

Assessment Evidence Guide

For

Food Technology

Level-5

(Formative)



**National Vocational & Technical Training
Commission Islamabad**

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Use Food Grade Packaging Material
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete and demonstrate the tasks of Receive food packaging, Test packaging material, Perform PET bottles making and Perform vacuum packing within 04 Hrs. Time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to <ol style="list-style-type: none"> 1. Receive Food Packaging 2. Test Packaging Material 3. Perform PET Bottles Making 4. Perform Vacuum Packing
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Receive Food Packaging <ul style="list-style-type: none"> ♦ Inspect and verify the incoming packaging material as per specification [SEP] ♦ Operate date coding machine [SEP] ♦ Ensure packaged products meet set requirements [SEP] ♦ Make tertiary packaging for bulk handling for warehouses storage & shipping/transport [SEP] ♦ Protect finished product from environmental factors [SEP] 2. Test Packaging Material <ul style="list-style-type: none"> ♦ Perform physical testing of packaging material [SEP] ♦ Perform chemical testing of packaging material [SEP] ♦ Perform microbiological testing of packaging material [SEP] 3. Perform PET Bottles Making <ul style="list-style-type: none"> ♦ Prepare preform [SEP] ♦ Operate blowing machine [SEP] ♦ Check bottle quality against specifications [SEP] 4. Perform Vacuum Packing <ul style="list-style-type: none"> ♦ Identify the vacuum packing method [SEP] ♦ Analyze plastic film package [SEP] ♦ Ensure air removal from the package before sealing [SEP] ♦ Apply Package sealing [SEP] ♦ Replace internal oxygen with nitrogen gas

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Use Food Grade Packaging Material
Purpose of Assessment	Formative Assessment
Assessment Tasks	1. Receive Food Packaging 2. Test Packaging Material 3. Perform PET Bottles Making 4. Perform Vacuum Packing

I can.....

Performance Criteria	Yes	No
1. Inspect and verify the incoming packaging material as per specification	<input type="checkbox"/>	<input type="checkbox"/>
2. Operate date coding machine	<input type="checkbox"/>	<input type="checkbox"/>
3. Check packaged products meet set requirements	<input type="checkbox"/>	<input type="checkbox"/>
4. Make tertiary packaging for bulk handling for warehouses storage & shipping/transport ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
5. Protect finished product from environmental factors ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform physical testing of packaging material	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform chemical testing of packaging material ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform microbiological testing of packaging material	<input type="checkbox"/>	<input type="checkbox"/>
9. Prepare preform ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
10. Operate blowing machine	<input type="checkbox"/>	<input type="checkbox"/>
11. Check bottle quality against specifications	<input type="checkbox"/>	<input type="checkbox"/>
12. Identify the vacuum packing method	<input type="checkbox"/>	<input type="checkbox"/>
13. Analyze plastic film package ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
14. Ensure air removal from the package before sealing ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
15. Apply Package sealing ^[1] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
16. Replace internal oxygen with nitrogen gas	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Use Food Grade Packaging Material
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks	1. Receive Food Packaging		
	2. Test Packaging Material		
	3. Perform PET Bottles Making		
	4. Perform Vacuum Packing		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Inspected and verified the incoming packaging material as per specification			
2. Operated date coding machine			
3. Checked packaged products meet set requirements			
4. Made tertiary packaging for bulk handling for warehouses storage & shipping/transport <small>[L] [SEP]</small>			
5. Protected finished product from environmental factors <small>[L] [SEP]</small>			
6. Performed physical testing of packaging material.			
7. Performed chemical testing of packaging material			
8. Performed microbiological testing of packaging material			
9. Prepared preform <small>[L] [SEP]</small>			
10. Operated blowing machine			
11. Checked bottle quality against specifications			
12. Identified the vacuum packing method <small>[L] [SEP]</small>			
13. Analyzed plastic film package <small>[L] [SEP]</small>			
14. Ensured air removal from the package before sealing			
15. Applied package sealing <small>[L] [SEP]</small>			
16. Replaced internal oxygen with nitrogen gas			
Competent <input type="checkbox"/>	Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Use Food Grade Packaging Material
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Why we inspect the incoming packaging material?		
2.	What are the characteristics of a good packing material?		

3.	What are the types of packaging material used in food?		
4.	Why packing is important?		
5.	Which environmental factors can affect the finished product?		
6.	How packaging can contaminate the product?		
7.	Enlist the types of packing		
8.	What is tertiary packing in food industry?		

9.	What types of tests are performed for the packaging materials?		
10.	Why the physical testing of packaging material is performed		
11.	Why the microbiological testing of packaging material is performed?		
12.	How are the PET bottles made?		
13.	Why the quality of PET bottle is checked against specification before marketing?		
14.	Why PET bottles are preferred to use?		

15.	Why the removal of air is ensured from the package before sealing?		
16.	What is the benefit of replacing internal oxygen with nitrogen gas?		
17.	Give example of any machine used for food grade packaging material?		

Feedback to the Candidate

Candidate's Signature _____ **Assessor's Signature** _____

List of Tools, Consumables and Equipment

Sr. No.	Name of items	Quantity (25 Candidates)
Consumables		
1.	Packaging material	25 sheets
2.	PET Bottles	25
3.	Preform tool	25
4.	Shrinkwrap	5 rolls
5.	Markers	25
6.	Glass beakers (100ml & 250ml)	2 for each student
7.	Glass Cylinders (100ml & 250ml)	2 for each student
8.	Conical Flasks (250ml)	2 for each student
9.	Glass pipettes	25
10.	Test tubes	10 for each student
11.	Test tubes racks	25
12.	Spatulas	25
13.	Media and chemicals as per required test	200g
14.	First aid box	5 set
15.	Lab coat	25
16.	Gloves	25 pairs
17.	Masks	25
18.	Safety shoes	25 pairs
19.	Helmet	25
20.	Goggles	25
21.	Ear Plugs	25
Equipment		
1.	Date coder machine	1
2.	Vacuum packing machine	1
3.	Blowing machine	1
4.	Sealing machine	1

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Perform Food Microbiological Tests
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete and demonstrate the tasks of Conduct product sampling, Prepare stock and working solution, Prepare culture media, Assess cleaning efficiency, Count colonies, Inoculate and incubate microorganism on growth medium and Calculate total plate count within 04 Hrs. Time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to <ol style="list-style-type: none"> 1. Conduct Product Sampling 2. Prepare Stock and Working Solution 3. Prepare Culture Media 4. Assess Cleaning Efficiency 5. Count Colonies 6. Inoculate and Incubate Microorganism on Growth Medium 7. Calculate Total Plate Count
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Conduct Product Sampling <ul style="list-style-type: none"> ♦ Collect sample as per product category [SEP] ♦ Analyze sample size and integrity of the container [SEP] ♦ Label and record sample [SEP] ♦ Store sample as per the required environment [SEP] 2. Prepare Stock and Working Solution <ul style="list-style-type: none"> ♦ Make solutions of required concentration [SEP] ♦ Make different dilutions to make a working solution [SEP] 3. Prepare Culture Media <ul style="list-style-type: none"> ♦ Prepare agar culture medium [SEP] ♦ Prepare broth culture medium [SEP] 4. Assess Cleaning Efficiency <ul style="list-style-type: none"> ♦ Perform Swab Test [SEP] ♦ Perform Dilution Test [SEP] 5. Count Colonies <ul style="list-style-type: none"> ♦ Determine type of microbes [SEP] ♦ Determine coliform, salmonella and TPC [SEP]


	<p>6. Inoculate and Incubate Microorganism on Growth Medium</p> <ul style="list-style-type: none"> ♦ Inoculate/streak the culture media with microorganism [SEP] ♦ Label the culture media with suitable name/code [SEP] ♦ Incubate the culture media at the optimum growth [SEP] temperature [SEP] <p>7. Calculate Total Plate Count</p> <ul style="list-style-type: none"> ♦ Operate colony counter [SEP] ♦ Count colonies [SEP] ♦ Calculate TPC as CFU/g [SEP]
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Perform Food Microbiological Tests
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Conduct Product Sampling 2. Prepare Stock and Working Solution 3. Prepare Culture Media 4. Assess Cleaning Efficiency 5. Count Colonies 6. Inoculate and Incubate Microorganism on Growth Medium 7. Calculate Total Plate Count

I can.....

Performance Criteria	Yes	No
1. Collect sample as per product category	<input type="checkbox"/>	<input type="checkbox"/>
2. Analyze sample size and integrity of the container	<input type="checkbox"/>	<input type="checkbox"/>
3. ^[L] _[SEP] Label and record sample	<input type="checkbox"/>	<input type="checkbox"/>
4. Store sample as per the required environment ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
5. Make solutions of required concentration ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
6. Make different dilutions to make a working solution	<input type="checkbox"/>	<input type="checkbox"/>
7. Prepare agar culture medium ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
8. Prepare broth culture medium ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform Swab Test ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform Dilution Test ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
11. Determine type of microbes ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
12. Determine coliform, salmonella and TPC ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
13. Inoculate/streak the culture media with microorganism ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
14. Label the culture media with suitable name/code ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
15. Incubate the culture media at the optimum growth ^[L] _[SEP] temperature	<input type="checkbox"/>	<input type="checkbox"/>
16. Operate colony counter ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>

17. Count colonies 	<input type="text"/>	<input type="text"/>
18. Calculate TPC as CFU/g	<input type="text"/>	<input type="text"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Perform Food Microbiological Tests
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks	1.	Conduct Product Sampling		
	2.	Prepare Stock and Working Solution		
	3.	Prepare Culture Media		
	4.	Assess Cleaning Efficiency		
	5.	Count Colonies		
	6.	Inoculate and Incubate Microorganism on Growth Medium		
	7.	Calculate Total Plate Count		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Collected sample as per product category <small>[L] [SEP]</small>			
2.	Analyzed sample size and integrity of the container <small>[L] [SEP]</small>			
3.	Labeled and recorded sample <small>[L] [SEP]</small>			
4.	Stored sample as per the required environment <small>[L] [SEP]</small>			
5.	Made solutions of required concentration			
6.	Made different dilutions to make a working solution			
7.	Prepared agar culture medium			
8.	Prepared broth culture medium <small>[L] [SEP]</small>			
9.	Performed Swab Test			
10.	Performed Dilution Test <small>[L] [SEP]</small>			
11.	Determined type of microbes			
12.	Determined coliform, salmonella and TPC <small>[L] [SEP]</small>			
13.	Inoculated/streaked the culture media with microorganism <small>[L] [SEP]</small>			
14.	Labeled the culture media with suitable name/code			
15.	Incubated the culture media at the optimum growth <small>[L] [SEP]</small> temperature <small>[L] [SEP]</small>			
16.	Operated colony counter <small>[L] [SEP]</small>			
17.	Counted colonies <small>[L] [SEP]</small>			
18.	Calculated TPC as CFU/g <small>[L] [SEP]</small>			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Perform Food Microbiological Tests
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What is the difference in prokaryotic and eukaryotic cell?		
2.	What are the required environmental conditions to store the sample?		

