

## **DECLARATION**

I, hereby declare that this thesis entitled “**Development of a chocolate enrobing machine for cookies**” 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.

**Place: Tavanur**

**Date:**

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**(2022-18-008)**

## **CERTIFICATE**

Certified that this thesis entitled “**Development of a chocolate enrobing machine for cookies**” is a record of research work done independently by **Er. Haritha V (2022-18-008)** 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.

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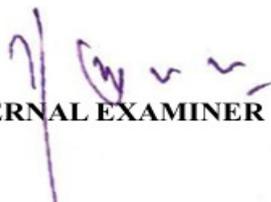
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*Dedicated to my  
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## LIST OF SYMBOLS AND ABBREVIATIONS

°C	:	Degree Celsius
/	:	Per
%	:	Percentage
MT	:	Metric tonnes
AOAC	:	Association of Official Analytical Chemistry
ANOVA	:	Analysis of Variance
ha	:	Hectares
CB	:	Cocoa Butter
CBA	:	Cocoa Butter Alternatives
CBR	:	Cocoa Butter Replacers
CBE	:	Cocoa Butter Equivalent
SHGs	:	Self- Help Groups
DCCD	:	Directorate of Cashewnut and Cocoa Development
ml	:	milli litre
<i>et al.</i>	:	and others
mm	:	milli meter
m	:	Meter
mg	:	milli gram
g	:	Gram
kcal	:	Kilo calories
kJ	:	Kilo jules
µg	:	Micro gram
H	:	Hour
% (wb)	:	Percent wet basis
cm	:	Centi meter
TAG	:	Triacylglycerols
s	:	Second
KCAEFT	:	Kelappaji College of Agricultural Engineering and Food Technology
TSS	:	Total Soluble solids

N	:	Normality
kWh	:	Kilo Watt hour
Rpm	:	Revolutions per minute
SS	:	Stainless steel
Fig	:	Figure
nm	:	Nano meter
min	:	Minute
CRF	:	Capital Recovery Factor
Pa.s	:	Pascal second
Pa	:	Pascal
pH	:	Potential of Hydrogen
BBD	:	Box-Behnken Design
RSM	:	Response Surface Methodology
ICA	:	International Confectionery Association
$a_w$	:	Water activity
3D	:	Three-dimensional
W	:	Watts
$R^2$	:	Coefficient of determination
mm	:	Micro-meter