

Assessment Evidence Guide

For

Food Technology

Level-3

(Formative)



**National Vocational & Technical Training
Commission Islamabad**

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Adopt Basic Good Manufacturing Practices (GMP) for Food Industry
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 time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Apply basic GMP requirements regarding the layout of premises, workspace 2. Apply Basic GMP requirements regarding personal hygiene 3. Apply basic GMP requirements regarding food processing, including rework 4. Apply basic GMP requirements regarding food packaging 5. Apply basic GMP requirements regarding documentation and records 6. Apply basic GMP requirements to production quality control and in-process controls 7. Apply basic GMP requirements regarding storage, warehousing, and distribution 8. Apply basic GMP requirements regarding the management of purchased materials 9. Apply basic GMP requirements regarding cleaning and sanitation 10. Apply basic GMP requirements regarding measures for prevention of cross-contamination 11. Apply basic GMP requirements regarding Integrated Pest Management (IPM) 12. Apply basic GMP requirements regarding food defense
Time: 04Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Apply basic GMP requirements regarding the layout of premises, workspace 2. Apply Basic GMP requirements regarding personal hygiene 3. Apply basic GMP requirements regarding food processing, including rework 4. Apply basic GMP requirements regarding food packaging 5. Apply basic GMP requirements regarding documentation and records 6. Apply basic GMP requirements to production quality control and in-process controls 7. Apply basic GMP requirements regarding storage, warehousing, and distribution 8. Apply basic GMP requirements regarding the management of purchased materials 9. Apply basic GMP requirements regarding cleaning and sanitation

	<p>10. Apply basic GMP requirements regarding measures for prevention of cross-contamination</p> <p>11. Apply basic GMP requirements regarding Integrated Pest Management (IPM)</p> <p>12. Apply basic GMP requirements regarding food defense</p>
Minimum Evidence Required	<p>1. Apply basic GMP requirements regarding the layout of premises, workspace</p> <ul style="list-style-type: none"> ♦ Apply adequate cleaning and/or disinfection ♦ Maintain sufficient space for food production and storage of equipment ♦ Follow safety rules and regulations for the food processing industry <p>2. Apply Basic GMP requirements regarding personal hygiene</p> <ul style="list-style-type: none"> ♦ Perform proper handwashing and disinfection procedures before entering production ♦ Report to the supervisor in the case of illness <p>3. Apply basic GMP requirements regarding food processing, including rework</p> <ul style="list-style-type: none"> ♦ Make sure that the actual food rework is identifiable. ♦ Perform rework handling as per industry standards. ♦ Maintain traceability records of all food rework <p>4. Apply basic GMP requirements regarding food packaging</p> <ul style="list-style-type: none"> ♦ Ensure food contact materials and products are safe for their intended uses ♦ Maintain packing surfaces and equipment to minimize product damage and contamination <p>5. Apply basic GMP requirements regarding documentation and records</p> <ul style="list-style-type: none"> ♦ Interpret laboratory control records ♦ Maintain records to support that any Good manufacturing practices (GMP) have been implemented <p>6. Apply basic GMP requirements to production quality control and in-process controls</p> <ul style="list-style-type: none"> ♦ Follow master production instructions (SOPs) ♦ Perform basic in-process control measurements (e.g. pH, weighing) under supervision ♦ Perform basic quality control measure under supervision <p>7. Apply basic GMP requirements regarding storage, warehousing, and distribution</p> <ul style="list-style-type: none"> ♦ Follow First Expire First Out (FEFO)/First in First Out (FIFO) ♦ Ensure the stacking method as per product description ♦ Ensure Product storage as per required parameters (temperature, humidity, etc.) <p>8. Apply basic GMP requirements regarding the management of purchased materials</p>

