



**INTERNSHIP REPORT**  
**ON**  
**QUALITY ASSURANCE AND PRODUCTION OF FROZEN FOOD,**  
**BAKERY AND ICE-CREAM**  
**“AT KAZI FOOD INDUSTRY”**

**Submitted By**

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**FACULTY OF ALLIED HEALTH SCIENCE**  
**(FAHS) DAFFODIL INTERNATIONAL**  
**UNIVERSITY**  
**JUNE 2023**

## LETTER OF TRANSMITTAL

Date:

To

Dr. Nizam Uddin

Associate Professor and Head In-Charge

Department of Nutrition And Food Engineering

Daffodil International University

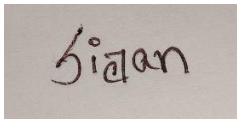
### **Subject: Submission of Internship Report**

Dear Sir,

I consider it a huge honor to be able to submit the internship report on “Quality Assurance and Production” of frozen food, Ice cream and Bakery products at “Kazi Food Industry Ltd” is another part of the B.Sc. program in Nutrition and Food Engineering (NFE). This report was created using the skills I learned while interning at "Kazi Food Industry Ltd." For me, working under your direct supervision is a tremendous accomplishment and learning opportunity. The "Quality Assurance and Production" report provides the basis of frozen food, ice cream and bakery products at “Kazi Food Industry Ltd” for fifteen days under the supervision of Md Mahfuzur Rahman “(Frozen Food Officer)” and Soumen Sarker, “(Quality Control Manager)” in “Kazi Food Industry Ltd”.

I want to submit this report for your opinion and advice as a result. I will be inspired to do better planning in the future by your thoughtful advice.

Sincerely Yours

A rectangular box containing a handwritten signature in black ink that reads "Sijan".

Md. Merazul Islam Sijan

ID: 192-34-960

Department of Nutrition and Food Engineering

## LETTER OF AUTHORIZATION

Date:

To

The Head

Nutrition & Food Engineering

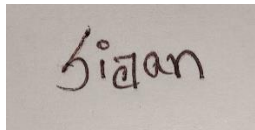
Faculty of Allied Health Science

Daffodil International University

### **Subject: Submission of Internship Report**

This internship report, "Studies on Production and Quality Assurance of Frozen Food, Ice-Cream and Bakery Products" at Kazi Food Industry Ltd., describes the knowledge and scope of the practice. It was delivered to the Faculty of Allied Health Science, Department of Nutrition and Food Engineering, Daffodil International University. The department and faculty members were the subject of this inquiry in its entirety.

Sincerely yours,

A rectangular box containing a handwritten signature in black ink that reads "Sijan".

.....

Md. Merazul Islam Sijan

ID: 192-34-960

Department of Nutrition and Food Engineering

Faculty of Allied Health Science

Daffodil International University

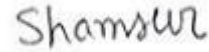
## CERTIFICATION OF APPROVAL

This is to certify that the Internship report on “Production and Quality Assurance of Frozen food, Ice-Cream and Bakery products”, conducted by Md. Merazul Islam Sijan, bearing respectively ID No: 192-34-960 of the department of Nutrition and Food Engineering. He finished his internship project under my supervision, and the report he produced has been given approval for presentation and defense/viva.

I'm happy to guarantee that the information and conclusions in the report are the genuine creation of Md. Merazul Islam Sijan. He has a solid moral foundation and a charming personality. Working with him has been a wonderful joy, and we wish him well in anything he does.



.....  
Dr. Nizam Uddin  
Associate Professor & Head In-Charge  
Nutrition & Food Engineering  
Faculty of Allied Health sciences



.....  
Md. Shamsur Rahman  
Lecturer  
Nutrition & Food Engineering  
Daffodil International University

## ACKNOWLEDGEMENT

First and foremost, I would like to express my heartfelt gratitude to the Almighty Allah for His blessings that enabled me to successfully complete my internship report on "Quality Assurance and Production of frozen food, ice-cream, and bakery products" at Kazi Food Industry Ltd. It is imperative to complement theoretical knowledge with practical experiences to bridge the gap between academia and real-world applications.

Without my parents, I would not have been able to accomplish my goals and ambitions, thus I am really grateful to them. They have given me continuous support and been a tremendous help all along the way.

I would like to express my gratitude to Md. Shamsur Rahman, Lecturer in the Department of Nutrition and Food Engineering in the Faculty of Allied Health Science at Daffodil International University, for his unwavering support and direction throughout my internship.

I want to express my gratitude to Dr. Nizam Uddin, the honorable head of the Department of Nutrition and Food Engineering, for his kind collaboration and support in helping me accept this degree.

My profound gratitude goes to the honorable Dean, Dr. Bellal Hossain, Faculty of Allied Health Science, Daffodil International University, for his continuous support.

I am grateful to Mr. Nazmul Hossain, AGM, Administration of Kazi Food Industry Ltd., for his assistance and support throughout my internship.

I would also like to express my deep appreciation to Mr. Asif (HR), Md. Mahfuzur Rahman (Frozen Food Officer), Soumen Sarker (Quality Control Manager), and all other assistant managers at Kazi Food Industry Ltd. for providing me with this valuable opportunity.

## **EXECUTIVE SUMMARY**

I completed my internship at "Kazi Food Industry Ltd" from March 12th to March 27th, 2023. During this period, I gained knowledge about the production procedures and quality assurance practices. I had the opportunity to observe the frozen food unit for 4 days, the ice-cream production unit for 4 days, the bakery products production unit for 4 days, and the quality control unit for 3 days.

The slogan of "Kazi Food Industry Ltd" is "Eat better". They prioritize maintaining high hygiene standards in their food production process and follow their own designed processes in their plant.

This report is a summary of the information I learned while interning at "Kazi Food Industry Ltd." Working at this firm has been a good experience and a terrific accomplishment for me. The research focuses on "Quality Assurance and Production of Frozen Food, Ice-Cream, and Bakery Products." It contains thorough information on the manufacturing methods of frozen foods (paratha, spring rolls and sausage), ice cream (cone biscuit, cone ice cream and choc-bar) and bakery items (simple cake, muffin cake, slice fruits cake and jelly). The report also includes flow diagrams of these processes as well as information on quality control measures.

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# **Chapter-1**

## **Introduction**

### **1.1 Introduction**

During my Bachelor of Science program in Nutrition and Food Engineering, I was fortunate to secure an internship at Kazi Food Industry Ltd, Bangladesh, as part of my remaining semester requirements. The duration of my internship was 15 days, working six days a week. Kazi Food Industry is a prominent frozen meals company in our country, known for its excellence in the field.