3.	Why the sample is labeled before testing or storage?		
4.	What causes the spoilage of food?		
5.	What is the suitable temperature for the growth of microbe?		
6.	Name microbes that are involved in food spoilage?		
7.	What is the difference between gram-positive and gram-negative bacteria?		

8.	Why we prepare the stock solution?		
9.	What is the difference between agar and broth medium?		
10.	How will you check cleaning efficiency?		
11.	What is CFU?		
12.	Why we label culture media with suitable name or code?		
13.	Name foodborne diseases		
14.	Enlist the sterilization techniques?		
15.	What is the required temperature for the sterilization?		

16.	Why we sterilize glass apparatus and growth media?		
17.	What is inoculum?		
18.	Why swab test is performed?		
19.	Which apparatus is used to count the colonies?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

List of Tools, Consumables and Equipment

Sr. No.	Name of items	Quantity (25 Candidates)
Consumables		
1.	Agar	200g
2.	Broth	200g
3.	Cotton swab	25
4.	Cultures of coliforms, salmonella,	25 slants
5.	Glass beakers (100ml & 250ml)	2 for each student
6.	Glass Cylinders (100ml & 250ml)	2 for each student
7.	Conical flasks (250ml)	2 for each student
8.	Petri-plates	25
9.	Media bottles	2 for each student

10.	Test tubes	10 for each student
11.	Test tubes racks	25
12.	Inoculating loops	25
13.	Glass slides and coverslips	5 box
14.	Sterilize weighing boats	25
15.	Spatulas	25
16.	Markers	25
17.	Scissors	25
18.	Knife	25
19.	First aid box	5 set
20.	Lab coat	25
21.	Gloves	25 pairs
22.	Masks	25
23.	Shoe covers	25 pairs
24.	Caps/head covers	25
25.	Goggles	25
Equipment		
1.	Incubator	1
2.	Autoclave	1
3.	Laminar flow hood	5
4.	Colony counter	5
5.	Stomacher	5
6.	Temperature controlled water bath	5
7.	Vortex mixer	5
8.	Light Microscope	5
9.	Micropipettes (100µl-5000µl)	5 of each type
10.	Weighing balance	5
11.	Oven	2
12.	pH meter	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Comply Quality Standards
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete and demonstrate the tasks of Perform receiving of raw and packaging material, Perform batch making operations, Perform sizing, Wrapping and packing operations, Monitor quality standard and Apply basic mathematical calculations within 04 Hrs. Time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to <ol style="list-style-type: none"> 1. Perform Receiving of Raw and Packaging Material 2. Perform Batch Making Operations 3. Perform Sizing, Wrapping and Packing Operations 4. Monitor Quality Standards 5. Apply Basic Mathematical Calculations
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Perform Receiving of Raw and Packaging Material <ul style="list-style-type: none"> ◆ Perform Physico-Chemical testing of the raw material as per set Standard Operating procedure [L][SEP] ◆ Examine COA (Certificate of analysis) [L][SEP] ◆ Record the results [L][SEP] 2. Perform Batch Making Operations <ul style="list-style-type: none"> ◆ Monitor the weighing of each ingredient as per set recipes [L][SEP] ◆ Set the production plant as per developed SOPs. [L][SEP] ◆ Operate the equipment to prepare the batch [L][SEP] ◆ Execute the production as per set standards [L][SEP] ◆ Analyze the production during operations against the [L][SEP] quality Plan 3. Perform Sizing, Wrapping and Packing Operations <ul style="list-style-type: none"> ◆ Operate the batch roller and dies for the production of the product as per set weight and size [L][SEP] ◆ Operate the cooling section of the line to produce the product as per set standards [L][SEP] ◆ Operate the wrapping machines to pack the product [L][SEP] ◆ Operate the packing machines for bag making of the [L][SEP] final product as per set standards

	<p>4. Monitor Quality Standards</p> <ul style="list-style-type: none"> ◆ Understand the quality parameters and specifications ◆ Monitor the results during the production process^[1]_{SEP} ◆ Record the results in the standard document <p>5. Apply Basic Mathematical Calculations</p> <ul style="list-style-type: none"> ◆ Perform basic mathematics to calculate the shift production ◆ Analyze the results of the different batch by performing basic mathematics and statistical analysis
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Comply Quality Standards
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Perform Receiving of Raw and Packaging Material 2. Perform Batch Making Operations 3. Perform Sizing, Wrapping and Packing Operations 4. Monitor Quality Standards 5. Apply Basic Mathematical Calculations

I can.....

Performance Criteria	Yes	No
1. Perform Physico-Chemical testing of the raw material as per set Standard Operating procedure ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
2. Examine COA (Certificate of analysis) ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
3. Record the results ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
4. Monitor the weighing of each ingredient as per set recipes	<input type="checkbox"/>	<input type="checkbox"/>
5. Set the production plant as per developed SOPs. ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
6. Operate the equipment to prepare the batch ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
7. Execute the production as per set standards	<input type="checkbox"/>	<input type="checkbox"/>
8. Analyze the production during operations against the ^[L] _[SEP] quality Plan	<input type="checkbox"/>	<input type="checkbox"/>
9. Operate the batch roller and dies for the production of the product as per set weight and size ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
10. Operate the cooling section of the line to produce the product as per set standards ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
11. Operate the wrapping machines to pack the product ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>
12. Operate the packing machines for bag making of the ^[L] _[SEP] final product as per set standards ^[L] _[SEP]	<input type="checkbox"/>	<input type="checkbox"/>

13. Understand the quality parameters and specifications	<input type="text"/>	<input type="text"/>
14. Monitor the results during the production process ^[11] _{SEP}	<input type="text"/>	<input type="text"/>
15. Record the results in the standard document ^[11] _{SEP}	<input type="text"/>	<input type="text"/>
16. Perform basic mathematics to calculate the shift production	<input type="text"/>	<input type="text"/>
17. Analyze the results of the different batch by performing basic mathematics and statistical analysis	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Comply Quality Standards
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1. Perform Receiving of Raw and Packaging Material		
		2. Perform Batch Making Operations		
		3. Perform Sizing, Wrapping and Packing Operations		
		4. Monitor Quality Standards		
		5. Apply Basic Mathematical Calculations		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performed Physico-Chemical testing of the raw material as per set Standard Operating procedure			
2.	Examined COA (Certificate of analysis) [L] [SEP]			
3.	Recorded the results [L] [SEP]			
4.	Monitored the weighing of each ingredient as per set recipes			
5.	Set the production plant as per developed SOPs.			
6.	Operated the equipment to prepare the batch [L] [SEP]			
7.	Executed the production as per set standards [L] [SEP]			
8.	Analyzed the production during operations against the [L] [SEP] quality Plan [L] [SEP]			
9.	Operated the batch roller and dies for the production of the product as per set weight and size [L] [SEP]			
10.	Operated the cooling section of the line to produce the product as per set standards [L] [SEP]			
11.	Operated the wrapping machines to pack the product [L] [SEP]			
12.	Operated the packing machines for bag making of the [L] [SEP] final product as per set standards [L] [SEP]			
13.	Understood the quality parameters and specifications			
14.	Monitored the results during the production			

	process ^[1-1] _{SEP}			
15.	Recorded the results in the standard document ^[1-1] _{SEP}			
16.	Performed basic mathematics to calculate the shift production			
17.	Analyzed the results of the different batch by performing basic mathematics and statistical analysis			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Comply Quality Standards
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Which test is performed on receiving of raw and packaging material?		
2.	Why testing is performed for raw material?		

3.	What does SOP stand for?		
4.	What are the required SOPs for the production of a batch?		
5.	What is COA?		
6.	Why COA is important?		
7.	Why weighing of each ingredient is required during batch making?		

8.	Why the results are recorded during production?		
9.	Enlist quality parameters for quality monitoring?		
10.	What is the use of batch roller?		
11.	Why the results of different batch are compared in production?		
12.	What is gap analysis?		
13.	What is CCP?		