	<ul style="list-style-type: none"> ♦ Handle the raw materials as per product requirements ♦ Select the appropriate raw materials based on functionality ♦ Meet company or customer standards (e.g. halal, organic, gluten-free) <p>9. Apply basic GMP requirements regarding cleaning and sanitation</p> <ul style="list-style-type: none"> ♦ Ensure safe food supply ♦ Follow sanitation procedures for all food contact equipment and food contact surfaces ♦ Report sanitation failures ♦ Maintain record-keeping associated with the sanitation procedure <p>10. Apply basic GMP requirements regarding measures for prevention of cross-contamination</p> <ul style="list-style-type: none"> ♦ Ensure segregation of area according to hygiene requirement (Zoning) ♦ Ensure adequate floor drainage systems in all areas <p>11. Apply basic GMP requirements regarding Integrated Pest Management (IPM)</p> <ul style="list-style-type: none"> ♦ Identify Target pest related to workplace area ♦ Ensure preventive measures regarding pest entry in the food processing area ♦ Install monitoring devices (Insect-o-curators, Bait Station, Glue Boards, Straws, Cages) ♦ Clean and maintain monitoring devices <p>12. Apply basic GMP requirements regarding food defense</p> <ul style="list-style-type: none"> ♦ Minimize the risk and impact of an incident of intentional contamination
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Adopt Basic Good Manufacturing Practices (GMP) for Food Industry
Purpose of Assessment	Formative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Apply basic GMP requirements regarding the layout of premises, workspace 2. Apply Basic GMP requirements regarding personal hygiene 3. Apply basic GMP requirements regarding food processing, including rework 4. Apply basic GMP requirements regarding food packaging 5. Apply basic GMP requirements regarding documentation and records 6. Apply basic GMP requirements to production quality control and in-process controls 7. Apply basic GMP requirements regarding storage, warehousing, and distribution 8. Apply basic GMP requirements regarding the management of purchased materials 9. Apply basic GMP requirements regarding cleaning and sanitation 10. Apply basic GMP requirements regarding measures for prevention of cross-contamination 11. Apply basic GMP requirements regarding Integrated Pest Management (IPM) 12. Apply basic GMP requirements regarding food defense

I can.....

Performance Criteria	Yes	No
1. Apply adequate cleaning and/or disinfection	<input type="checkbox"/>	<input type="checkbox"/>
2. Maintain sufficient space for food production and storage of equipment	<input type="checkbox"/>	<input type="checkbox"/>
3. Follow safety rules and regulations for the food processing industry	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform proper handwashing and disinfection procedures before entering production	<input type="checkbox"/>	<input type="checkbox"/>
5. Report to the supervisor in the case of illness	<input type="checkbox"/>	<input type="checkbox"/>
6. Make sure that the actual food rework is identifiable.	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform rework handling as per industry standards.	<input type="checkbox"/>	<input type="checkbox"/>
8. Maintain traceability records of all food rework	<input type="checkbox"/>	<input type="checkbox"/>

9. Ensure food contact materials and products are safe for their intended uses	<input type="checkbox"/>	<input type="checkbox"/>
10. Maintain packing surfaces and equipment to minimize product damage and contamination	<input type="checkbox"/>	<input type="checkbox"/>
11. Interpret laboratory control records	<input type="checkbox"/>	<input type="checkbox"/>
12. Maintain records to support that any Good manufacturing practices (GMP) have been implemented	<input type="checkbox"/>	<input type="checkbox"/>
13. Follow master production instructions (SOPs)	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform basic in-process control measurements (e.g. pH, weighing) under supervision	<input type="checkbox"/>	<input type="checkbox"/>
15. Perform basic quality control measure under supervision	<input type="checkbox"/>	<input type="checkbox"/>
16. Follow First Expire First Out (FEFO)/First in First Out (FIFO)	<input type="checkbox"/>	<input type="checkbox"/>
17. Ensure the stacking method as per product description	<input type="checkbox"/>	<input type="checkbox"/>
18. Ensure Product storage as per required parameters (temperature, humidity, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
19. Handle the raw materials as per product requirements	<input type="checkbox"/>	<input type="checkbox"/>
20. Select the appropriate raw materials based on functionality	<input type="checkbox"/>	<input type="checkbox"/>
21. Meet company or customer standards (e.g. halal, organic, gluten-free)	<input type="checkbox"/>	<input type="checkbox"/>
22. Ensure safe food supply	<input type="checkbox"/>	<input type="checkbox"/>
23. Follow sanitation procedures for all food contact equipment and food contact surfaces	<input type="checkbox"/>	<input type="checkbox"/>
24. Report sanitation failures	<input type="checkbox"/>	<input type="checkbox"/>
25. Maintain record-keeping associated with the sanitation procedure	<input type="checkbox"/>	<input type="checkbox"/>
26. Ensure segregation of area according to hygiene requirement (Zoning)	<input type="checkbox"/>	<input type="checkbox"/>
27. Ensure adequate floor drainage systems in all areas	<input type="checkbox"/>	<input type="checkbox"/>
28. Identify Target pest related to workplace area	<input type="checkbox"/>	<input type="checkbox"/>
29. Ensure preventive measures regarding pest entry in the food processing area	<input type="checkbox"/>	<input type="checkbox"/>
30. Install monitoring devices (Insect-o-curators, Bait Station, Glue Boards, Straws, Cages)	<input type="checkbox"/>	<input type="checkbox"/>
31. Clean and maintain monitoring devices	<input type="checkbox"/>	<input type="checkbox"/>
32. Minimize the risk and impact of an incident of intentional contamination	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Adopt Basic Good Manufacturing Practices (GMP) for 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

