope / Objectives of the project:	1) TO REDUCE FARMERS EFFORTS AND HEALTH PROBLEMS. 2) MODERNIZE AGRICULTURE SECTOR. 3) MAKE AVAILABLE IN LEAST COST.

15	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	<ol style="list-style-type: none"> 1) DESIGN OF FERTILIZER SPRAYER 2D LAYOUT. 2) SKETCHING 3D FIGURE & DESINGING MODEL. 3) MAKE NUMBER OF TRAILS BY VARYING THE PARAMETERS. 4) MANUFACTURING OF ACTUAL MODEL. 5) DESIGN THE SPRAYER AND MANUFACTURING. 6) TESTING & MODIFACATION. 7) INTERPRETATION OF RESULT & DISUSSION. 
16	<p>Expected Outcome of the project:</p>	<ol style="list-style-type: none"> 1) REDUCE FARMERS EFFORT & TIME. 2) REQUIRES LESS MAN POWER. 3) OVERCOME LABOUR PROBLEM. 4) SATISFY THE PARTIAL THRUST OF INDIAN CULTURE.
17	<p>Application of the project :</p>	<ol style="list-style-type: none"> 1) SPRAYING PESTICIDES. 2) ALSO USED FOR SPRAYING MOSQUITO. 3) REPELLENT & SANITIZER.
18	<p>Budget details with Materials required:</p>	<p>WATER PUMP, NOZZLE,ALLOYS, STORAGE TANK,D C MOTORS,BLUETOOTH,AURDINO,12V BATTERY,CHASSIS</p> <p>BUDGET: 12000/-</p>

19	Date of commencement of the Project :	28-12-2020
20	Probable date of completion of the project :	15-06-2021
21	Duration of project work :	5 - 6 MONTHS
22	Pert chart for completion of the project in said duration as per planned activities:	


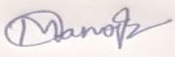
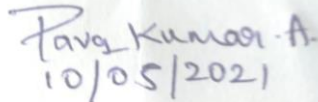
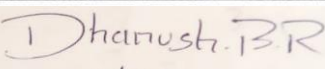
Sl.No	Activities Planned	1 Month.	2 Month /	3 Month	4 Month	5 Month	6 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	PRASHANT S KOTAGI	 10/05/2021
02	MANOJ R S	 10/05/2021
03	PAVAN KUMAR A	 10/05/2021
04	DHANUSH B R	 10/5/2021
05		