14.	Why CCP is important in production?		
15.	What is PRP?		
16.	Why it is important to follow SOPs during production?		

Feedback to the Candidate
Candidate's Signature _____ Assessor's Signature _____

List of Tools, Consumables and Equipment

Sr. No.	Name of items	Quantity (25 Candidates)
Consumables		
1.	Raw Material as per required test	500g
2.	Standard operating procedures document file for assessor	1
3.	Certificate of analysis for assessor	1
4.	Quality manual for assessor	1
5.	Technical manual for assessor	1
6.	Data sheets to record the results	25 sheets
7.	Markers	25
8.	Glass beakers (100ml & 250ml)	2 for each student
9.	Glass Cylinders (100ml & 250ml)	2 for each student
10.	Conical Flasks (250ml)	2 for each student
11.	Test tubes	10 for each student

12.	Test tubes racks	25
13.	Sterilize weighing boats	25
14.	Spatulas	25
15.	Scissors	25
16.	Knife	25
17.	Pen	25
18.	First aid box	5 set
19.	Lab coat	25
20.	Gloves	25 pairs
21.	Masks	25
22.	Shoe covers	25 pairs
23.	Caps	25
24.	Goggles	25
Equipment		
1.	Weighing balance	5
2.	Oven	2
3.	pH meter	5
4.	Production plant as per required test	1
5.	Batch roller and dies	5
6.	Wrapping machine	1
7.	Packing machine	1
8.	Computer	5
9.	Printer	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Implement Quality Management System
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete and demonstrate the tasks of Monitor quality in work area, Contribute to continual improvement, Participate in internal audits, Implement food quality policy and Maintain food quality records within 04 Hrs. Time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to <ol style="list-style-type: none"> 1. Monitor Quality in Work Area 2. Contribute to Continual Improvement 3. Participate in Internal Audits 4. Implement Food Quality Policy 5. Maintain Food Quality Records
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Monitor Quality in Work Area <ul style="list-style-type: none"> ◆ Ensure Good hygiene practices [L] [SEP] ◆ Ensure Good Manufacturing practices to confirm the [L] [SEP] quality of output and/or service [L] [SEP] ◆ Monitor control points to confirm the quality of output [L] [SEP] ◆ Identify nonconformities and take corrective actions [L] [SEP] ◆ Record and Report non-conformities [L] [SEP] 2. Contribute to Continual Improvement <ul style="list-style-type: none"> ◆ Identify barriers to improve quality performance [L] [SEP] ◆ Identify and investigate likely causes [L] [SEP] ◆ Identify solutions and implement or report [L] [SEP] 3. Participate in Internal Audits <ul style="list-style-type: none"> ◆ Understand Audit criteria [L] [SEP] ◆ Develop an audit plan [L] [SEP] ◆ Organize audit documents [L] [SEP] ◆ Perform adequacy audit [L] [SEP] ◆ Participate in on-site audit as a team member [L] [SEP] ◆ Perform Root Cause Analysis [L] [SEP] ◆ Develop Corrective Action Preventive Action reports [L] [SEP]

	<ul style="list-style-type: none"> Record and maintain information ^[L]_[SEP] <p>4. Implement Food Quality Policy</p> <ul style="list-style-type: none"> Perform manufacturing ^[L]_[SEP] Perform products delivery ^[L]_[SEP] Implement Food Quality standards ^[L]_[SEP] Implement Food Safety standards ^[L]_[SEP] Make mutually agreed customer requirements ^[L]_[SEP] related to food quality and safety ^[L]_[SEP] <p>5. Maintain Food Quality Records</p> <ul style="list-style-type: none"> Implement traceability ^[L]_[SEP] Follow appropriate practices ^[L]_[SEP] Perform documentation ^[L]_[SEP] Maintain records as legal requirements related ^[L]_[SEP] documentation ^[L]_[SEP] Maintain record relating manufacturing record ^[L]_[SEP] Maintain record relating processing ^[L]_[SEP] Maintain record relating packing ^[L]_[SEP] Maintain record relating packing, distribution, ^[L]_[SEP] receipt, holding or importation of food products
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Implement Quality Management System
Purpose of Assessment	Formative Assessment
Assessment Tasks	1. Monitor Quality in Work Area 2. Contribute to Continual Improvement 3. Participate in Internal Audits 4. Implement Food Quality Policy 5. Maintain Food Quality Records

I can.....

Performance Criteria	Yes	No
1. Ensure Good hygiene practices	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure Good Manufacturing practices to confirm the quality of output and/or service	<input type="checkbox"/>	<input type="checkbox"/>
3. Monitor control points to confirm the quality of output	<input type="checkbox"/>	<input type="checkbox"/>
4. Identify nonconformities and take corrective actions	<input type="checkbox"/>	<input type="checkbox"/>
5. Record and report non-conformities	<input type="checkbox"/>	<input type="checkbox"/>
6. Identify barriers to improve quality performance	<input type="checkbox"/>	<input type="checkbox"/>
7. Identify and investigate likely causes	<input type="checkbox"/>	<input type="checkbox"/>
8. Identify solutions and implement or report	<input type="checkbox"/>	<input type="checkbox"/>
9. Understand audit criteria	<input type="checkbox"/>	<input type="checkbox"/>
10. Develop an audit plan	<input type="checkbox"/>	<input type="checkbox"/>
11. Organize audit documents	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform adequacy audit	<input type="checkbox"/>	<input type="checkbox"/>
13. Participate in on-site audit as a team member	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform Root Cause Analysis	<input type="checkbox"/>	<input type="checkbox"/>
15. Develop Corrective Action Preventive Action reports	<input type="checkbox"/>	<input type="checkbox"/>
16. Record and maintain information	<input type="checkbox"/>	<input type="checkbox"/>

17. Perform manufacturing ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
18. Perform products delivery ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
19. Implement Food Quality standards ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
20. Implement Food Safety standards ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
21. Make mutually agreed customer requirements ^[L] _[SEP] related to food quality and safety ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
22. Implement traceability ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
23. Follow appropriate practices ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
24. Perform documentation ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
25. Maintain records as legal requirements related ^[L] _[SEP] documentation ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
26. Maintain record relating manufacturing record ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
27. Maintain record relating processing ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
28. Maintain record relating packing ^[L] _[SEP]	<input type="text"/>	<input type="text"/>
29. Maintain record relating packing, distribution, ^[L] _[SEP] receipt, holding or importation of food products ^[L] _[SEP]	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Implement Quality Management System
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1.	Monitor Quality in Work Area		
		2.	Contribute to Continual Improvement		
		3.	Participate in Internal Audits		
		4.	Implement Food Quality Policy		
		5.	Maintain Food Quality Records		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks	
1.	Ensured Good hygiene practices [L][SEP]				
2.	Ensured Good Manufacturing practices to confirm the [L][SEP] quality of output and/or service [L][SEP]				
3.	Monitored control points to confirm the quality of output				
4.	Identified nonconformities and take corrective actions [L][SEP]				
5.	Recorded and Reported non-conformities [L][SEP]				
6.	Identified barriers to improve quality performance				
7.	Identified and investigated likely causes [L][SEP]				
8.	Identified solutions and implemented or reported [L][SEP]				
9.	Understood Audit criteria				
10.	Developed an audit plan [L][SEP]				
11.	Organized audit documents [L][SEP]				
12.	Performed adequacy audit [L][SEP]				
13.	Participated in on-site audit as a team member				
14.	Performed Root Cause Analysis [L][SEP]				
15.	Developed Corrective Action Preventive Action reports				
16.	Recorded and maintained information [L][SEP]				
17.	Performed manufacturing				
18.	Performed products delivery [L][SEP]				
19.	Implemented Food Quality standards [L][SEP]				

20.	Implemented Food Safety standards ^[L] _[SEP]			
21.	Made mutually agreed customer requirements ^[L] _[SEP] related to food quality and safety			
22.	Implemented traceability ^[L] _[SEP]			
23.	Followed appropriate practices			
24.	Performed documentation ^[L] _[SEP]			
25.	Maintained records as legal requirements related ^[L] _[SEP] documentation ^[L] _[SEP]			
26.	Maintained record relating manufacturing record ^[L] _[SEP]			
27.	Maintained record relating processing ^[L] _[SEP]			
28.	Maintained record relating packing ^[L] _[SEP]			
29.	Maintained record relating packing, distribution, ^[L] _[SEP] receipt, holding or importation of food products ^[L] _[SEP]			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Implement Quality Management System
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Define good manufacturing practices		
2.	How you will ensure good hygiene practices?		

3.	Why do you need to check non-conformities?		
4.	What are the basic requirements for continual improvement?		
5.	What is the difference between quality assurance and quality control?		
6.	Why corrective action is taken?		
7.	What is the use of root cause analysis?		

8.	What is the difference between food quality and food safety standards?		
9.	Why traceability is implemented?		
10.	Why HACCP is important in food technology?		
11.	Define adequacy audit		
12.	What is the importance of preventive action?		
13.	What is the reason of making document of each record?		
14.	What does GHP stand for?		