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Applied adequate cleaning and/or disinfection	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Maintained sufficient space for food production and storage of equipment	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Followed safety rules and regulations for the food processing industry	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Performed proper handwashing and disinfection procedures before entering production	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Reported to the supervisor in the case of illness	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Ensured that the actual food rework is identifiable.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Performed rework handling as per industry standards.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Maintained traceability records of all food rework	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Ensured food contact materials and products are safe for their intended uses	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Maintained packing surfaces and equipment to minimize product damage and contamination	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Interpreted laboratory control records	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Maintained records to support that any Good manufacturing practices (GMP) have been implemented	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Followed master production instructions (SOPs)	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Performed basic in-process control measurements (e.g. pH, weighing) under supervision	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Performed basic quality control measure under supervision	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Followed First Expire First Out (FEFO)/First in First Out (FIFO)	<input type="checkbox"/>	<input type="checkbox"/>	
17.	Ensured the stacking method as per product description	<input type="checkbox"/>	<input type="checkbox"/>	
18.	Ensured Product storage as per required parameters (temperature, humidity, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	
19.	Handled the raw materials as per product requirements	<input type="checkbox"/>	<input type="checkbox"/>	
20.	Selected the appropriate raw materials based on functionality	<input type="checkbox"/>	<input type="checkbox"/>	
21.	Met company or customer standards (e.g. halal, organic, gluten-free)	<input type="checkbox"/>	<input type="checkbox"/>	
22.	Ensured safe food supply	<input type="checkbox"/>	<input type="checkbox"/>	

23.	Followed sanitation procedures for all food contact equipment and food contact surfaces	<input type="checkbox"/>	<input type="checkbox"/>	
24.	Reported sanitation failures	<input type="checkbox"/>	<input type="checkbox"/>	
25.	Maintained record-keeping associated with the sanitation procedure	<input type="checkbox"/>	<input type="checkbox"/>	
26.	Ensured segregation of area according to hygiene requirement (Zoning)	<input type="checkbox"/>	<input type="checkbox"/>	
27.	Ensured adequate floor drainage systems in all areas	<input type="checkbox"/>	<input type="checkbox"/>	
28.	Identified Target pest related to workplace area	<input type="checkbox"/>	<input type="checkbox"/>	
29.	Ensured preventive measures regarding pest entry in the food processing area	<input type="checkbox"/>	<input type="checkbox"/>	
30.	Installed monitoring devices (Insect-o-curators, Bait Station, Glue Boards, Straws, Cages)	<input type="checkbox"/>	<input type="checkbox"/>	
31.	Cleaned and maintain monitoring devices	<input type="checkbox"/>	<input type="checkbox"/>	
32.	Minimized the risk and impact of an incident of intentional contamination	<input type="checkbox"/>	<input type="checkbox"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Adopt Basic Good Manufacturing Practices (GMP) for 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. What is importance of layout in the food industry?		
2. Why personal hygiene is important in the food industry?		
3. Define the rework handling procedure?		
4. Define FEFO and FIFO and its importance?		
5. Differentiate between cleaning and sanitation?		

6. What is zoning?		
7. What is different between safety and hygiene?		
8. How to establish a food defense system?		
9. What is the importance of pest management in food industry?		
10. What is GMP?		
11. How to Minimize the risk and impact of an incident of intentional contamination?		
12. How to Prevent intentional contamination of food products		

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

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Food Technology (Level3)
Competency Standard	Apply Food Processing Techniques
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 time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Prepare food for processing 2. Apply size reduction techniques 3. Apply extraction techniques 4. Apply high temperature techniques 5. Apply low temperature techniques 6. Apply fermentation techniques 7. Apply evaporation techniques 8. Monitor adding of ingredients 9. Push batches to preservation and for packaging process 10. Produce beverages 11. Handle food additives 12. Perform basic calculation
Time: 04Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Prepare food for processing 2. Apply size reduction techniques 3. Apply extraction techniques 4. Apply high temperature techniques 5. Apply low temperature techniques 6. Apply fermentation techniques 7. Apply evaporation techniques 8. Monitor adding of ingredients 9. Push batches to preservation and for packaging process 10. Produce beverages 11. Handle food additives 12. Perform basic calculation

