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| **AICTE Chhatra Vishwakarma Awards 2019 Submission Form** |

Top of Form

**Question Title**

1. Team Leader Email address



**Question Title**

\*2. Application ID



**Question Title**

\*3. Institute Email address



**Question Title**

\*4. Institute Name



**Question Title**

\*5. Institute State



**Question Title**

\*6. Team Name



**Question Title**

\*7. Sub Category

Livelihood

Waste management

Crop waste management (parali/para etc.)

Value addition of Agriculture produce, Agro industry and Rural handicraft

Farm and flock

Water

Land

Energy

**Team Details**

**Question Title**

\*8. Mentor Detail

Name

Age

Gender

Mobile Number

Email Id

T shirt Size(XS/S/L/XL/XXL/XXXL)

**Question Title**

\*9. Team Member 1/Team Leader Detail

Name

Age

Gender

Course Name

Current Batch Year

Mobile Number

Email Id

T shirt Size(XS/S/L/XL/XXL/XXXL)

**Question Title**

10. Team Member 2 Detail.(If any)

Name

Age

Gender

Course Name

Current Batch Year

Mobile Number

Email Id

T shirt Size(XS/S/L/XL/XXL/XXXL)

**Question Title**

11. Team Member 3 Detail.(If any)

Name

Age

Gender

Course Name

Current Batch Year

Mobile Number

Email Id

T shirt Size(XS/S/L/XL/XXL/XXXL)

**Question Title**

12. Team Member 4 Detail.(If any)

Name

Age

Gender

Course Name

Current Batch Year

Mobile Number

Email Id

T shirt Size(XS/S/L/XL/XXL/XXXL)

**Question Title**

\*13. Council will provide separate stall to each team with one Table (2x4), 02 Chairs & 01 electricity connection. Do you require any other arrangement to setup the prototype? (Please specify)



**Question Title**

\*14. Does your prototype is Flammable?

Yes

No

**Question Title**

\*15. Do you require Stay Arrangement?

Yes

No

**Question Title**

\*16. Provide brief description of your project .(Max.100-150 words)



Our proposed cost-effective system, Hydroponics, is a method of growing plants in a water based, nutrient rich solution. Our system does not use soil; instead the root is supported using an inert medium cocopeat and hydroton. The basic premise behind our system is to allow the plants’ roots to come in direct contact with the nutrient solution, while also having access to oxygen, which is essential for proper growth.

**Question Title**

\*17. Mention appropriately outcome of your project within two lines.

Our proposed system reduces menial work by automating the farming process and increasing the yeild. This will also increase the farmer's income while reducing the labor cost.



**Question Title**

\*18. Are you planning to apply for "PATENT" of your prototype?   
\*If "YES" , then your product description will not be uploaded on public portal considering copyright issue.

Yes

No

**Information required for Poster**

**Question Title**

19. Project Name/Title



**Question Title**

20. Define your problem statement. (Max. 60 words)



The lack of knowledge of modern farming methods is why farmers add extra fertilizers to get better yield. But excess fertilizers poison the produce making the land uncultivable. In traditional farming, the land is not used optimally to get maximum yield. Additionally, the crops on fields can be damaged by a number of external factors such as rain, insects, etc.

**Question Title**

21. Description of the solution you are proposing for the said problem (Max 200 words)



In hydroponics the plant roots are submerged into a container filled with water. All the necessary nutrients required by the plant are injected in the water with the help of a pump. There is also a separate reservoir to help maintain the pH value of the water. Additionally hydroponics is carried out in a closed environment where the temperature, light intensity, moisture, etc can be controlled with respect to each type of crop to boost the produce. With the help of automation, complete control of pH value, light intensity, temperature, moisture, etc. will be done with the help of sensors and actuators. Automation and IoT in farming will enable the farmer to access the controller and monitor the crops from his/her mobile app from anywhere in the world in real time. In addition to that, with the help of automatic control of all the components, less electricity will be consumed and this will in turn increase the profit margin of the farmer. In hydroponics there is less chance of the crops being damaged by pests as no soil is being used. We are using cost effective equipment without compromising the functionality of the system while making it affordable for the farmers.

**Question Title**

22. Give a working diagram/flowchart to explain the working of the proposed solution.

Choose File

 No file chosen

**Question Title**

23. Upload photograph of Your Prototype(Photo1)

Choose File

 No file chosen

**Question Title**

24. Upload photograph of Your Prototype(Photo2).If any

Choose File

 No file chosen

**Attachments**

**Question Title**

\*25. Declaration from Faculty in-charge/ mentor of the project (Should be printed on the Institutions’ Letterhead, duly verified and stamped by the Principal. \*  
\*Format for the same is attached on email and also available at :-https://www.aicte-india.org/aicte-vishwakrama-award-2019

16 MB PDF onlyChoose File

 No file chosen

**Question Title**

\*26. Upload Passport Size Photograph of  Mentor

\*File Size limit is 16 MBChoose File

 No file chosen

**Question Title**

\*27. Upload Passport Size Photograph of  Team Member 1 /Team Leader

\*File Size limit is 16 MBChoose File

 No file chosen

**Question Title**

28. Upload Passport Size Photograph of  team member 1.(If any)

\*File Size limit is 16 MBChoose File

 No file chosen

**Question Title**

29. Upload Passport Size Photograph of  team member 2(If any)

\*File Size limit is 16 MBChoose File

 No file chosen

**Question Title**

30. Upload Passport Size Photograph of  team member 3.(If any)

\*File Size limit is 16 MBChoose File

 No file chosen