15.	What does PRP stand for?		
16.	Enlist the type of audits		
17.	Why it is important to plan an audit?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

List of Tools/Consumables and Equipment

Sr. No.	Name of items	Quantity (25 Candidates)
Consumables		
1.	Corrective action form	25 sheets
2.	Preventive action form	25 sheets
3.	Audit plan document form	25 sheets
4.	Food quality standards document file for assessor	1
5.	Food safety standards document file for assessor	1
6.	Customer feedback form	25 sheets
7.	Markers	25
8.	Files	25
9.	Pen	25
10.	First aid box	5 set
11.	Lab coat	25
12.	Gloves	25 pairs
13.	Masks	25
Equipment		
1.	Quality control office	1
2.	Computer	5
3.	Printer	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Compliance of Food Safety System
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete and demonstrate the tasks of Monitor food safety system, Perform work according to the food safety system, Apply HACCP principles in food production and Participate in internal audit procedures within 04 Hrs. Time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to <ol style="list-style-type: none"> 1. Monitor Food Safety System 2. Perform Work According to the Food Safety System 3. Apply HACCP Principles in Food Production 4. Participate in Internal Audit Procedures
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Monitor Food Safety System <ul style="list-style-type: none"> ◆ Conduct risk assessment ◆ Comply with the Food Safety system 2. Perform Work According to the Food Safety System <ul style="list-style-type: none"> ◆ Monitor the production against set standards of the Food Safety system ◆ Record the results 3. Apply HACCP Principles in Food Production <ul style="list-style-type: none"> ◆ Conduct hazard analysis to develop a list of hazards which are of such significance and reasonably likely to cause injury or illness (Principle 1) ◆ Determine critical control points to prevent or eliminate a food safety hazard or reduce it to an acceptable level (CCPs) (Principle 2) ◆ Establish critical limits as per regulatory standards and industry guidelines (Principle 3) ◆ Establish monitoring procedures to produce an accurate record for future use in verification (Principle 4) ◆ Establish corrective actions to identify health hazards and to establish strategies to prevent, eliminate, or reduce their occurrence

	<p>(Principle 5)</p> <ul style="list-style-type: none"> ◆ Establish verification procedures for identification of the hazards, critical control points, critical limits as per industry guidelines (Principle 6) ◆ Establish record-keeping and documentation procedures as per industry guidelines/procedure (Principle 7) <p>4. Participate in Internal Audit Procedures</p> <ul style="list-style-type: none"> ◆ Ensure the implementation of all relevant SOPs. ◆ Maintain a record of all checklists and logs ◆ Perform self-assessment and gap closure of all applicable standards
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Compliance of Food Safety System
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Monitor Food Safety System 2. Perform Work According to the Food Safety System 3. Apply HACCP Principles in Food Production 4. Participate in Internal Audit Procedures

I can.....

Performance Criteria	Yes	No
1. Conduct risk assessment	<input type="checkbox"/>	<input type="checkbox"/>
2. Comply with the Food Safety system	<input type="checkbox"/>	<input type="checkbox"/>
3. Monitor the production against set standards of the Food Safety system	<input type="checkbox"/>	<input type="checkbox"/>
4. Record the results	<input type="checkbox"/>	<input type="checkbox"/>
5. Conduct hazard analysis to develop a list of hazards which are of such significance and reasonably likely to cause injury or illness (Principle 1)	<input type="checkbox"/>	<input type="checkbox"/>
6. Determine critical control points to prevent or eliminate a food safety hazard or reduce it to an acceptable level (CCPs), (Principle 2)	<input type="checkbox"/>	<input type="checkbox"/>
7. Establish critical limits as per regulatory standards and industry guidelines (Principle 3)	<input type="checkbox"/>	<input type="checkbox"/>
8. Establish monitoring procedures to produce an accurate record for future use in verification (Principle 4)	<input type="checkbox"/>	<input type="checkbox"/>
9. Establish corrective actions to identify health hazards and to establish strategies to prevent, eliminate, or reduce their occurrence (Principle 5)	<input type="checkbox"/>	<input type="checkbox"/>
10. Establish verification procedures for identification of the hazards, critical control points, critical limits as per industry guidelines (Principle 6)	<input type="checkbox"/>	<input type="checkbox"/>
11. Establish record-keeping and documentation procedures as per industry guidelines/procedure (Principle 7)	<input type="checkbox"/>	<input type="checkbox"/>

12. Ensure the implementation of all relevant SOPs.	<input type="text"/>	<input type="text"/>
13. Maintain a record of all checklists and logs	<input type="text"/>	<input type="text"/>
14. Perform self-assessment and gap closure of all applicable standards	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Compliance of Food Safety System
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks	1. Monitor Food Safety System			
	2. Perform Work According to the Food Safety System			
	3. Apply HACCP Principles in Food Production			
	4. Participate in Internal Audit Procedures			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Conducted risk assessment			
2.	Complied with the Food Safety system			
3.	Monitored the production against set standards of the Food Safety system			
4.	Recorded the results			
5.	Conducted hazard analysis to develop a list of hazards which are of such significance and reasonably likely to cause injury or illness (Principle 1)			
6.	Determined critical control points to prevent or eliminate a food safety hazard or reduce it to an acceptable level (CCPs), (Principle 2)			
7.	Established critical limits as per regulatory standards and industry guidelines, (Principle 3)			
8.	Established monitoring procedures to produce an accurate record for future use in verification (Principle 4)			
9.	Established corrective actions to identify health hazards and to establish strategies to prevent, eliminate, or reduce their occurrence (Principle 5)			
10.	Established verification procedures for identification of the hazards, critical control points, critical limits as per industry guidelines (Principle 6)			
11.	Established record-keeping and documentation procedures as per industry guidelines/procedure (Principle 7)			
12.	Ensured the implementation of all relevant SOPs			
13.	Maintained a record of all checklists and logs			
14.	Performed self-assessment and gap closure of all applicable standards			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Compliance of Food Safety System
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____
	Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div>
	Name of the Assessor: _____
	Assessor's code: _____
	Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Enlist the type of hazards		
2.	What are the effects of microbiological hazards on food quality?		

3.	Give example of two food allergens		
4.	What are chemical hazards?		
5.	Why Operational Prerequisite Program (OPRP) is important in Food Safety System?		
6.	What preventive measures are used to control the happening of a hazard?		
7.	How you will conduct risk assessment?		
8.	Define food safety system		

9.	What does HACCP stand for?		
10.	According to which guidelines you will establish critical limits?		
11.	What will you monitor to produce accurate record for future use in verification?		
12.	Why corrective action is taken?		
13.	What is the purpose of preventive action?		
14.	What are the basic requirements of internal audit procedure?		

15.	What does OPRP stand for?		

Feedback to the Candidate	
Candidate's Signature _____ Assessor's Signature _____	

List of Tools/Consumables and Equipment

Sr. No.	Name of items	Quantity (25 Candidates)
Consumables		
1.	Corrective action form	25 sheets
2.	Risk assessment form	25 sheets
3.	Food quality standards document file for assessor	1
4.	Food safety standards document file for assessor	1
5.	Regulatory standard and industry guidelines for assessor	1
6.	Standard operating procedures document file for assessor	1
7.	Data sheets to record the results	25 sheets
8.	Decision tree	25 sheets
9.	Markers	25
10.	Files	25
11.	Pen	25
12.	First aid box	5 set
13.	Lab coat	25
14.	Gloves	25 pairs
15.	Masks	25
Equipment		
1.	Quality control office	1
2.	Computer	5
3.	Printer	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Monitor Freezing Process
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to prepare the food products for freezing, monitor the freezing process and record the information in appropriate format within 04 hrs. time frame (for practical demonstration & assessment)
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to: <ol style="list-style-type: none"> 1. Prepare food products for freezing 2. Monitor the freezing process 3. Record information
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Prepare food products for freezing <ul style="list-style-type: none"> ♦ Perform all preparatory operations for fruits/vegetable/meat/fish ♦ Pack prepared food products in appropriate packaging material ♦ Seal the package 2. Monitor the freezing process <ul style="list-style-type: none"> ♦ Calibrate temperature gauge ♦ Examine the freezing process to meet production requirements 3. Record Information <ul style="list-style-type: none"> ♦ Record temperature in the appropriate format ♦ Calculate the efficiency of the freezing plant

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Monitor Freezing Process
Purpose of Assessment	Formative Assessment
Assessment Tasks	1. Prepare food products for freezing 2. Monitor the freezing process 3. Record information

I can.....

Performance Criteria	Yes	No
1. Perform all preparatory operations for fruits/vegetable/meat/fish	<input type="checkbox"/>	<input type="checkbox"/>
2. Pack prepared food products in appropriate packaging material	<input type="checkbox"/>	<input type="checkbox"/>
3. Seal the package	<input type="checkbox"/>	<input type="checkbox"/>
4. Calibrate temperature guage	<input type="checkbox"/>	<input type="checkbox"/>
5. Examine the freezing process to meet production requirements	<input type="checkbox"/>	<input type="checkbox"/>
6. Record temperature in the appropriate format	<input type="checkbox"/>	<input type="checkbox"/>
7. Calculate the efficiency of the freezing plant	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Monitor Freezing Process
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1. Prepare food products for freezing		
		2. Monitor the freezisng process		
		3. Record information		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performed all preparatory operations for fruits/vegetable/meat/fish			
2.	Packed prepared food products in appropriate packaging material			
3.	Sealed the package			
4.	Calibrated temperature guage			
5.	Examined the freezing process to meet production requirements			
6.	Recorded temperature in the appropriate format			
7.	Calculated the efficiency of the freezing plant			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Monitor Freezing Process
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What is the purpose of freezing?		
2.	What are the physical changes that occur in a product during freezing?		
3.	What is the standard temperature range for freezing?		

4.	Microbes can survive in freezing temperature.		
	a) True b) False		
5.	Enlist three environmental controls in freezing process?		
6.	Enlist three quality characteristics of frozen product?		
7.	Which thermometer is used to measure the core temperature of meat?		
8.	What is the effect of freezing on shelf life of product?		
9.	Name a microbe that can survive in freezing temperature?		
10.	Which one of the following (if stored in one freezer) will be stored in the lowest shelf of freezer?		
	a) Vegetable b) Fruits c) Meat		
11.	What is the optimum growth temperature of microbes?		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Basic analysis Lab	01
2	Freezing chamber	02
3	Microbiology lab	01

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Apply Meat Curing and Smoking
Purpose of Assessment	Formative Assessment
Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Prepare, operate and clean processing equipment used for curing 2. Prepare meat and ingredients 3. Prepare brines 4. Process and store the product 5. Prepare meat and ingredients for smoking 6. Smoke the meat products 7. Chill the meat products
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Prepare, operate and clean processing equipment used for curing 2. Prepare meat and ingredients 3. Prepare brines 4. Process and store the product 5. Prepare meat and ingredients for smoking 6. Smoke the meat products 7. Chill the meat products
Minimum Evidences Required	<ol style="list-style-type: none"> 1. Prepare, operate and clean processing equipment used for curing. <ul style="list-style-type: none"> ♦ Prepare processing equipment ♦ Clean processing equipment according to the manufacturer's specifications, and OH&S, hygiene, and workplace requirements. 2. Prepare meat and ingredients <ul style="list-style-type: none"> ♦ Select meat according to product specifications. ♦ Prepare meat by adding ingredients according to product specifications, and hygiene and workplace requirements. 3. Prepare brines <ul style="list-style-type: none"> ♦ Add required amount of water and other liquid and solid additives in correct order and mixed according to product specifications ♦ Use Hydrometer (salinometer) to check the brine solution.