<p>Minimum Evidence Required</p>	<ol style="list-style-type: none"> 1. Prepare food for processing <ul style="list-style-type: none"> ◆ Perform sorting, grading and peeling methods for fruits and vegetables ◆ Ensure dressing of Meat, Poultry and Marine food ◆ Perform shelling of eggs and dry fruits ◆ Ensure batch loading as per recipe 2. Apply size reduction techniques <ul style="list-style-type: none"> ◆ Perform cutting of fruits and vegetables by using different methods ◆ Perform cutting, mincing, filleting of Meat and Fish ◆ Perform grinding and milling 3. Apply extraction techniques <ul style="list-style-type: none"> ◆ Perform extraction techniques in fruits and vegetables ◆ Perform extraction techniques in Fat and Oil 4. Apply high temperature techniques <ul style="list-style-type: none"> ◆ Perform pasteurization of different food products ◆ Perform sterilization of different food products ◆ Perform (UHT) Ultra High Temperature treatment for liquid foods ◆ Perform blanching of Fruits and vegetables ◆ Use dry heat method for different foods 5. Apply low temperature techniques <ul style="list-style-type: none"> ◆ Use refrigeration/cold storage methods for different foods ◆ Use different freezing techniques for foods ◆ Use different chilling techniques for foods 6. Apply fermentation techniques <ul style="list-style-type: none"> ◆ Perform lactic acid fermentation for foods ◆ Perform Acetic Acid fermentation for foods ◆ Perform Alcoholic fermentation for foods 7. Apply evaporation techniques <ul style="list-style-type: none"> ◆ Use different evaporation techniques ◆ Use spray drying method for liquid foods ◆ Perform drum drying for foods 8. Monitor adding of ingredients <ul style="list-style-type: none"> ◆ Check flavor, aroma and appearance of ingredients ◆ Ensure addition of ingredients as per specification ◆ Maintain record of ingredients 9. Push batches to preservation and for packaging process <ul style="list-style-type: none"> ◆ Perform incubation / Maturation for different food
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	<ul style="list-style-type: none"> ◆ Ensure storage of finished products at low temperature ◆ Perform Hardening of frozen products <p>10. Produce beverages</p> <ul style="list-style-type: none"> ◆ Prepare carbonated drink as per recipe ◆ Prepare non-carbonated drink as per recipe <p>11. Handle food additives</p> <ul style="list-style-type: none"> ◆ Use different preservative chemicals for food preservation ◆ Perform enrichment and fortification ◆ Use functional additives to improve physical and chemicals properties <p>12. Perform basic calculation</p> <ul style="list-style-type: none"> ◆ Perform dry and wet calculation for ingredients ◆ Calculate process losses
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Apply Food Processing Techniques
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Prepare food for processing 2. Apply size reduction techniques 3. Apply extraction techniques 4. Apply high temperature techniques 5. Apply low temperature techniques 6. Apply fermentation techniques 7. Apply evaporation techniques 8. Monitor adding of ingredients 9. Push batches to preservation and for packaging process 10. Produce beverages 11. Handle food additives 12. Perform basic calculation

I can.....

Performance Criteria	Yes	No
1. Perform sorting, grading and peeling methods for fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>
2. Ensure dressing of Meat, Poultry and Marine food	<input type="checkbox"/>	<input type="checkbox"/>
3. Perform shelling of eggs and dry fruits	<input type="checkbox"/>	<input type="checkbox"/>
4. Ensure batch loading as per recipe	<input type="checkbox"/>	<input type="checkbox"/>
5. Perform cutting of fruits and vegetables by using different methods	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform cutting, mincing, filleting of Meat and Fish	<input type="checkbox"/>	<input type="checkbox"/>
7. Perform grinding and milling	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform extraction techniques in fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform extraction techniques in Fat and Oil	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform pasteurization of different food products	<input type="checkbox"/>	<input type="checkbox"/>