The organization is made up of several different divisions, such as administration, accounting, value-added tax, production, quality control, maintenance, storage, and distribution, to name a few. I was one of three students from Daffodil International University's Nutrition and Food Engineering program, who were offered internship at Kazi Food Industry Ltd. During my internship, I worked closely with the production and quality assurance teams to develop my skills in these areas

### **1.2 Purpose of Internship**

An internship is an excellent professional development opportunity since it gives students real-world experience in a sector related to their academic or professional interests. It's a place where students may test out their interests in the workforce, network with professionals, and learn new skills.

An internship is beneficial for students because it gives them hands-on experience in their field of study, giving them a leg up when it comes to learning the nuts and bolts of their future profession. Internships provide an excellent chance for students to strengthen both their academic and professional abilities by applying their classroom knowledge in a real-world setting.

Overall, internships serve as a mutually beneficial arrangement, enabling students to gain practical experience and companies to access young talent and foster their professional development.

1. The goal of internship training is to bridge the gap between academic learning and real-world application by giving students and young professionals actual experience in a particular sector or subject.
2. Internships are beneficial because they allow participants to get experience in their field of interest, make professional connections, and learn more about themselves.
3. Overall, internship training provides students with the skills, information, and exposure they need to thrive in their chosen areas by combining academic study with actual job experience.



## Chapter-2

### Kazi Food Industry Limited

#### 2.1 About Kazi Food Industry Limited

Kazi Farm Group is a prominent business conglomerate in Bangladesh, with its primary focus on the poultry business. Kazi Farms Limited, established in 1996, initially started as a hatchery for imported eggs.

Kazi Food Industries Limited (KFIL) is a recent addition to the Kazi Farms Group. Situated in Beron, ashulia, Dhaka. KFIL began its journey in 2013 with a vision to become the most trusted consumer food company in Bangladesh. Currently, KFIL operates under three main brands: Bellissimo (premium ice cream), Za 'n Zee (ice cream), and Kazi Farms Kitchen (frozen food, including meat-based, flour-based, fish-based, dried fish, and dry foods).

KFIL is committed to upholding high standards and has received Halal and ISO certifications. It is also registered with the United States Food and Drug Administration (FDA), allowing it to export items to the United States market. The company's consistent aim is to serve customers with high-quality culinary goods. "Kazi Farms Kitchen" got the renowned "No. 01 Frozen Food Brand 2022" title in appreciation of its quality, making it the top frozen food brand in Bangladesh.

KFIL has increased its worldwide reach, with items exported to the United States, Italy, France, the United Kingdom, Ireland, Canada, the United States of America, Japan, South Korea, Australia, New Zealand, and Russia.

#### 2.2 Challenge, imaginative and prescient of Kazi Food Industry ltd

1. High-Quality Chicks and Feed: Ensuring the availability of high-quality chicks and feed to allow poultry producers to operate effectively and profitably.
2. Safe Eggs and Poultry: Producing eggs and poultry products that meet rigorous safety standards, inspiring consumer confidence in the products' quality and safety.
3. Organic Fertilizer: Providing organic fertilizers that replenish the natural components of the soil, encourage long-term fertility, and protect the income of farmers.

#### Vision:

- ✚ We've got a vision of an extra prosperous Bangladesh, in which poultry farmers are generating earnings through producing secure food.

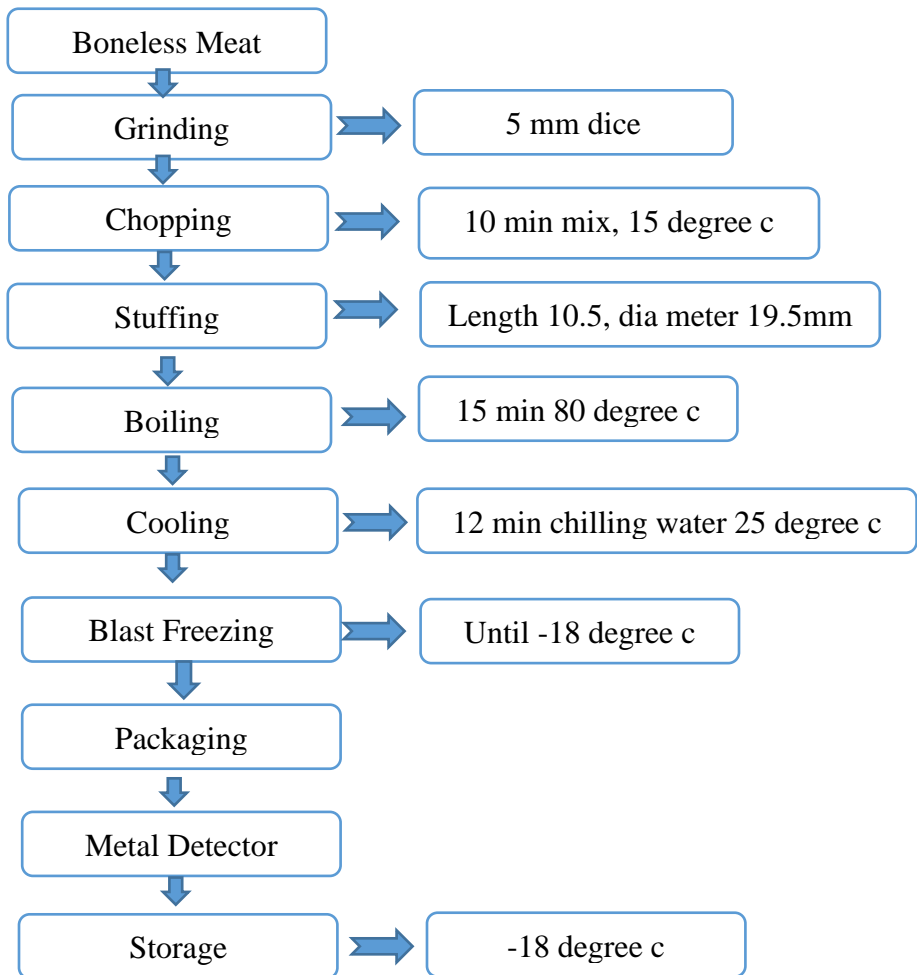
**Chapter-3**  
**Production procedure**

**3.1 Preparation of Sausage**

**Ingredients:**

- Kema Meat
- Chicken Skin
- Palm Oil
- Corn Flour
- Wheat Flour
- Garlic
- Ice Water