	<p>4. Process and store the product</p> <ul style="list-style-type: none"> ◆ Perform curing according to product specifications and health regulations. ◆ Make adjustments to the process as required to achieve product specifications. ◆ Store product according to product specifications <p>5. Prepare meat and ingredients for smoking</p> <ul style="list-style-type: none"> ◆ Select meat according to product specifications. ◆ Prepare meat according to product specifications, and hygiene and workplace requirements. <p>6. Smoke the meat products</p> <ul style="list-style-type: none"> ◆ Check the product to ensure correct spacing prior to loading. ◆ Insert core temperature probes into the center of the product, to record the temperatures, as appropriate to product specifications. ◆ Operate meat smoker. <p>7. Chill the meat products</p> <ul style="list-style-type: none"> ◆ Chill product immediately or cool at ambient temperature to a specified internal temperature before chilling according to product specifications. ◆ Store product according to product specifications. ◆ Stack the product according to product specifications and workplace requirements.
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Apply Meat Curing and Smoking
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Prepare, operate and clean processing equipment used for curing 2. Prepare meat and ingredients 3. Prepare brines 4. Process and store the product 5. Prepare meat and ingredients for smoking 6. Smoke the meat products 7. Chill the meat products

I can.....

Performance Criteria	Yes	No
1. Prepare processing equipment	<input type="checkbox"/>	<input type="checkbox"/>
2. Clean processing equipment according to the manufacturer's specifications, and OH&S, hygiene, and workplace requirements.	<input type="checkbox"/>	<input type="checkbox"/>
3. Select meat according to product specifications.	<input type="checkbox"/>	<input type="checkbox"/>
4. Prepare meat by adding ingredients according to product specifications, and hygiene and workplace requirements.	<input type="checkbox"/>	<input type="checkbox"/>
5. Add required amount of water and other liquid and solid additives in correct order and mixed according to product specifications	<input type="checkbox"/>	<input type="checkbox"/>
6. Use Hydrometer (salinometer) to check the brine solution.	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform curing according to product specifications and health regulations.	<input type="checkbox"/>	<input type="checkbox"/>
8. Make adjustments to the process as required to achieve product specifications.	<input type="checkbox"/>	<input type="checkbox"/>
9. Store product according to product specifications	<input type="checkbox"/>	<input type="checkbox"/>

10. Select meat according to product specifications.	<input type="text"/>	<input type="text"/>
11. Prepare meat according to product specifications, and hygiene and workplace requirements.	<input type="text"/>	<input type="text"/>
12. Check the product to ensure correct spacing prior to loading.	<input type="text"/>	<input type="text"/>
13. Insert core temperature probes into the center of the product, to record the temperatures, as appropriate to product specifications.	<input type="text"/>	<input type="text"/>
14. Operate meat smoker.	<input type="text"/>	<input type="text"/>
15. Chill product immediately or cool at ambient temperature to a specified internal temperature before chilling according to product specifications.	<input type="text"/>	<input type="text"/>
16. Store product according to product specifications.	<input type="text"/>	<input type="text"/>
17. Stack the product according to product specifications and workplace requirements	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Apply Meat Curing and Smoking
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task	1. Prepare, operate and clean processing equipment used for curing			
	2. Prepare meat and ingredients			
	3. Prepare brines			
	4. Process and store the product			
	5. Prepare meat and ingredients for smoking			
	6. Smoke the meat products			
	7. Chill the meat products			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Prepared processing equipment			
2.	Cleaned processing equipment according to the manufacturer's specifications, and OH&S, hygiene, and workplace requirements.			
3.	Selected meat according to product specifications.			
4.	Prepare meat by adding ingredients according to product specifications, and hygiene and workplace requirements.			
5.	Added required amount of water and other liquid and solid additives in correct order and mixed according to product specifications			
6.	Used Hydrometer (salinometer) to check the brine solution.			
7.	Performed curing according to product specifications and health regulations.			
8.	Made adjustments to the process as required to achieve product specifications.			
9.	Stored product according to product specifications			
10.	Selected meat according to product specifications.			
11.	Prepared meat according to product specifications, and hygiene and workplace requirements.			
12.	Checked the product to ensure correct spacing prior to loading.			
13.	Inserted core temperature probes into the center of the product, to record the temperatures, as appropriate to product specifications.			
14.	Operated meat smoker.			

15.	Chilled product immediately or cool at ambient temperature to a specified internal temperature before chilling according to product specifications.			
16.	Stored product according to product specifications.			
17.	Stacked the product according to product specifications and workplace requirements			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Apply Meat Curing and Smoking
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Differentiate an additive and an ingredient		
2.	What is meat curing?		
3.	What is meat smoking?		
4.	What are the agents used in meat curing?		

5.	What is Salometer?		
6.	Name the microbes that can survive in meat?		
7.	What is the temperature range for storage of smoked meat?		
8.	What is the temperature range for storage of cured meat?		
9.	Enlist key Steps in Meat Curing Process.		
10.	What is the effect of smoking on shelf life of meat?		
11.	What is effect of curing on shelf life of meat?		

12.	What is the role of brine on shelf life of meat?		
13.	What is CIP?		
14.	What is COP?		
15.	What are the quality characteristics of selecting meat for curing?		
16.	What are the quality characteristics of selecting meat for smoking?		
17.	Which thermometer is used to check the core temperature of meat?		
18.	What is the temperature range for chilling?		
19.	Enlist the key considerations during stacking of meat?		
20.	Name the microbe commonly found in meat?		

21.	Name the microbe that can survive in extreme cold temperatures?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Automatic injector machine (Injectomat)	5
2	Massagers	5
3	Pumping equipment	5
4	Smoke generator	5
5	Smoke jet	5
6	Brine tanks	5

7	Chiller	2
8	Wooden Boxes	10

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Different Types of Cheese
Purpose of Assessment	Formative Assessment
Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. Time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Check/analyze quality of raw milk 2. Perform Milk Pasteurization 3. Inoculate culture 4. Perform addition of rennet 5. Monitor curd production and cutting process 6. Operate pressing and molding machine 7. Monitor pressing and moulding process 8. Apply salting of cheese 9. Ensure ripening of cheese 10. Pack and store cheese
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to</p> <ol style="list-style-type: none"> 1. Check/analyze quality of raw milk 2. Perform Milk Pasteurization 3. Inoculate culture 4. Perform addition of rennet 5. Monitor curd production and cutting process 6. Operate pressing and molding machine 7. Monitor pressing and moulding process 8. Apply salting of cheese 9. Ensure ripening of cheese 10. Pack and store cheese
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Check/analyze quality of raw milk <ul style="list-style-type: none"> ♦ Determine Fat%, ♦ Determine SNF ♦ Determine LR 2. Perform Milk Pasteurization <ul style="list-style-type: none"> ♦ Set time and temperature for pasteurization ♦ Operate pasteurizer as per standard requirements

	<p>3. Inoculate Culture</p> <ul style="list-style-type: none"> ♦ Select proper type of culture ♦ Check quantity/dosage of culture ♦ Check storage temperature <p>4. Perform Addition of Rennet</p> <ul style="list-style-type: none"> ♦ Apply rennet for curdling of milk ♦ Monitor pH change in coagulum ♦ Ensure proper dosage of calcium chloride (CaCl₂) <p>5. Monitor curd production and cutting process</p> <ul style="list-style-type: none"> ♦ Ensure curdling of milk ♦ Start cutting process according to set specifications <p>6. Operate pressing and moulding machine</p> <ul style="list-style-type: none"> ♦ Determine acidity and pH to assess proper time to press ♦ Operate pressing vats for whey separation <p>7. Monitor pressing and moulding process</p> <ul style="list-style-type: none"> ♦ Ensure the pressing and moulding process is started up according to company specifications ♦ Operate moulding machines ♦ Ensure pressed and the moulded product meets specifications. <p>8. Apply Salting of Cheese</p> <ul style="list-style-type: none"> ♦ Perform salting/brining of cheese ♦ Ensure pH and moisture <p>9. Ensure Ripening of Cheese</p> <ul style="list-style-type: none"> ♦ Check flavor development during aging ♦ Check taste development ♦ Check eyes development <p>10. Pack and Store Cheese</p> <ul style="list-style-type: none"> ♦ Select appropriate packaging material ♦ Operate packaging machine
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Different Types of Cheese
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Check/analyze quality of raw milk 2. Perform Milk Pasteurization 3. Inoculate culture 4. Perform addition of rennet 5. Monitor curd production and cutting process 6. Operate pressing and molding machine 7. Monitor pressing and moulding process 8. Apply salting of cheese 9. Ensure ripening of cheese 10. Pack and store cheese

I can.....

