

# Ice Cream Processing Technician

## Assessment for Certification

<b>Qualification Pack</b>	Ice Cream Processing Technician
<b>Reference ID</b>	FIC/Q2004
<b>NSQF Level</b>	4
<b>Sector</b>	Food Processing
<b>Occupation</b>	Processing

<b>CANDIDATE'S DETAILS (Fill in Capital Letters only)</b>	
CANDIDATE'S NAME	
AADHAR / RATION CARD NUMBER	
SDMS ENROLMENT ID	
BATCH ID	
TRAINING CENTRE NAME	
LOCATION	
Candidate's Sign	

**Assessor's Sign:** \_\_\_\_\_

### **READ THE INSTRUCTIONS CAREFULLY BEFORE STARTING**

- The question paper consists of Theory and Practical parts
- Complete the Theory part first and then move on to the practical part when instructed.
- The theory section has **5 parts which consists of 20 questions** in total.
- All questions are compulsory.
- Only use Blue/Black Ball point pens to fill/answer the question paper.
- Read the questions carefully before answering.
- Tick only the specified number of options for a particular question. Ticking more than specified options will get you ZERO for the whole question.
- Put a tick mark (✓) or a cross mark (X) as specified in the questions.
- The marks should only be in the box which you want to mark as an answer.
- Do not write anything in the section marked for the assessor.
- Time allotted for Theory: 1 ½ hour

## THEORY TEST

### Part I: Prepare and maintain work area and machineries for production

1. Select and tick **ONLY SIX** items from the table which should NOT be present in or around the workspace in order for the place to remain hygienic. ( 2 X 6 = 12 marks)

Dust	Towels	Brush	Microbes
Cream	Waste	Stabilizers	Tools
Whisk	Gloves	Spoons	Equipment
Insects	Cleaning Cloth	Flies	Sanitizer
Eggs	Water	Butter	Cockroaches

2. Hazard Analysis and Critical Control Points (HACCP) is used for maintaining \_\_\_\_\_ at the workplace. (2marks)

<input type="checkbox"/>	a. Safety	<input type="checkbox"/>	b. Hygiene
<input type="checkbox"/>	c. Security	<input type="checkbox"/>	d. None of these

3. State True or False: There are three basic principles of HACCP. (2marks)

<input type="checkbox"/>	a. True	<input type="checkbox"/>	b. False
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4. State True or False: HACCP are referred as the prevention of hazards rather than finished product inspection. (2marks)

<input type="checkbox"/>	a. True	<input type="checkbox"/>	b. False
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5. Select and tick **ONLY FOUR** correct tools and equipments that you will require as a Ice Cream Processing Technician.( 2 X 4 = 8 marks)

Spoon	Hammer	Stapler	Stabilizer
Broom	Spade	Flavoring	Earthen Pots
Ladder	Measuring Cups	Fire Torch	Pliers

6. Put a **tick (✓)** mark against the **Bio degradable** items and a **cross (✗)** marks against the **Non- Biodegradable** items. (1 X 7 = 7 marks)

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Vanilla Essence | <input type="checkbox"/> Plastic         | <input type="checkbox"/> Zip Lock Bags |
| <input type="checkbox"/> Cream           | <input type="checkbox"/> Parchment Paper | <input type="checkbox"/> Fruits        |
| <input type="checkbox"/> Butter          |  |  |

7. Select **ONLY TWO** things that should be done before using a machine? ( 1 X 2 = 2 marks)

<input type="checkbox"/> Check if it is clean and dry	<input type="checkbox"/> Put water in it	<input type="checkbox"/> Spray disinfectant in it	<input type="checkbox"/> Attend any minor faults	<input type="checkbox"/> Clean it with broom
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### Part II: Production planning for ice-cream production

8. Which of the following machines are used in commercial ice cream processing: (3 X 4=12 marks)

High Speed Mixers	Batch Oven	Homogenizer
Continuous Ovens	Pasteurizers	Aeration machines
Whipping Machines	Cook tops	Slicers