11. Perform sterilization of different food products	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform (UHT) Ultra High Temperature treatment for liquid foods	<input type="checkbox"/>	<input type="checkbox"/>
13. Perform blanching of Fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>
14. Use dry heat method for different foods	<input type="checkbox"/>	<input type="checkbox"/>
15. Use refrigeration/cold storage methods for different foods	<input type="checkbox"/>	<input type="checkbox"/>
16. Use different freezing techniques for foods	<input type="checkbox"/>	<input type="checkbox"/>
17. Use different chilling techniques for foods	<input type="checkbox"/>	<input type="checkbox"/>
18. Perform lactic acid fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>
19. Perform Acetic Acid fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>
20. Perform Alcoholic fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>
21. Use different evaporation techniques	<input type="checkbox"/>	<input type="checkbox"/>
22. Use spray drying method for liquid foods	<input type="checkbox"/>	<input type="checkbox"/>
23. Perform drum drying for foods	<input type="checkbox"/>	<input type="checkbox"/>
24. Check flavor, aroma and appearance of ingredients	<input type="checkbox"/>	<input type="checkbox"/>
25. Ensure addition of ingredients as per specification	<input type="checkbox"/>	<input type="checkbox"/>
26. Maintain record of ingredients	<input type="checkbox"/>	<input type="checkbox"/>
27. Perform incubation / Maturation for different food	<input type="checkbox"/>	<input type="checkbox"/>
28. Ensure storage of finished products at low temperature	<input type="checkbox"/>	<input type="checkbox"/>
29. Perform Hardening of frozen products	<input type="checkbox"/>	<input type="checkbox"/>
30. Prepare carbonated drink as per recipe	<input type="checkbox"/>	<input type="checkbox"/>
31. Prepare non-carbonated drink as per recipe	<input type="checkbox"/>	<input type="checkbox"/>
32. Use different preservative chemicals for food preservation	<input type="checkbox"/>	<input type="checkbox"/>
33. Perform enrichment and fortification	<input type="checkbox"/>	<input type="checkbox"/>
34. Use functional additives to improve physical and chemicals properties	<input type="checkbox"/>	<input type="checkbox"/>
35. Perform dry and wet calculation for ingredients	<input type="checkbox"/>	<input type="checkbox"/>

36. Calculate process losses	<input type="text"/>	<input type="text"/>
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Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Apply Food Processing Techniques
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

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performed sorting, grading and peeling methods for fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Ensured dressing of Meat, Poultry and Marine food	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Performed shelling of eggs and dry fruits	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Ensured batch loading as per recipe	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Performed cutting of fruits and vegetables by using different methods	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Performed cutting, mincing, filleting of Meat and Fish	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Performed grinding and milling	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Performed extraction techniques in fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Performed extraction techniques in Fat and Oil	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Performed pasteurization of different food products	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Performed sterilization of different food products	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Performed (UHT) Ultra High Temperature treatment for liquid foods	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Performed blanching of Fruits and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Used dry heat method for different foods	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Used refrigeration/cold storage methods for different foods	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Used different freezing techniques for foods	<input type="checkbox"/>	<input type="checkbox"/>	
17.	Used different chilling techniques for foods	<input type="checkbox"/>	<input type="checkbox"/>	
18.	Performed lactic acid fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>	
19.	Performed Acetic Acid fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>	
20.	Performed Alcoholic fermentation for foods	<input type="checkbox"/>	<input type="checkbox"/>	
21.	Used different evaporation techniques	<input type="checkbox"/>	<input type="checkbox"/>	
22.	Used spray drying method for liquid foods	<input type="checkbox"/>	<input type="checkbox"/>	

23.	Performed drum drying for foods	<input type="checkbox"/>	<input type="checkbox"/>	
24.	Checked flavor, aroma and appearance of ingredients	<input type="checkbox"/>	<input type="checkbox"/>	
25.	Ensured addition of ingredients as per specification	<input type="checkbox"/>	<input type="checkbox"/>	
26.	Maintained record of ingredients	<input type="checkbox"/>	<input type="checkbox"/>	
27.	Performed incubation / Maturation for different food	<input type="checkbox"/>	<input type="checkbox"/>	
28.	Ensured storage of finished products at low temperature	<input type="checkbox"/>	<input type="checkbox"/>	
29.	Performed Hardening of frozen products	<input type="checkbox"/>	<input type="checkbox"/>	
30.	Prepared carbonated drink as per recipe	<input type="checkbox"/>	<input type="checkbox"/>	
31.	Prepared non-carbonated drink as per recipe	<input type="checkbox"/>	<input type="checkbox"/>	
32.	Used different preservative chemicals for food preservation	<input type="checkbox"/>	<input type="checkbox"/>	
33.	Performed enrichment and fortification	<input type="checkbox"/>	<input type="checkbox"/>	
34.	Used functional additives to improve physical and chemicals properties	<input type="checkbox"/>	<input type="checkbox"/>	
35.	Performed dry and wet calculation for ingredients	<input type="checkbox"/>	<input type="checkbox"/>	
36.	Calculated process losses	<input type="checkbox"/>	<input type="checkbox"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Apply Food Processing Techniques
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. What is food processing?		
2. Enlist three advantages of size reduction techniques?		
3. Define extraction?		
4. Define fermentation?		
5. Define evaporation?		