Performance Criteria	Yes	No
1. Determine Fat%,	<input type="checkbox"/>	<input type="checkbox"/>
2. Determine SNF	<input type="checkbox"/>	<input type="checkbox"/>
3. Determine LR	<input type="checkbox"/>	<input type="checkbox"/>
4. Set time and temperature for pasteurization	<input type="checkbox"/>	<input type="checkbox"/>
5. Operate pasteurizer as per standard requirements	<input type="checkbox"/>	<input type="checkbox"/>
6. Select proper type of culture	<input type="checkbox"/>	<input type="checkbox"/>
7. Check quantity/dosage of culture	<input type="checkbox"/>	<input type="checkbox"/>
8. Check storage temperature	<input type="checkbox"/>	<input type="checkbox"/>
9. Apply rennet for curdling of milk	<input type="checkbox"/>	<input type="checkbox"/>
10. Monitor pH change in coagulum	<input type="checkbox"/>	<input type="checkbox"/>
11. Ensure proper dosage of calcium chloride (CaCl ₂)	<input type="checkbox"/>	<input type="checkbox"/>
12. Ensure curdling of milk	<input type="checkbox"/>	<input type="checkbox"/>
13. Start cutting process according to set specifications	<input type="checkbox"/>	<input type="checkbox"/>
14. Determine acidity and pH to assess proper time to press	<input type="checkbox"/>	<input type="checkbox"/>

15. Operate pressing vats for whey separation	<input type="checkbox"/>	<input type="checkbox"/>
16. Ensure the pressing and moulding process is started up according to company specifications	<input type="checkbox"/>	<input type="checkbox"/>
17. Operate moulding machines	<input type="checkbox"/>	<input type="checkbox"/>
18. Ensure pressed and the moulded product meets specifications.	<input type="checkbox"/>	<input type="checkbox"/>
19. Perform salting/brining of cheese	<input type="checkbox"/>	<input type="checkbox"/>
20. Ensure pH and moisture	<input type="checkbox"/>	<input type="checkbox"/>
21. Check flavor development during aging	<input type="checkbox"/>	<input type="checkbox"/>
22. Check taste development	<input type="checkbox"/>	<input type="checkbox"/>
23. Check eyes development	<input type="checkbox"/>	<input type="checkbox"/>
24. Select appropriate packaging material	<input type="checkbox"/>	<input type="checkbox"/>
25. Operate packaging machine	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Different Types of Cheese
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks	1. Check/analyze quality of raw milk			
	2. Perform Milk Pasteurization			
	3. Inoculate culture			
	4. Perform addition of rennet			
	5. Monitor curd production and cutting process			
	6. Operate pressing and molding machine			
	7. Monitor pressing and moulding process			
	8. Apply salting of cheese			
	9. Ensure ripening of cheese			
	10. Pack and store cheese			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Determined Fat%			
2.	Determined SNF			
3.	Determined LR			
4.	Set time and temperature for pasteurization			
5.	Operated pasteurizer as per standard requirements			
6.	Selected proper type of culture			
7.	Checked quantity/dosage of culture			
8.	Checked storage temperature			
9.	Applied rennet for curdling of milk			
10.	Monitored pH change in coagulum			
11.	Ensured proper dosage of calcium chloride (CaCl ₂)			
12.	Ensured curdling of milk			
13.	Started cutting process according to set specifications			
14.	Determined acidity and pH to assess proper time to press			
15.	Operated pressing vats for whey separation			
16.	Ensured the pressing and moulding process is started up according to company specifications			
17.	Operated moulding machines			
18.	Ensured pressed and the moulded product meets specifications.			
19.	Performed salting/brining of cheese			
20.	Ensured pH and moisture			

21.	Checked flavor development during aging			
22.	Checked taste development			
23.	Checked eyes development			
24.	Selected appropriate packaging material			
25.	Operated packaging machine			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Different Types of Cheese
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What are the common types of cheese?		
2.	What are enzymes?		
3.	What is rennet?		

4.	What is a difference between synthetic rennet and plant-based rennet?		
5.	Enlist the key steps in cheese making process?		
6.	Differentiate between curd and yougurt?		
7.	What are the quality characteristics to be observed in curd making?		
8.	What is inoculum?		
9.	What is the role of culture in cheese making?		

10.	what happens to pH when culture is added?		
11.	What are the byproducts of cheese making process?		
12.	Enlist three advantages of salt addition in cheese making process?		
13.	Why pasteurization of milk is important during cheese making?		
14.	What is the purpose of pressing cheese?		
15.	What is cheese moulding?		

16.	How aging affects the quality of cheese		
17.	what is ripening of cheese?		
18.	What is the optimum temperature for introducing culture in milk?		
19.	What is the temperature for aging of cheese?		
20.	What is syneresis?		
21.	What is an appropriate packaging material for cheese?		
22.	What is the storage temperature range for cheese?		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
2	Milk analysis lab	1
3	Lab scale Pasteurizer	5
4	Pilot cheese-making plant	5
5	Pressing and moulding machine	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Sugar
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____
	Registration/Roll Number_____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. Time frame (for practical demonstration & assessment)</p> <ol style="list-style-type: none"> 1. Check juice extraction process 2. Monitor clarification and evaporation 3. Perform crystallization 4. Dry and pack sugar
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Check juice extraction process 2. Monitor clarification and evaporation 3. Perform crystallization 4. Dry and pack sugar
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Check Juice Extraction Process <ul style="list-style-type: none"> ♦ Operate crusher ♦ Operate presser ♦ Check bagass separation from juice ♦ Extract juice ♦ Check sugar separation from stalks ♦ Check brix of juice 2. Monitor clarification and evaporation <ul style="list-style-type: none"> ♦ Heat lime ♦ Check sedimentation of muds ♦ Check filtration ♦ Check moisture percentage of juice ♦ Operate evaporator ♦ Check brix and moisture of syrup 3. Perform crystallization <ul style="list-style-type: none"> ♦ Operate crystallization machine ♦ Check grain size ♦ Check seed size

	<ul style="list-style-type: none"> ♦ Check massecuite in crystallizers ♦ Operate centrifugal machine <p>4. Dry and Pack Sugar</p> <ul style="list-style-type: none"> ♦ Operate sugar dryer ♦ Operate screens vibrator to sort sugar crystals according to size ♦ Select appropriate packaging and labeling material ♦ Ensure storage at ambient conditions
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Sugar
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Check juice extraction process 2. Monitor clarification and evaporation 3. Perform crystallization 4. Dry and pack sugar

I can.....

Performance Criteria	Yes	No
1. Operate crusher	<input type="checkbox"/>	<input type="checkbox"/>
2. Operate presser	<input type="checkbox"/>	<input type="checkbox"/>
3. Check bagass separation from juice	<input type="checkbox"/>	<input type="checkbox"/>
4. Extract juice	<input type="checkbox"/>	<input type="checkbox"/>
5. Check sugar separation from stalks	<input type="checkbox"/>	<input type="checkbox"/>
6. Check brix of juice	<input type="checkbox"/>	<input type="checkbox"/>
7. Heat lime	<input type="checkbox"/>	<input type="checkbox"/>
8. Check sedimentation of muds	<input type="checkbox"/>	<input type="checkbox"/>
9. Check filtration	<input type="checkbox"/>	<input type="checkbox"/>
10. Check moisture percentage of juice	<input type="checkbox"/>	<input type="checkbox"/>
11. Operate evaporator	<input type="checkbox"/>	<input type="checkbox"/>
12. Check brix and moisture of syrup	<input type="checkbox"/>	<input type="checkbox"/>
13. Operate crystallization machine	<input type="checkbox"/>	<input type="checkbox"/>
14. Check grain size	<input type="checkbox"/>	<input type="checkbox"/>
15. Check seed size	<input type="checkbox"/>	<input type="checkbox"/>
16. Check massecuite in crystallizers	<input type="checkbox"/>	<input type="checkbox"/>
17. Operate centrifugal machine	<input type="checkbox"/>	<input type="checkbox"/>

18. Operate sugar dryer	<input type="checkbox"/>	<input type="checkbox"/>
19. Operate screens vibrator to sort sugar crystals according to size	<input type="checkbox"/>	<input type="checkbox"/>
20. Select appropriate packaging and labeling material	<input type="checkbox"/>	<input type="checkbox"/>
21. Ensure storage at ambient conditions	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Sugar
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1. Check juice extraction process		
		2. Monitor clarification and evaporation		
		3. Perform crystallization		
		4. Dry and pack sugar		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Operated crusher			
2.	Operated presser			
3.	Checked bagass separation from juice			
4.	Extracted juice			
5.	Checked sugar separation from stalks			
6.	Checked brix of juice			
7.	Performed lime heating			
8.	Checked sedimentation of muds			
9.	Checked filtration			
10.	Checked moisture percentage of juice			
11.	Operated evaporator			
12.	Checked brix and moisture of syrup			
13.	Operated crystallization machine			
14.	Checked grain size			
15.	Checked seed size			
16.	Checked massecuite in crystallizers			
17.	Operated centrifugal machine			
18.	Operated sugar dryer			
19.	Operated screens vibrator to sort sugar crystals according to size			
20.	Selected appropriate packaging and labeling material			
21.	Ensured storage at ambient conditions			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Sugar
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	What are Molasses?		
2.	Define evaporation?		
3.	What is the main source of sugar?		

4.	What is the standard brix of sugar juice?		
5.	Why is the purpose of clarification in sugar production?		
6.	Why lime is added in sugar juice?		
7.	What is the moisture content of juice after clarification?		
8.	What is the moisture content of sugar syrup after evaporation?		
9.	What is the brix of sugar syrup after evaporation?		
10.	Define crystallization?		

11.	What are the sub steps in sugar crystallization process?		
12.	What is the speed (r.p.m) of centrifugal machine?		
13.	What is the purpose of centrifugation?		
14.	Define centrifugal force?		
15.	What is the moisture content of sugar crystals after centrifugation?		
16.	What is the purpose of drying sugar crystals?		
17.	What is the standard moisture content of a low-moisture product?		