9. Select ANY SEVEN from the following which you think are the form of commercially produced ice-creams? (2X7=14 marks)

Cones	Spoons	Sundae	Ice Candy
Dice	Cups	Bottle	Glass
Sandwiches	Slice	Soft serves	Cakes

10. Calculate the required amount of ingredients for the production of 100kgs of ice cream if for making 1 kg of ice cream , 700 grms of fresh cream, 200 gram of sugar and 100 gram of chocolate syrup is used: (3 X 3=9 marks)



Fresh Cream	Sugar	Chocolate Syrup
_____ kg	_____ kg	_____ kg

### Part III: Ice Cream production

11. Select ANY SEVEN types of ice cream toppings: (2X7=14 marks)

Rice puffs	Olive Oil	Dry fruits	Patato
Salt	Chocolate Syrup	Nutmeg	Choco chips
Cherry	Pepper	Bits of fruits	Chilli

12. Identify and tick the correct name of the given equipments: ( 2.5 X 2 = 5 marks )

	
i) Ice cream Scooper	iii) Ice cream Biscuits
ii) Ice cream Spade	iv) Ice cream Cones

13. Fill in the blanks with correct option: (8 X 2 = 16 marks )

- In the process of mixing, (**fresh cream/emulsified butter**) is mixed with other ingredients.
- Pasteurization of ice cream is done at (**72°C/100°C**)
- The process of (**Pasteurization/Emulsification**) activates the stabilizers added in the mix.
- Through the process of (**Mixing/Whipping**) the ice cream is converted into a soft solid.
- The process of homogenization breaks down the (**fat/protein**) globules present in the mix.
- Pasteurization kills any (**bacteria/yeast**) present in the liquid.
- (**Mixing/Whipping**) blends the mix with air.
- Pasteurization of liquid is carried out for approximately (**30/60**) minutes.

### Part IV: Documentation & Record Keeping

14. Select **ONLY ELEVEN** items from the table which is a reason for **why documentation is done**.(4 X 11= 44 marks)

It gives detailed knowledge about running of the business	It helps to clean the food handling equipment and machineries	It helps to set an appropriate product price.
It helps in raw material storage	It helps to control product quality.	It helps in theft
It helps to keep track of the money invested in the business.	It works as an evidence for legal procedures.	It helps to take corrective measures at the right time.
It helps to identify the separate costs of raw material or product ingredients	It helps in tracking what material was used in which product	It helps in sending the produce to the market
It helps to identify the production cost of a particular process.	It helps to ensure that quality assurance procedures are followed.	It helps to ensure that the production unit is running smoothly/effectively

15. Select **ONLY THREE** correct statement which suggest the information in a **log of production records**: ( 2 X 3 = 6 marks)





Amount of finished products stored	Quantity of ingredients used	Number of earplugs used
Type of raw materials	Number of gloves used	Information about product quality

16. Select **ONLY TWO** correct option which suggest the reason of why the **stock rotation method is used** ( 5 X 2 = 10 marks)

Ensure market demand	Ensure there is a minimum chance of food spoilage	Ensure continuous income	Help to retain the taste of processed foods.
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**Part V: Health, Hygiene & Safety**

17. Identify and tick the correct name of the shown equipment used for maintaining hygiene. (2.5 X 4 = 10 marks)

			
i. Head mask ii. Hair Restraint	i. Single use gloves ii. Rubber gloves	i. Ear plugs ii. Ear enhancers	i. Nose and Mouth Mask ii. Smell & Odor retardant

18. Tick the correct option from the two given options: ( 1 X 11= 11 marks)

**Step 1:** Wet hands & (arms / legs) with (mild/ warm) water

**Step 2:** Apply (soap / surf)

**Step 3:** Use enough to build a good (bubbles / lather)





**Step 4:** Vigorously (scrub / rub) hands & arms for (4-5 / 10-15) seconds.

**Step 5:** Clean under finger (nails / tips) and (inside / between) finger

**Step 6:** (Rinse / Wash) under running water and (rinse/wash) thoroughly.

**Step 7:** Dry using a (single use / wet) paper towel.

19. Identify and tick the correct name of the following safety equipments/signage (1.5 X 4 = 6 marks)

			
i. Don't use hands ii. No Entry	i. Assembly point ii. Refreshment point	i. Hot, don't touch. ii. Thorns, don't put hands	i) Air Extinguisher ii) Fire Extinguisher