6. Enlist three types of packaging material?		
7. Differentiate between carbonated and non-carbonated beverage?		
8. Differentiate between an additive and an ingredient?		
9. Define primary food processing?		
10. Define secondary food processing?		
11. Define tertiary food processing?		
12. What are ready to eat foods?		
13. What are the factors which affect the shelf life of food products?		
14. What is Traditional food processing?		
15. What is the purpose of food processing?		
16. Why to process food?		
17. What is value addition of food?		
18. What is cross contamination?		
19. What is tetra packaging?		

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

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Perform Carbonated Beverage Processing
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 time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Apply standard formulation procedure 2. Apply mixing process 3. Ensure Pasteurization and homogenization of for carbonated drinks 4. Ensure carbonation and cooling of carbonated drinks 5. Filling of beverages
Time: 04Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Apply standard formulation procedure 2. Apply mixing process 3. Ensure Pasteurization and homogenization of for carbonated drinks 4. Ensure carbonation and cooling of carbonated drinks 5. Filling of beverages
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Apply standard formulation procedure <ul style="list-style-type: none"> ◆ Ensure availability of all ingredients as per formulation ◆ Ensure formulation contains permitted ingredients ◆ Check the working of weighing balance and its calibration. 2. Apply mixing process <ul style="list-style-type: none"> ◆ Check the working of mixing tank /agitator ◆ Check the cleaning of all equipment used ◆ Check strainers and line filters are in sound condition. 3. Ensure Pasteurization and homogenization of for carbonated drinks <ul style="list-style-type: none"> ◆ Check availability of steam for pasteurization ◆ Make sure pasteurizer temp gauge is in working condition and calibrated. ◆ Ensure there is no leakage from the pasteurizer ◆ Ensure homogenizer is in good working condition ◆ Check the sample before and after homogenization 4. Ensure carbonation and cooling of carbonated drinks <ul style="list-style-type: none"> ◆ Check quality of CO₂ gas as per specifications ◆ Check the working of carbo cooler condenser and temperature

	<p>gauges</p> <ul style="list-style-type: none"> ♦ Check any leakage from carbo cooler and all pipeline at inlet and outlet ♦ Check CO2 gas volume in the final product after certain intervals as per sampling plan <p>5. Filling of beverages</p> <ul style="list-style-type: none"> ♦ Ensure quality of packaging material ♦ Ensure all filters and strainers are in place before starting beverage filling. ♦ Ensure product meet the quality parameters as per standard specifications ♦ Ensure properly filling and sealing of capping machines ♦ Check the working of the label and date coding printer
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Perform Carbonated Beverage Processing
Purpose of Assessment	Formative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Apply standard formulation procedure 2. Apply mixing process 3. Ensure Pasteurization and homogenization of for carbonated drinks 4. Ensure carbonation and cooling of carbonated drinks 5. Filling of beverages

I can.....

Performance Criteria	Yes	No
1. Check quality of each food ingredient in carbonated beverage processing	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform cleaning in place (CIP) of all equipment in beverage production	<input type="checkbox"/>	<input type="checkbox"/>
3. Perform pasteurization and homogenization of for carbonated drinks	<input type="checkbox"/>	<input type="checkbox"/>
4. Perform cooling and carbonation of carbonated drinks	<input type="checkbox"/>	<input type="checkbox"/>
5. Check quality of CO2 gas as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
6. Check the working of carbo cooler condenser and temperature gauges	<input type="checkbox"/>	<input type="checkbox"/>
7. Check CO2 gas volume in final product of carbonated drink	<input type="checkbox"/>	<input type="checkbox"/>
8. Perform filling of carbonated beverages	<input type="checkbox"/>	<input type="checkbox"/>
9. Ensure quality of packaging material	<input type="checkbox"/>	<input type="checkbox"/>