**Flow diagram:**

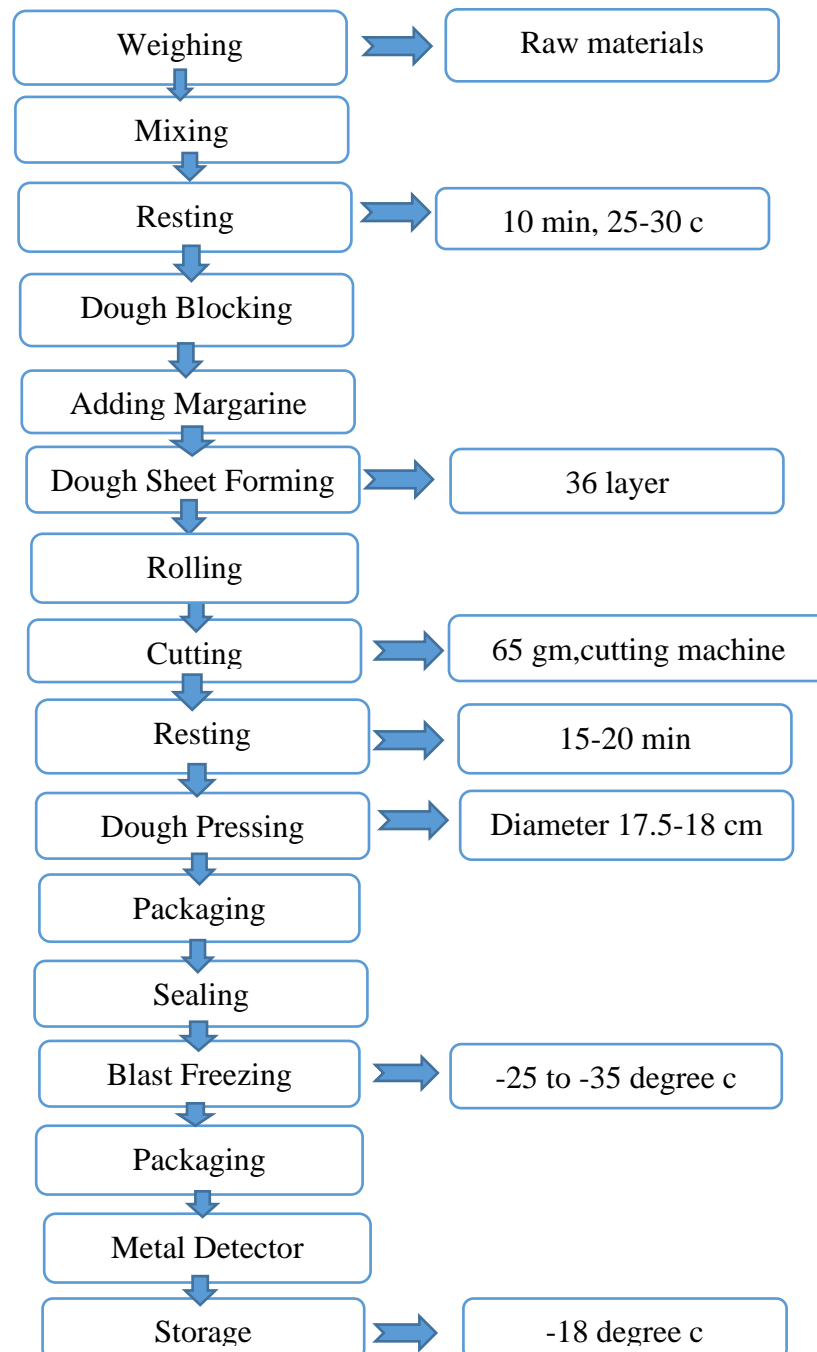


### 3.2 Preparation of Plain Paratha

#### Ingredients:

- Wheat flour
- Margarine
- Sugar
- Salt
- Baking Power
- Water

#### Flow diagram:

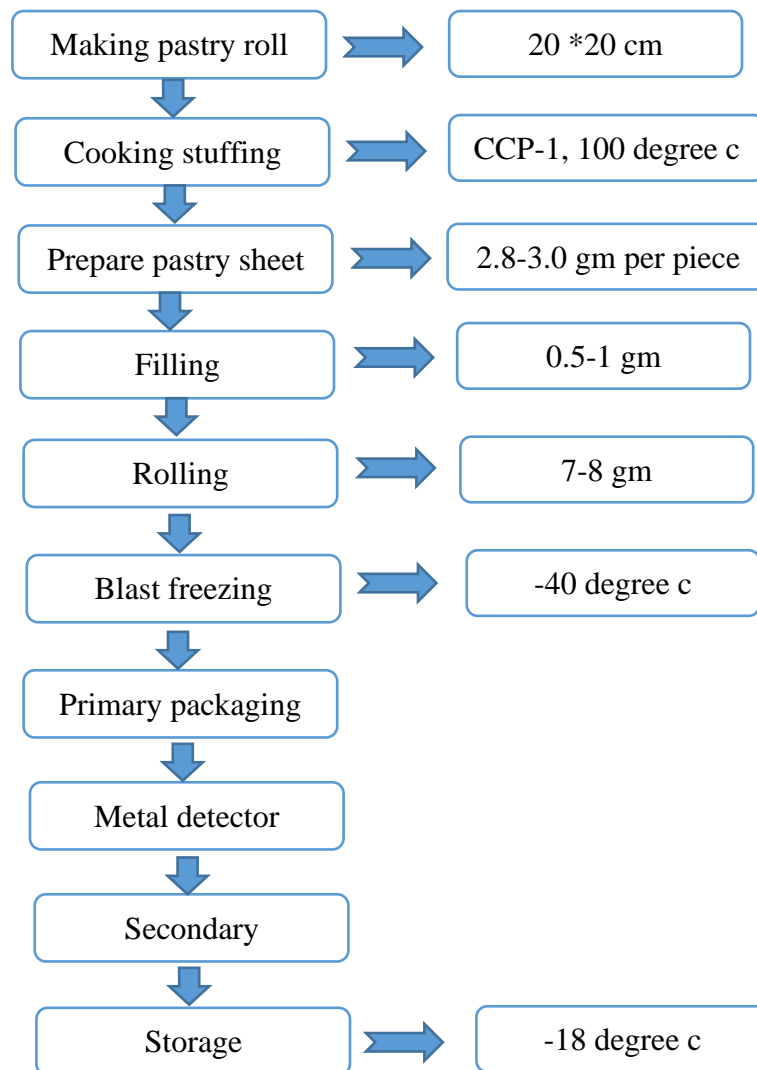


### 3.3 Preparation of Spring Roll (Hand Made)

#### Ingredients:

- Chicken
- Oil
- Onion
- Salt
- Mixed spice
- Garlic
- Ginger
- Soya Sauce

#### Flow diagram:

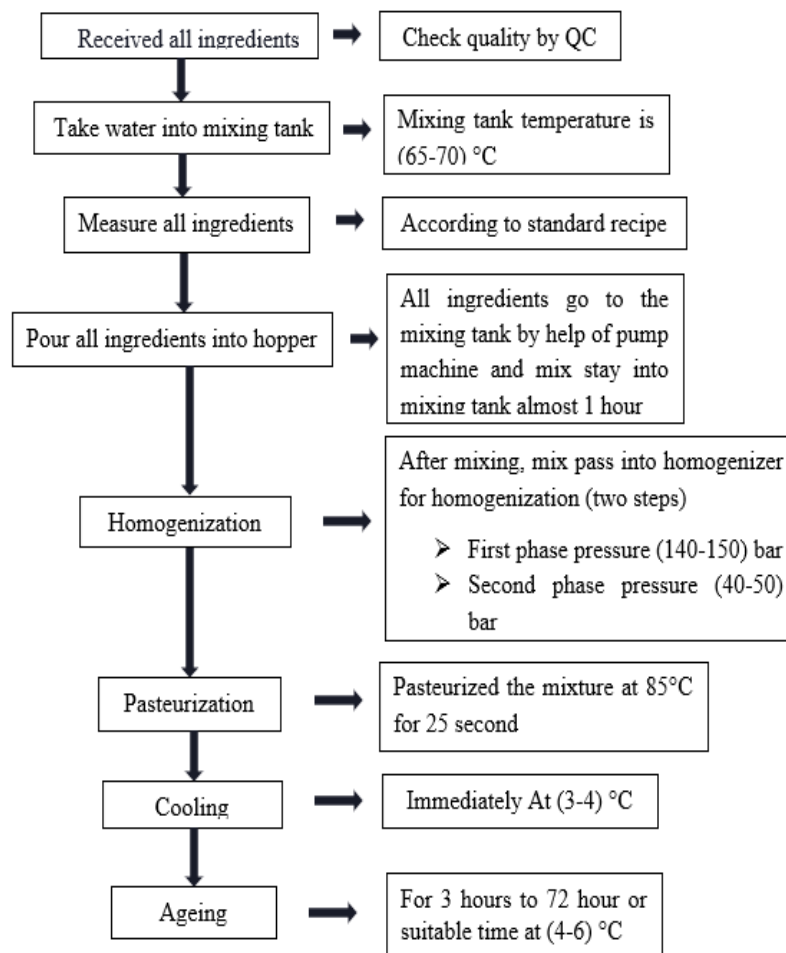