18.	What is the suitable cleaning method for a low-moisture production premises?		
19.	Which is the purest form of sugar?		
	a) Brown sugar b) White sugar		
20.	What are the by-products of sugar?		
21.	What is the optimum temperature range for sugar storage?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Weighing Balance	5
2	Centrifugal machine	5
3	Filling machine	5
4	Packing machine	5
5	Refractometer	5
6	Moisture analyzer	5
7	Filter paper	10
8	Filtration chamber	5
9	Dryer	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Extruded Products
Purpose of Assessment	Formative Assessment
Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. Time frame (for practical demonstration & assessment)</p> <ol style="list-style-type: none"> 1. Prepare extrusion ingredients 2. Mix extrusion ingredients 3. Perform extrusion 4. Perform frying 5. Perform drying 6. Pack and store extruded products
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Prepare extrusion ingredients 2. Mix extrusion ingredients 3. Perform extrusion 4. Perform frying 5. Perform drying 6. Pack and store extruded products
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Prepare extrusion ingredients <ul style="list-style-type: none"> ♦ Select ingredients for batch preparation as per standards ♦ Ground ingredients to achieve consistency as per set quality standards for further processing ♦ Check particle size of ground material 2. Mix extrusion ingredients <ul style="list-style-type: none"> ♦ Operate pre conditioner for mixing of ingredients ♦ Ensure time and temperature during mixing ♦ Add all ingredients and additives to form dough/mix (Extrudate) ♦ check quality of extrudate as per organizational procedures

	<p>3. Perform extrusion</p> <ul style="list-style-type: none"> ♦ Check extruder and its utilities before operation ♦ Ensure cleaning of all accessories ♦ Operate extruder ♦ Check quality of extruded product as per specs ♦ Report to in charge in case of non-conformance <p>4. Perform frying</p> <ul style="list-style-type: none"> ♦ Check fryer and its utilities before operation ♦ Ensure cleaning of all accessories ♦ Operate fryer ♦ Check quality of fried extruded product as per specs ♦ Report to incharge in case of non-conformance <p>5. Perform drying</p> <ul style="list-style-type: none"> ♦ Operate dryer ♦ Check moisture content in finished product as per specs <p>6. Pack and store extruded products</p> <ul style="list-style-type: none"> ♦ Select appropriate packaging material ♦ Operate packaging machine ♦ Check storage temperature
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Extruded Products
Purpose of Assessment	Formative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Prepare extrusion ingredients 2. Mix extrusion ingredients 3. Perform extrusion 4. Perform frying 5. Perform drying 6. Pack and store extruded products

I can.....

Performance Criteria	Yes	No
1. Prepare extrusion ingredients	<input type="checkbox"/>	<input type="checkbox"/>
2. Select ingredients for batch preparation as per standards	<input type="checkbox"/>	<input type="checkbox"/>
3. Ground ingredients to achieve consistency as per set quality standards for further processing	<input type="checkbox"/>	<input type="checkbox"/>
4. Check particle size of ground material	<input type="checkbox"/>	<input type="checkbox"/>
5. Operate pre conditioner for mixing of ingredients	<input type="checkbox"/>	<input type="checkbox"/>
6. Ensure time and temperature during mixing	<input type="checkbox"/>	<input type="checkbox"/>
7. Add all ingredients and additives to form dough/mix (Extrudate)	<input type="checkbox"/>	<input type="checkbox"/>
8. check quality of extrudate as per organizational procedures	<input type="checkbox"/>	<input type="checkbox"/>
9. Check extruder and its utilities before operation	<input type="checkbox"/>	<input type="checkbox"/>
10. Ensure cleaning of all accessories	<input type="checkbox"/>	<input type="checkbox"/>
11. Operate extruder	<input type="checkbox"/>	<input type="checkbox"/>

12. Check quality of extruded product as per specs	<input type="checkbox"/>	<input type="checkbox"/>
13. Report to in charge in case of non-conformance	<input type="checkbox"/>	<input type="checkbox"/>
14. Check fryer and its utilities before operation	<input type="checkbox"/>	<input type="checkbox"/>
15. Ensure cleaning of all accessories	<input type="checkbox"/>	<input type="checkbox"/>
16. Operate fryer	<input type="checkbox"/>	<input type="checkbox"/>
17. Check quality of fried extruded product as per specs	<input type="checkbox"/>	<input type="checkbox"/>
18. Report to incharge in case of non-conformance	<input type="checkbox"/>	<input type="checkbox"/>
19. Operate dryer	<input type="checkbox"/>	<input type="checkbox"/>
20. Check moisture contents in finished product as per specs	<input type="checkbox"/>	<input type="checkbox"/>
21. Select appropriate packaging material	<input type="checkbox"/>	<input type="checkbox"/>
22. Operate packaging machine	<input type="checkbox"/>	<input type="checkbox"/>
23. Check storage temperature	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Extruded Products
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task	1. Prepare extrusion ingredients			
	2. Mix extrusion ingredients			
	3. Perform extrusion			
	4. Perform frying			
	5. Perform drying			
	6. Pack and store extruded products			
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Prepared extrusion ingredients			
2.	Selected ingredients for batch preparation as per standards			
3.	Grounded ingredients to achieve consistency as per set quality standards for further processing			
4.	Checked particle size of ground material			
5.	Operated pre conditioner for mixing of ingredients			
6.	Ensured time and temperature during mixing			
7.	Added all ingredients and additives to form dough/mix (Extrudate)			
8.	checked quality of extrudate as per organizational procedures			
9.	Checked extruder and its utilities before operation			
10.	Ensured cleaning of all accessories			
11.	Operated extruder			
12.	Checked quality of extruded product as per specs			
13.	Reported to in charge in case of non-conformance			
14.	Checked fryer and its utilities before operation			
15.	Ensured cleaning of all accessories			

16.	Operated fryer			
17.	Checked quality of fried extruded product as per specs			
18.	Reported to incharge in case of non-conformance			
19.	Operated dryer			
20.	Checked moisture contents in finished product as per specs			
21.	Selected appropriate packaging material			
22.	Operated packaging machine			
23.	Checked storage temperature			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Prepare Extruded Products
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Differentiate between pasta and macroni?		
2.	What is extrusion technology?		

3.	What are the main types of extruders?		
4.	Why ingredients are grounded during preparation of extruded products?		
5.	Name any three common defects while preparing extruded products?		
6.	Define sifting?		
7.	What are the key ingredients of pasta?		
8.	What is the difference between semolina and maida?		

9.	What is the standard moisture content of pasta dough?		
10.	Why uniform flow rate of dough is important through the extruder?		
11.	What is the objective of drying in extrusion?		
12.	What is the standard moisture content of pasta dough after drying?		
13.	What is the role of steam in extrusion?		
14.	Enlist key steps in gelatinization of starch?		

15.	Why shapes and size are important for extruded products?		
16.	Which type of cleaning is suitable for extruder?		
17.	What is the purpose of frying extruded products?		
18.	What is an appropriate packaging material for extruded products?		
19.	What is an optimum storage temperature for freshly made extruded products?		
20.	What is the most critical step in extrusion and why?		
21.	What are the key parameters to check the quality of extruded product?		

22.	What are the key parameters to check the quality of extruded product?		

Feedback to the Candidate
Candidate's Signature _____ Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Extruder	5
2	Dies	As per requirement
3	Mixer	5
4	Wrapping machine	5
5	Moisture analyzer	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Produce Confections
Purpose of Assessment	Formative Assessment
Candidate Details	Name _____ Registration/Roll Number _____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 04 Hrs. Time frame (for practical demonstration & assessment)</p> <ol style="list-style-type: none"> 1. Receive and store raw materials as per manufacturing order 2. Mix ingredients as per standard recipe 3. Perform cooking of batch 4. Perform rolling and moulding 5. Prepare chocolate confection 6. Prepare gums 7. Perform wrapping and packaging
Time: 04 Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Receive and store raw materials as per manufacturing order 2. Mix ingredients as per standard recipe 3. Perform cooking of batch 4. Perform rolling and moulding 5. Prepare chocolate confection 6. Prepare gums 7. Perform wrapping and packaging
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Receive and store raw materials as per manufacturing order <ul style="list-style-type: none"> ♦ Select ingredients for batch preparation as per standards ♦ Ground ingredients to achieve consistency as per set quality standards for further processing ♦ Check particle size of ground material

	<p>2. Mix ingredients as per standard recipe</p> <ul style="list-style-type: none"> ◆ Perform melting of sugar and butter together ◆ Ensure consistency of mix by stirring ◆ Check brix and viscosity <p>3. Perform cooking of batch</p> <ul style="list-style-type: none"> ◆ Produce syrups of required brix ◆ Ensure addition of all additives ◆ Maintain temperature according to standards ◆ Check bubbles of mix <p>4. Perform rolling and moulding</p> <ul style="list-style-type: none"> ◆ Operate rolling machine to produce sheet of uniform size ◆ Operate moulder/shaping machine <p>5. Prepare Chocolate confection</p> <ul style="list-style-type: none"> ◆ Mix ingredients and additives ◆ Temper the mixture ◆ Operate moulder/sheeter <p>6. Prepare Gums</p> <ul style="list-style-type: none"> ◆ Mix ingredients and additives ◆ Operate moulder/shaping machine ◆ Check gum elasticity <p>7. Perform wrapping and packaging</p> <ul style="list-style-type: none"> ◆ Select appropriate packaging material ◆ Operate wrapping machine
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Produce Confections
Purpose of Assessment	Formative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Receive and store raw materials as per manufacturing order 2. Mix ingredients as per standard recipe 3. Perform cooking of batch 4. Perform rolling and moulding 5. Prepare chocolate confection 6. Prepare gums 7. Perform wrapping and packaging

I can.....

