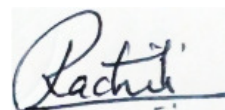


DECLARATION

I, hereby declare that this thesis entitled “**Development of IoT based automated aquaponics system for water quality monitoring and control**” is a bonafide record of research work done by me during the course of research and the thesis has not previously formed the basis for the award to me of any degree, diploma, associateship, fellowship or other similar title, of any other University or Society.

A handwritten signature in blue ink, appearing to read 'Rachana', with a horizontal line underneath.

Tavanur

RACHANA V V

Date: 11/04/2025

(2021-18-005)

CERTIFICATE

Certified that this thesis entitled “**Development of IoT based automated aquaponics system for water quality monitoring and control**” is a record of research work done independently by Er. Rachana V V (2021-18-005). under my guidance and supervision and that it has not previously formed the basis for the award of any degree, diploma, fellowship or associateship to her.



Tavanur

Date: 07/05/2025

Dr. Jinu A

(Major Advisor, Advisory
Committee)

Assistant Professor


Dept. of SWCE,


KCAEFT, Tavanur

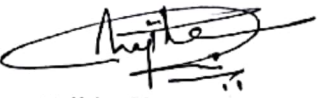
CERTIFICATE


We, the undersigned members of the advisory committee of Er. Rachana V V (2021-18-005), a candidate for the degree of **Master of Technology in Agricultural Engineering** with major in Soil and Water Conservation Engineering, agree that the thesis entitled "**Development of IoT based automated aquaponics system for water quality monitoring and control**" may be submitted by Rachana V V (2021-18-005) in partial fulfilment of the requirement for the degree.


Committee:

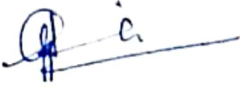

Dr. Jinu A
(Major Advisor, Advisory Committee)
Assistant Professor
Dept. of SWCE,
KCAEFT, Tavanur


Dr. Priya G. Nair
(Member, Advisory Committee)
Assistant Professor & Head
KVK, Malappuram


Dr. Najitha Ummer
(Member, Advisory Committee)
Assistant Professor (Entomology),
Cocoa Research Centre, KAU, Thrissur


Dr. Sathian. K. K
(Member, Advisory Committee)
Professor,
Dept. of SWCE,
KCAEFT, Tavanur


Dr. Abdul Hakkim V. M
Professor & HoD
Dept. of SWCE
KCAEFT, Tavanur


Dr. Ambili G K
(External examiner)
Senior Scientist
KSCSTE- CWRDM,
Kozhikode

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RACHANA V V

Dedication

Dedicated to my family, friends, mentors, and agricultural engineers for their unwavering support and invaluable guidance on this journey.