### 3.4 Preparation of Ice cream (General)

#### Ingredients:

- Skim milk powder (SMP)
- Sweet whea powder
- Sugar
- Vegetable fat
- RBD coconut oil
- Glucose
- Stabilizer
- Emulsifier
- Color
- Flavor
- Water

#### Flow diagram:

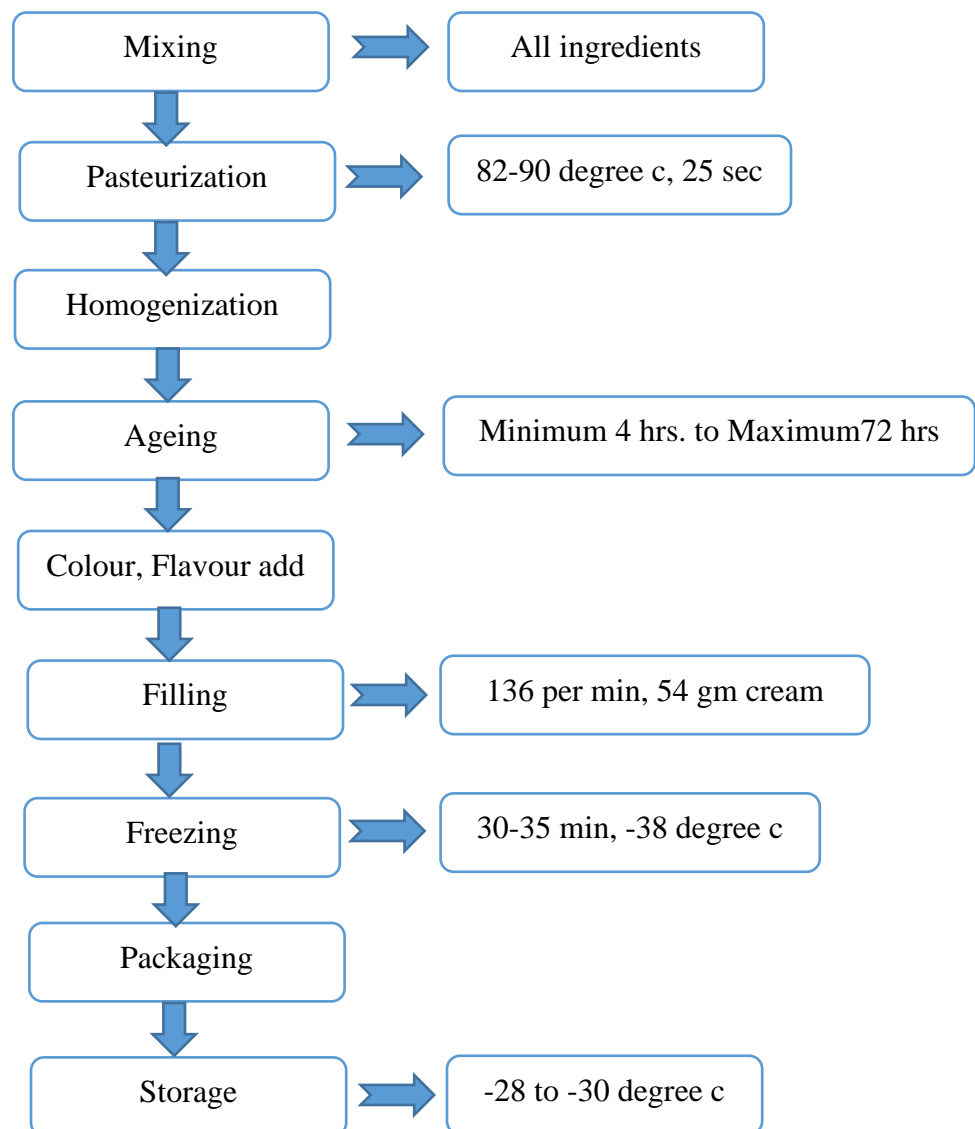


### 3.5 Preparation of Cone Ice cream

#### Ingredients:

- Skim Milk Powder (SMP)
- Sweet whea powder
- Sugar
- Fat (Vegetable, coconut oil, butter)
- Glucose
- Water
- Stabilizer