10. Ensure all filters and strainers are in place before starting beverage filling.	<input type="text"/>	<input type="text"/>
11. Check product is according to the quality parameters as per standard specifications	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Perform Carbonated Beverage Processing
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

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Checked quality of each food ingredient in carbonated beverage processing	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Performed cleaning in place (CIP) of all equipment used in beverage production	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Performed pasteurization and homogenization of for carbonated drinks	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Performed cooling and carbonation of carbonated drinks	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Checked quality of CO2 gas as per specifications	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Checked the working of carbo cooler condenser and temperature gauges	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Checked CO2 gas volume in final product of carbonated drink	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Performed filling of carbonated beverages	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Ensure quality of packaging material	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Ensure all filters and strainers are in place before starting beverage filling.	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Checked product is according to the quality parameters as per standard specifications	<input type="checkbox"/>	<input type="checkbox"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Carbonated Beverage Processing
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. How to differentiate carbonated and non-carbonated beverages?		
2. What are pasteurization conditions for carbonated beverages?		
3. What are carbonation conditions?		
4. What is principle of carbonation process?		
5. What is different between pasteurization and homogenization?		

6. What is different between labeling and coding print?		
7. What is carbon dioxide?		
8. What is refractometer?		
9. What is brix?		
10. What is different between filler and capper?		
11. Enlist the impurities in carbon dioxide gas		
12. What are heavy metals?		
13. What is water hardening?		
14. What is TDS?		

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

List of Tools and Equipment

Sr. no.	Name of tool	Quantity (25 candidates)
1	pH meter	5
2	Refractometer	5
3	Thermometer	5
4	TDS meter	5
5	Titration apparatus	5
6	Chilling unit	1
7	CO2 Cylinder	2
8	Filling machine	1
9	Capping machine	1
10	Labeling machine	1
11	CO2 Tester	5
12	Pasteurizer	1
13	Carbo cooler	1

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Sugar	10
2	Flavour	100 grams

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Perform Meat Processing
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 time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Inspect the live animals 2. Perform Halal Slaughtering 3. Grading and chilling of carcass 4. Cutting and/or mincing of meat 5. Packaging and labeling of meat 6. Freezing, and storage of meat
Time: 04Hrs.	<p>During a practical assessment, under observation by an assessor, you are required to:</p> <ol style="list-style-type: none"> 1. Inspect the live animals 2. Perform Halal Slaughtering 3. Grading and chilling of carcass 4. Cutting and/or mincing of meat 5. Packaging and labeling of meat 6. Freezing, and storage of meat
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Inspect the live animals <ul style="list-style-type: none"> ♦ Check the animal's/bird health ♦ Calculate the mortality rate in case of poultry ♦ Calculate the average weight and size of the animal/bird 2. Perform Halal Slaughtering <ul style="list-style-type: none"> ♦ Apply the basic shariah principles ♦ Give horizontal cut to the esophagus, carotid artery, jugular vein and trachea simultaneously ♦ Allow animals/birds to bleed completely 3. Grading and chilling of carcass <ul style="list-style-type: none"> ♦ Grade the carcasses as per weight, age and size specifications ♦ Monitor chilling process as per specifications ♦ Record the temperature of chilled carcass ♦ Separate the out-of-specifications product ♦ Rectify the process as per procedures 4. Cutting and/or mincing of meat <ul style="list-style-type: none"> ♦ Perform cutting/mincing as per product specifications ♦ Identify the out-of-specifications product ♦ Dispose waste generated by the process as required

	<p>5. Packaging and labeling of meat</p> <ul style="list-style-type: none"> ♦ Inspect the packaging material to meet the specifications ♦ Monitor the packaging of products as per label specifications ♦ Check the temperature of finally packed products <p>6. Freezing, and storage of meat</p> <ul style="list-style-type: none"> ♦ Check the blast freezer is working as per specifications ♦ Monitor the freezing procedure is being followed as per specifications ♦ Check the cold storage is working at specified temperatures ♦ Shift the final freeze products in cold store
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Meat Processing
Purpose of Assessment	Formative Assessment
Assessment Task	<ol style="list-style-type: none"> 1. Inspect the live animals 2. Perform Halal Slaughtering 3. Grading and chilling of carcass 4. Cutting and/or mincing of meat 5. Packaging and labeling of meat 6. Freezing, and storage of meat

I can.....