20. Tick on the correct option: ( 1 X 8 = 8 marks)

- i) You should be aware about any potential physical/chemical/biological hazard that can occur at the work place. **(YES/ NO)**
- ii) It is alright if rodents/pest/flyes etc are present in the baking area. **(YES/ NO)**
- iii) Periodic audits should be conducted to ensure safety and hygiene.**(YES/ NO)**
- iv) Documenting what has been used for which product may help for future reference, in case required **(YES/ NO)**
- v) The quality of food can be determined by its aroma, appearance, taste and best before date. **( YES/ NO)**
- vi) Storing raw food with cooked ones can result in cross-contamination. **(YES/ NO)**
- vii) Labeling material can help in avoiding confusion while identification? **( YES/ NO)**
- viii) FIFO means First in First Out. **( YES/ NO)**

## PRACTICAL TEST

Prepare any **ONE** from the following listed

- i) Vanilla Flavored Ice cream
- ii) Strawberry Flavored Ice cream
- iii) Chocolate Flavored Ice cream
- iv) Fresh fruits Ice cream

**READ THE INSTRUCTION CAREFULLY BEFORE STARTING:**

- Produce at least 100grams of ice cream so that the assessor can taste/inspect it for quality. You will further be marked for preparing the workplace before starting to work, equipment utilization, adherence to various processes required for baking, consistency, quality of output, and overall safety and hygiene maintained while the practical session of the assessment.
- Use the recipe which has been taught to you in due course of your training. Please adhere to the same for getting a desired output.
- Refer to the marking criteria in the next section to understand more about how you will be marked.

*\*This section is only for the use of assessor*

## MARKING SHEET

### Theory Marks

<i>Associated Parts</i>	<i>Total Marks</i>	<i>Marks Obtained</i>
Part I: Prepare and maintain work area and machineries for Production	<b>35</b>	
Part II: Production planning for ice-cream production	<b>35</b>	
Part III: Ice Cream production	<b>35</b>	
Part IV: Documentation & Record Keeping	<b>60</b>	
Part V: Health, Hygiene & Safety	<b>35</b>	
<b>TOTAL</b>	<b>200</b>	

**Practical Marks**

<b>Associated Parts</b>	<b>Sections</b>	<b>Total Marks</b>	<b>Marks Obtained</b>
Part I: Prepare and maintain work area and machineries for Production	Cleaning of workplace	21	
	Cleaning of tools & equipments	21	
	Ensuring working/availability of tools & equipments	23	
Part II: Production planning for ice-cream production	Procuring Raw materials	31	
	Equipment utilization	34	
Part III: Ice Cream production	Process used for mixing Ingredients	10	
	Process used for Pasteurization	10	
	Process used for Homogenization	8	
	Process used for Whipping	10	
	Process used for Freezing	7	
	Quality of the output	10	
	Post production cleaning and maintenance	10	
Part V: Health, Hygiene & Safety	Overall food safety and hygiene maintained	26	
	Personal Hygiene and use of personal hygiene equipments	17	
<b>TOTAL</b>		<b>238</b>	

**Viva Marks**

<b>Associated Parts</b>	<b>Ask &amp; mark accordingly</b>	<b>Total Marks</b>	<b>Marks Obtained</b>
Part IV: Documentation & Record Keeping	Ask <b>ANY TWO</b> <ul style="list-style-type: none"> <li>What do you understand by <b>BATCH NUMBER</b> and what is its importance?</li> <li>What do you understand by <b>BEST BEFORE DATE</b> and how is it important?</li> <li>How would previous records help in planning for upcoming production orders of biscuits?</li> </ul>	40	
Part V: Health, Hygiene & Safety	Ask <b>ANY ONE</b> <ul style="list-style-type: none"> <li>Should you come to work if you have cough and cold?</li> <li>How should you drink water when thirsty while mixing dough?</li> </ul>	22	
<b>TOTAL</b>		<b>62</b>	