#### Flow diagram:

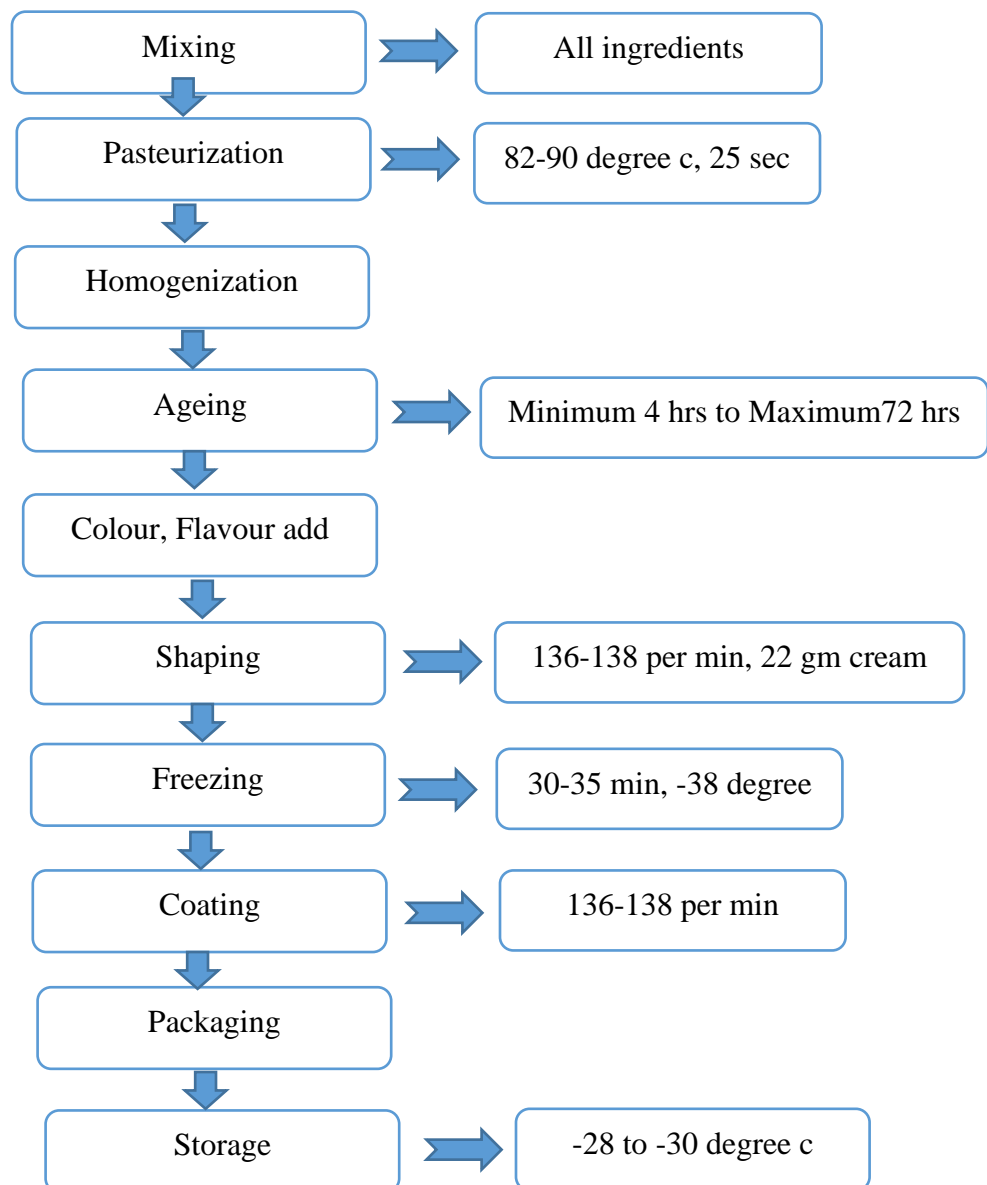


### 3.6 Preparation of Choco bar Ice cream

#### Ingredients:

- Skim Milk Powder
- Sweet whea powder
- Sugar
- Fat (Vegetable, coconut, butter)
- Glucose
- Stabilizer
- Water
- Chocolate syrup

#### Flow diagram:

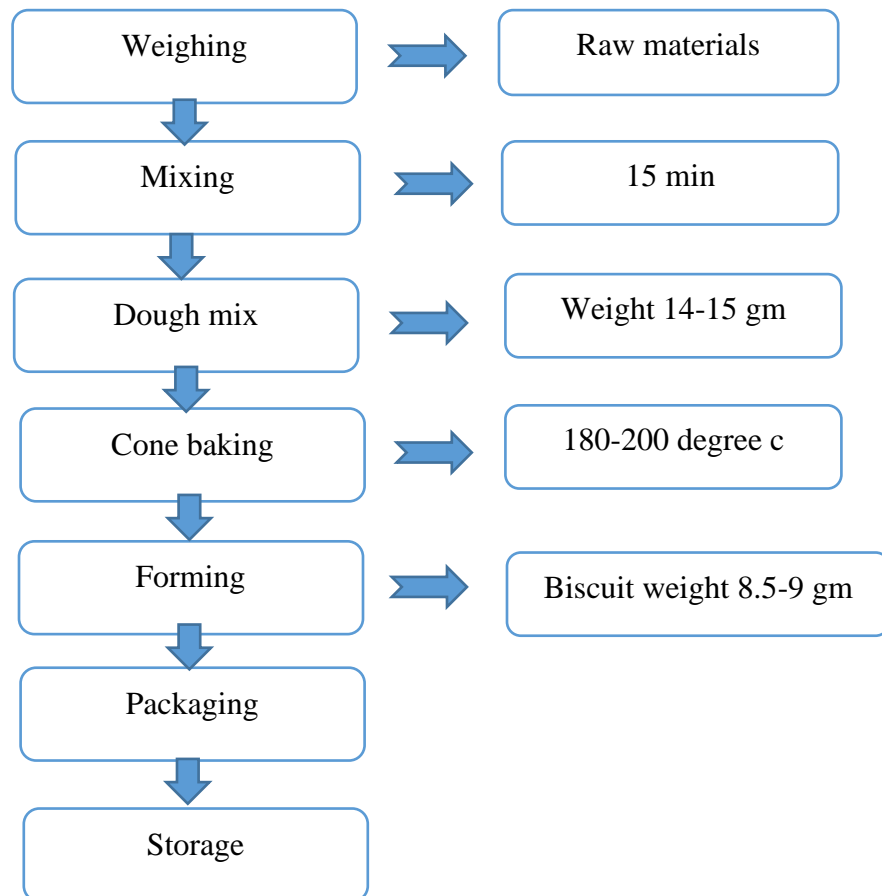


### 3.7 Preparation of Cone Biscuit

#### Ingredients:

- Water
- Sugar
- Salt
- Starch
- Baking powder
- Lecithin
- Soy-bean
- Soya meta