Performance Criteria	Yes	No
1. Select ingredients for batch preparation as per standards	<input type="checkbox"/>	<input type="checkbox"/>
2. Ground ingredients to achieve consistency as per set quality standards for further processing	<input type="checkbox"/>	<input type="checkbox"/>
3. Check particle size of ground material	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform melting of sugar and butter together	<input type="checkbox"/>	<input type="checkbox"/>
5. Ensure consistency of mix by stirring	<input type="checkbox"/>	<input type="checkbox"/>
6. Check brix and viscosity	<input type="checkbox"/>	<input type="checkbox"/>
7. Produce syrups of required brix	<input type="checkbox"/>	<input type="checkbox"/>

8. Ensure addition of all additives	<input type="text"/>	<input type="text"/>
9. Maintain temperature according to standards	<input type="text"/>	<input type="text"/>
10. Check bubbles of mix	<input type="text"/>	<input type="text"/>
11. Operate rolling machine to produce sheet of uniform size	<input type="text"/>	<input type="text"/>
12. Operate moulder/shaping machine	<input type="text"/>	<input type="text"/>
13. Mix ingredients and additives	<input type="text"/>	<input type="text"/>
14. Temper the mixture	<input type="text"/>	<input type="text"/>
15. Operate moulder/sheeter	<input type="text"/>	<input type="text"/>
16. Mix ingredients and additives	<input type="text"/>	<input type="text"/>
17. Operate moulder/shaping machine	<input type="text"/>	<input type="text"/>
18. Check gum elasticity	<input type="text"/>	<input type="text"/>
19. Select appropriate packaging material	<input type="text"/>	<input type="text"/>
20. Operate wrapping machine	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Produce Confections
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YETCOMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1. Receive and store raw materials as per manufacturing order		
		2. Mix ingredients as per standard recipe		
		3. Perform cooking of batch		
		4. Perform rolling and moulding		
		5. Prepare chocolate confection		
		6. Prepare gums		
		7. Perform wrapping and packaging		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Selected ingredients for batch preparation as per standards			
2.	Grounded ingredients to achieve consistency as per set quality standards for further processing			
3.	Checked particle size of ground material			
4.	Performed melting of sugar and butter together			
5.	Ensured consistency of mix by stirring			
6.	Checked brix and viscosity			
7.	Produced syrups of required brix			
8.	Ensured addition of all additives			
9.	Maintained temperature according to standards			
10.	Checked bubbles of mix			
11.	Operated rolling machine to produce sheet of uniform size			
12.	Operated moulder/shaping machine			
13.	Mixed ingredients and additives			
14.	Tempered the mixture			
15.	Operated moulder/sheeter			
16.	Mixed ingredients and additives			
17.	Operated moulder/shaping machine			
18.	Checked gum elasticity			

19.	Selected appropriate packaging material			
20.	Operated wrapping machine			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification (Level-5) Food Technology
Competency Standard	Produce Confections
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Differentiate between toffees and candies?		
2.	Why is the purpose of raw material inspection?		

3.	What is the optimum temperature range for dry storage?		
4.	What is sensory evaluation?		
5.	Define melting point?		
6.	What is the physical change occur during melting?		
7.	Name the instrument used to measure viscosity?		
8.	What is the role of temperature in viscosity?		

9.	What is the name of instrument used to check brix?		
10.	What is the unit to read brix?		
11.	What is the purpose of determining brix?		
12.	What is the purpose of determining viscosity?		
13.	What is the standard cooking temperature?		
14.	Which type of thermometer is used to check the core temperature of a product?		

15.	What is the difference between an additive and an ingredient?		
16.	Enlist the ingredients of a compound chocolate?		
17.	What is the difference between latex and a resin?		
18.	Name the key ingredients of gum base?		
19.	Which type of thermometer is used to check the core temperature of a product?		
20.	What is the standard fat content in the liquid chocolate?		

21.	Soya Lecithin is a		
	<ul style="list-style-type: none"> a) Sugar b) Fat c) Salt 		
22.	What is the highest moisture content limit for a low moisture product?		
23.	Which type of cleaning is suitable for cleaning the production area of a low moisture product?		
24.	What is the temperature limit for refining chocolate mix?		

Feedback to the Candidate	
Candidate's Signature _____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Weighing Balance	5
2	Wrapping machine	5
3	Rolling machine	5
4	Packing machine	5
5	Refractometer	5
6	Moulder	5

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Quality Control in Food Industry
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	To meet this standard, you are required to complete the following within 04 Hrs. Time frame (for practical demonstration & assessment) <ol style="list-style-type: none"> 1. Check the quality of raw material 2. Check Lab testing equipment 3. Prepare product according to specifications 4. Perform Sensory evaluation of the product 5. Carry out Preventive measures 6. Check the quality of the final product
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to: <ol style="list-style-type: none"> 1. Check the quality of raw material 2. Check Lab testing equipment 3. Prepare product according to specifications 4. Perform Sensory evaluation of the product 5. Carry out Preventive measures 6. Check the quality of the final product
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Check the quality of raw material <ul style="list-style-type: none"> ♦ Check the quality of raw material as per specification ♦ Perform physical, chemical and microbiological analysis 2. Check Lab testing equipment <ul style="list-style-type: none"> ♦ Ensure all lab equipment in a well-maintained condition ♦ Make sure in time calibration of all equipment 3. Prepare product according to specifications <ul style="list-style-type: none"> ♦ Apply standard procedures to make food products ♦ Perform analysis at each step of product preparation 4. Perform sensory evaluation of the product <ul style="list-style-type: none"> ♦ Conduct sensory evaluation as per standard ♦ Analyze and interpret sensory evaluation results

	<p>5. Carry out Preventive measures</p> <ul style="list-style-type: none"> ♦ Make sure the preventive maintenance schedule is followed ♦ Keep a record of each maintenance <p>6. Check the quality of the final product</p> <ul style="list-style-type: none"> ♦ Perform random sampling from the final product ♦ Check the frequency of sampling as per SOP ♦ Complete final product analysis record ♦ Ensure the traceability of each batch
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Quality Control in Food Industry
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Check the quality of raw material 2. Check Lab testing equipment 3. Prepare product according to specifications 4. Perform Sensory evaluation of the product 5. Carry out Preventive measures 6. Check the quality of the final product

I can.....

Performance Criteria	Yes	No
1. Check the quality of raw material as per specification	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform physical, chemical and microbiological analysis	<input type="checkbox"/>	<input type="checkbox"/>
3. Ensure all lab equipment in a well-maintained condition	<input type="checkbox"/>	<input type="checkbox"/>
4. Make sure in time calibration of all equipment	<input type="checkbox"/>	<input type="checkbox"/>
5. Apply standard procedures to make food products	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform analysis at each step of product preparation	<input type="checkbox"/>	<input type="checkbox"/>
7. Conduct sensory evaluation as per standard	<input type="checkbox"/>	<input type="checkbox"/>
8. Analyze and interpret sensory evaluation results	<input type="checkbox"/>	<input type="checkbox"/>

9. Make sure the preventive maintenance schedule is followed	<input type="checkbox"/>	<input type="checkbox"/>
10. Keep a record of each maintenance	<input type="checkbox"/>	<input type="checkbox"/>
11. Check the quality of the final product	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform random sampling from the final product	<input type="checkbox"/>	<input type="checkbox"/>
13. Check the frequency of sampling as per SOP	<input type="checkbox"/>	<input type="checkbox"/>
14. Complete final product analysis record	<input type="checkbox"/>	<input type="checkbox"/>
15. Ensure the traceability of each batch	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Quality Control in Food Industry
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Tasks		1. Check the quality of raw material		
		2. Check Lab testing equipment		
		3. Prepare product according to specifications		
		4. Perform Sensory evaluation of the product		
		5. Carry out Preventive measures		
		6. Check the quality of the final product		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Checked the quality of raw material as per specification			
2.	Performed physical, chemical and microbiological analysis			
3.	Ensured all lab equipment in a well-maintained condition			
4.	Ensured in time calibration of all equipment			
5.	Applied standard procedures to make food products			
6.	Performed analysis at each step of product preparation			
7.	Conducted sensory evaluation as per standard			
8.	Analyzed and interpret sensory evaluation results			
9.	Ensured the preventive maintenance schedule is followed			
10.	Kept a record of each maintenance			
11.	Checked the quality of the final product			
12.	Performed random sampling from the final product			
13.	Checked the frequency of sampling as per SOP			
14.	Completed final product analysis record			
15.	Ensured the traceability of each batch			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level-5 in Food Technology
Competency Standard	Ensure Quality Control in Food Industry
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Differentiate between Quality Assurance and Quality Control?		
2.	Differentiate between Corrective measure and a preventive measure?		
3.	What are the Key elements of raw material inspection?		
4.	Why do you mean by cross contamination?		

5.	What are the possible food safety hazards involved in transportation?		
6.	Name three types of food storages?		
7.	What is the standard temperature range for refrigeration?		
8.	What does IPM stands for?		
9.	What is CIP?		
10.	What is COP?		
11.	Why sensory evaluation is conducted?		
12.	Enlist the key parameters of sensory evaluation?		

13.	What is calibration?		
14.	Why calibration is required?		
15.	What is the SI?		
16.	What does SOP stands for?		
17.	What does GLP stands for?		
18.	Define traceability of a product?		
19.	What are the key components of a batch report?		
20.	Why do we need inspection at each process step instead of a signal final inspection?		
21.	What is Hedonic Scale?		

22.	What is the unit of measurement in sensory evaluation?		
23.	What does HACCP stands for?		
24.	Why process flow diagram needs to be verified?		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____

List of Tools and Equipment

Sr. No	DESCRIPTION	Quantity (25 candidates)
1	Refractometer	5
2	pH meter	5
3	Chemicals for lab testing	As per required test
4	Hydrometer	5
5	Weighing Balance	5
6	Densitometer	5