#### Flow diagram:



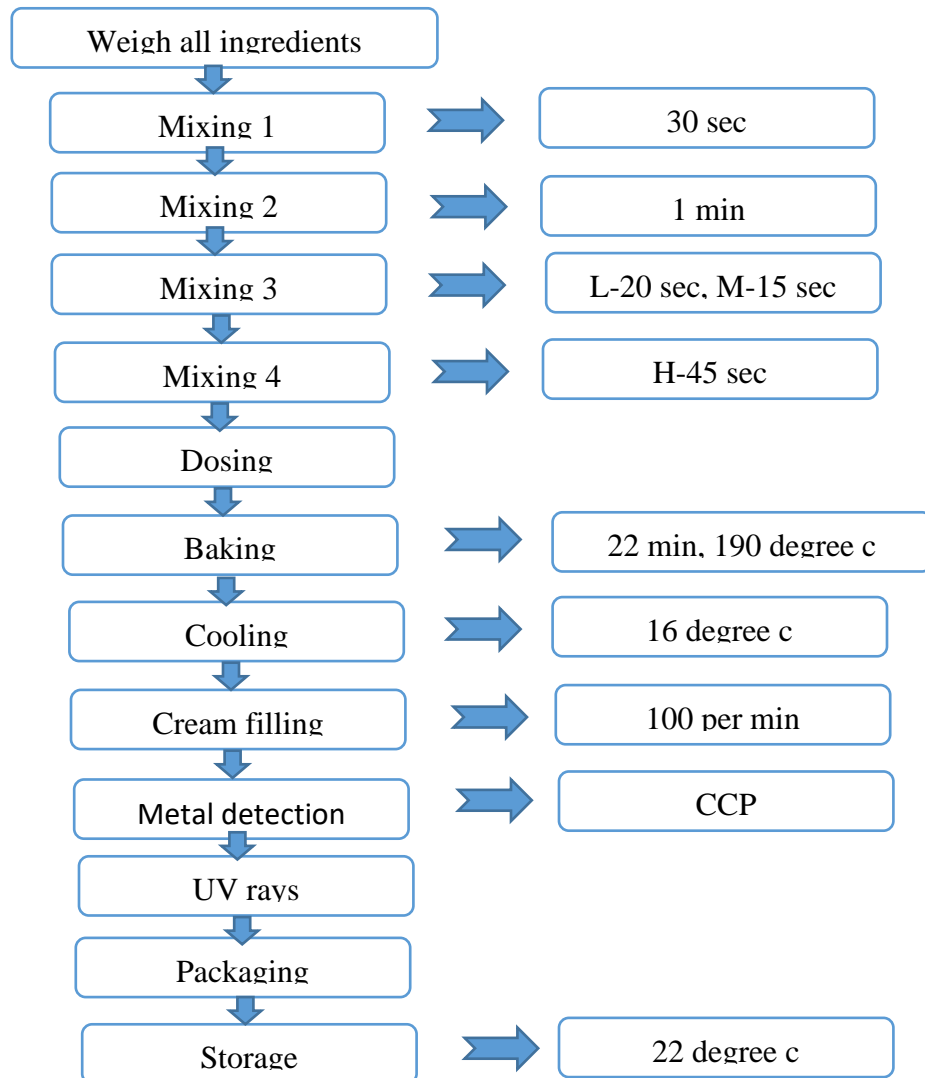


### 3.8 Preparation of Chocolate Muffin Cake

#### Ingredients:

- Egg
- Sugar
- Salt
- Citric acid
- Potassium
- Cake gel
- Flour
- Sorbital
- Invas syrup
- Black coca powder
- Alkaloid coca powder
- Flavor
- Water
- Plum oil
- Milk powder
- Corn flour
- ACCP
- CMC
- SBC
- Grantham gum

#### Flow diagram:



### 3.9 Preparation of Slice Fruit Cake

#### Ingredients:

Sugar

Egg

Cake gel

Pottasiam sorbet

Water

Salt

Liquid glucose

Orange flavor

Sunset yellow color

Baking soda + Powder

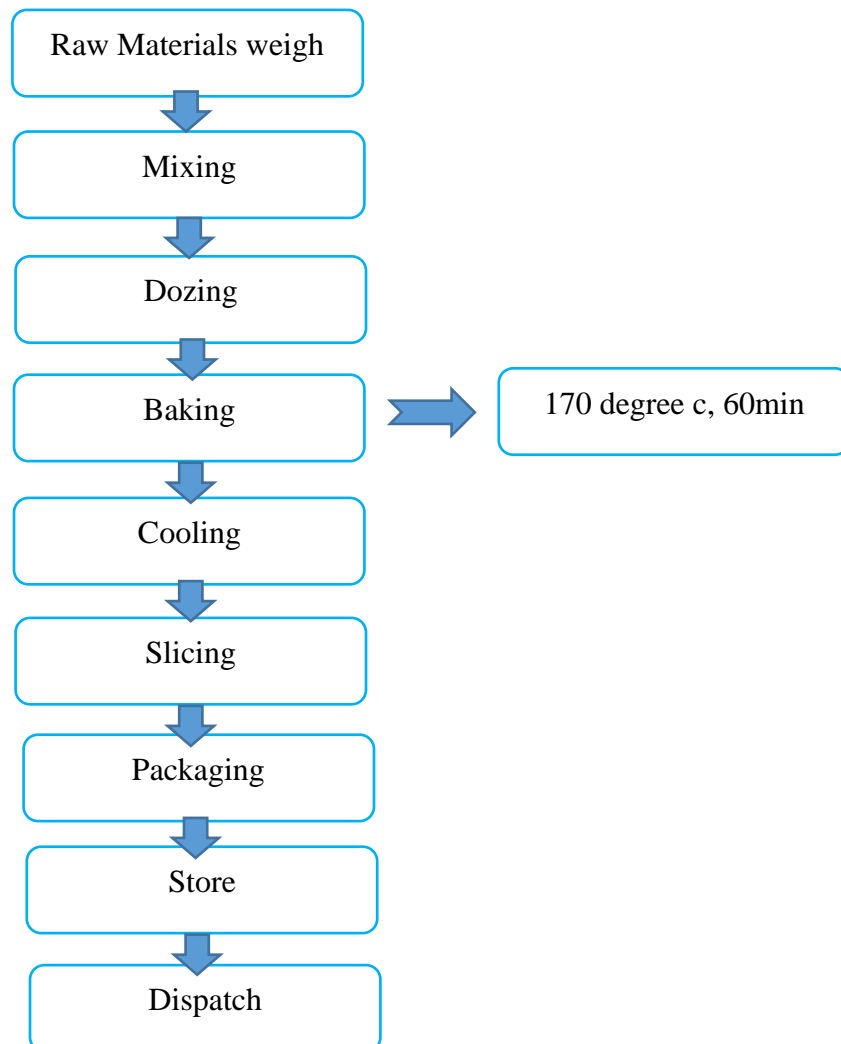
Palm oil

Cassata fruits

k2000

Glycerin

#### Flow diagram:

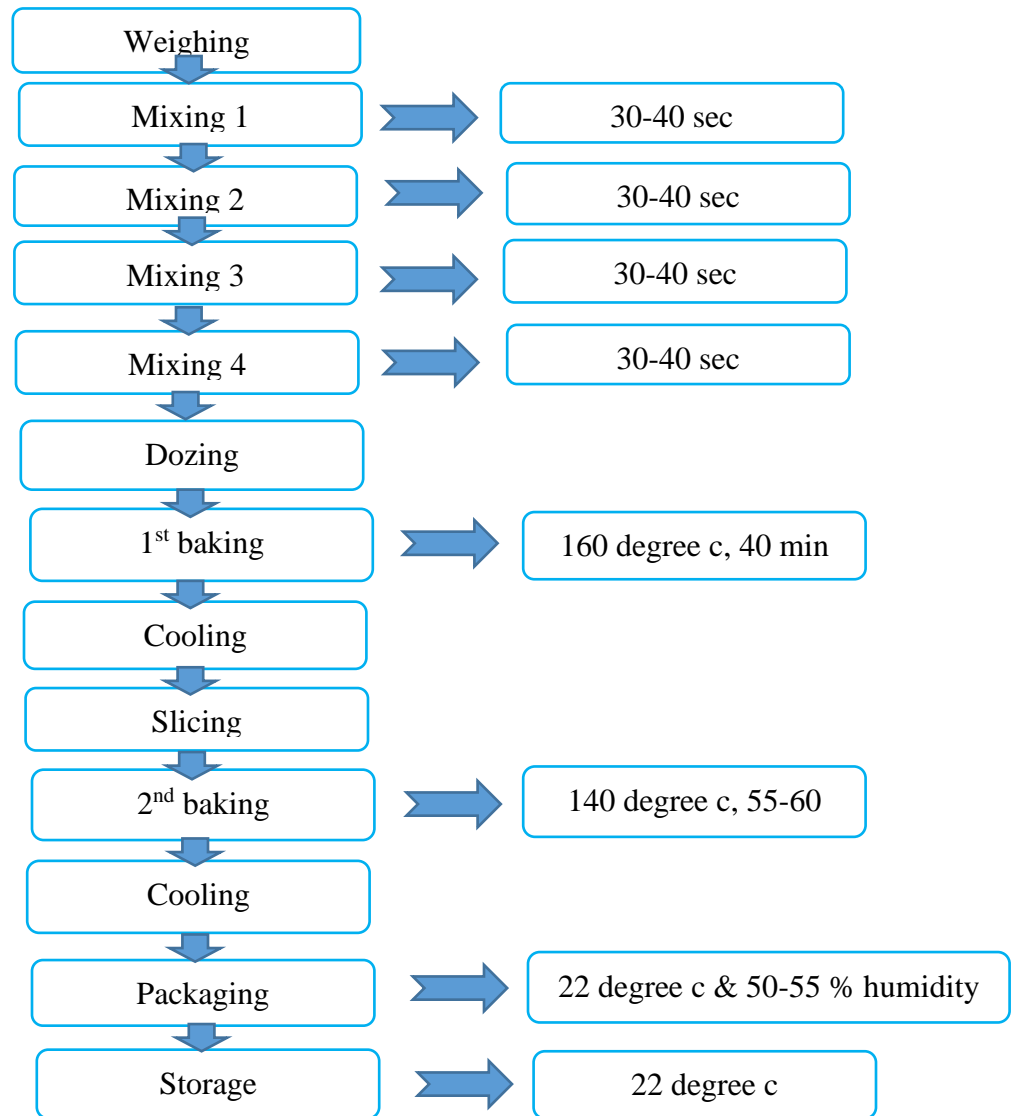


### 3.10 Preparation of Dry Cake

#### Ingredients:

- Dalda + Margarine
- Ammonia bi carbonate
- Sugar
- Water
- Cake gel
- Milk powder
- Egg
- \* Palm oil
- \* Sunset yellow color
- \* Milk flavor
- \* Vanilla
- \* NaHCO<sub>3</sub>
- \* Flour

#### Flow diagram:

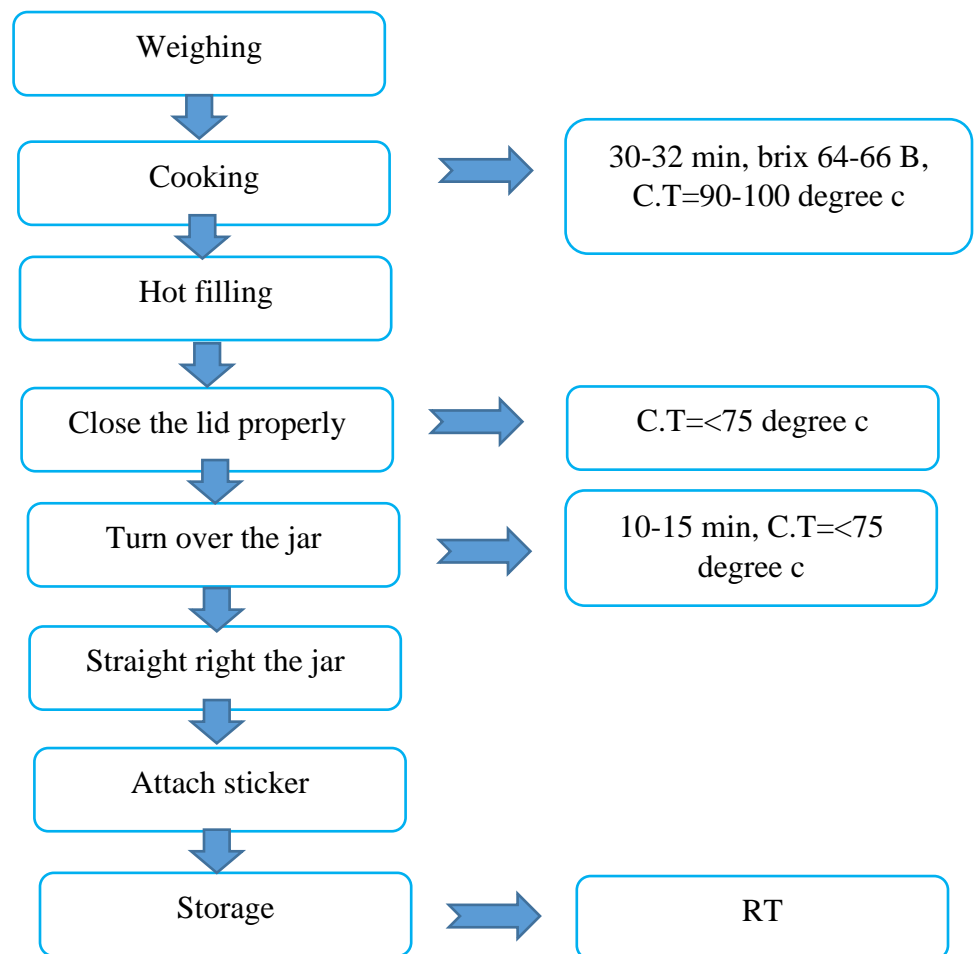


### 3.11 Preparation of Orange jelly

#### Ingredients:

- Water
- Sugar
- Juice (Orange)
- Pectin
- Citric Acid
- Sodium benzoate
- Orange-red color
- Orange flavor

#### Flow diagram:



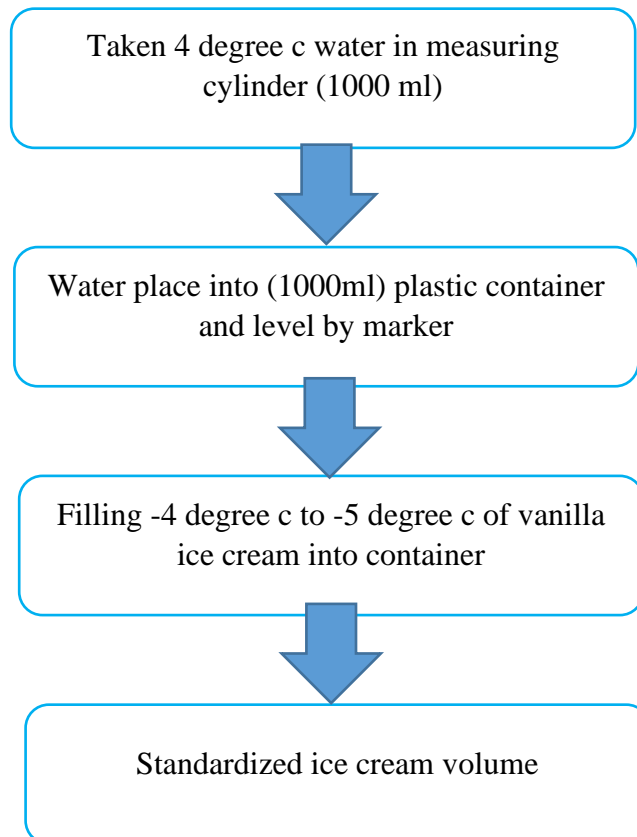
## **Chapter-4**

### **Quality Assurance**

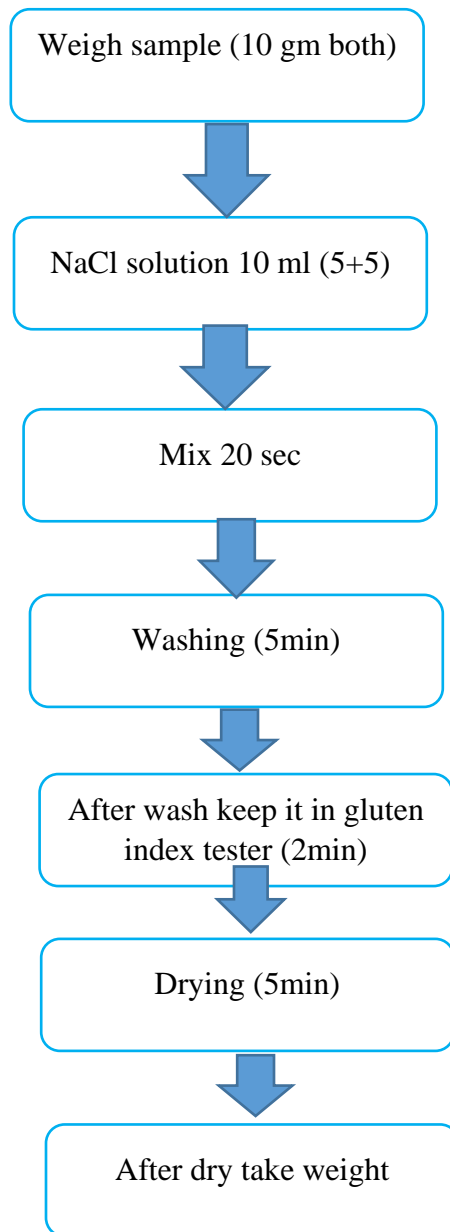
#### **4.1 Laboratory Equipment Name**

- Hand sealer
- Gluten analyzer
- pH meter
- Viscosity meter
- Centrifuge machine
- EMF
- Distil water plant
- Autoclave
- Vertical autoclave
- Hot air sterilizer
- Digital colony counter
- Incubator
- Laminar Air flow

#### 4.2 Flow chart of ice cream volume measurement



### 4.3 Flow chart of Gluten analysis



**Calculation:**  $\text{Weight} * 10 = \%$

## **Chapter-5**

### **Conclusion**

#### **5.1 Conclusion:**

I am delighted and honored to have had the chance to train at Kazi Food Industry Ltd, a forerunner in Bangladesh. I like how much time they gave me to learn about the production and quality control departments. Throughout my internship, the trainers were open and honest, and the personnel were kind and accommodating.

During my time at Kazi Food Industry Ltd., I learned about the manufacturing processes and quality control procedures for bakery products, ice cream, and frozen foods. This experience will unquestionably be beneficial to my future endeavors. I am grateful for the chance to learn and advance in such a reputable organization.