Performance Criteria	Yes	No
1. Check the animals/bird health	<input type="checkbox"/>	<input type="checkbox"/>
2. Calculate the mortality rate in case of poultry	<input type="checkbox"/>	<input type="checkbox"/>
3. Calculate the average weight and size of the animal/bird	<input type="checkbox"/>	<input type="checkbox"/>
4. Apply the basic shariah principles		
5. Give horizontal cut to the esophagus, carotid artery, jugular vein and trachea simultaneously	<input type="checkbox"/>	<input type="checkbox"/>
6. Allow animals/birds to bleed completely	<input type="checkbox"/>	<input type="checkbox"/>
7. Grade the carcasses as per weight, age and size specifications	<input type="checkbox"/>	<input type="checkbox"/>
8. Monitor chilling process as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
9. Record the temperature of chilled carcass	<input type="checkbox"/>	<input type="checkbox"/>
10. Separate the out-of-specifications product	<input type="checkbox"/>	<input type="checkbox"/>
11. Perform cutting/mincing as per product specifications	<input type="checkbox"/>	<input type="checkbox"/>
12. Identify the out-of-specifications product	<input type="checkbox"/>	<input type="checkbox"/>
13. Dispose waste generated by the process as required	<input type="checkbox"/>	<input type="checkbox"/>

14. Inspect the packaging material to meet the specifications	<input type="checkbox"/>	<input type="checkbox"/>
15. Monitor the packaging of products as per label specifications	<input type="checkbox"/>	<input type="checkbox"/>
16. Check the temperature of finally packed products	<input type="checkbox"/>	<input type="checkbox"/>
17. Check the blast freezer is working as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
18. Monitor the freezing procedure is being followed as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
19. Check the cold storage is working at specified temperatures	<input type="checkbox"/>	<input type="checkbox"/>
20. Shift the final freeze products in cold store	<input type="checkbox"/>	<input type="checkbox"/>

Candidate's Signature _____ Assessor's Signature _____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Meat Processing
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

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Check the animals/bird health	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Calculate the mortality rate in case of poultry	<input type="checkbox"/>	<input type="checkbox"/>	

3.	Calculate the average weight and size of the animal/bird	<input type="text"/>	<input type="text"/>	
4.	Apply the basic shariah principles	<input type="text"/>	<input type="text"/>	
5.	Give horizontal cut to the esophagus, carotid artery, jugular vein and trachea simultaneously	<input type="text"/>	<input type="text"/>	
6.	Allow animals/birds to bleed completely	<input type="text"/>	<input type="text"/>	
7.	Grade the carcasses as per weight, age and size specifications	<input type="text"/>	<input type="text"/>	
8.	Monitor chilling process as per specifications	<input type="text"/>	<input type="text"/>	
9.	Record the temperature of chilled carcass	<input type="text"/>	<input type="text"/>	
10.	Separate the out-of-specifications product	<input type="text"/>	<input type="text"/>	
11.	Perform cutting/mincing as per product specifications	<input type="text"/>	<input type="text"/>	
12.	Identify the out-of-specifications product	<input type="text"/>	<input type="text"/>	
13.	Dispose waste generated by the process as required	<input type="text"/>	<input type="text"/>	
14.	Inspect the packaging material to meet the specifications	<input type="text"/>	<input type="text"/>	
15.	Monitor the packaging of products as per label specifications	<input type="text"/>	<input type="text"/>	
16.	Check the temperature of finally packed products	<input type="text"/>	<input type="text"/>	
17.	Check the blast freezer is working as per specifications	<input type="text"/>	<input type="text"/>	
18.	Monitor the freezing procedure is being followed as per specifications	<input type="text"/>	<input type="text"/>	
19.	Check the cold storage is working at specified temperatures	<input type="text"/>	<input type="text"/>	
20.	Shift the final freeze products in cold store	<input type="text"/>	<input type="text"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Meat Processing
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 quality criteria for meat?		
2. What is antemortem inspection?		
3. What is post-mortem inspection?		
4. Edible viscera include -----?		
5. What is Rigor Mortis?		

6. What are major two pathogens of meat?		
7. What is difference between mutton and beef?		
8. What is composition of meat?		
9. What are shariah principles for slaughtering?		
10. What is freezing of meat?		
11. What is chilling of meat?		
12. How to control spoilage of meat?		
13. What is dripping / thawing loss?		
14. What is brine?		
15. What is refrigerator temperature?		
16. What is freezing temperature?		
17. What is blast freezing?		
18. What is smoking?		
19. What is scalding?		
20. What is debonding?		
21. Why chlorine is used in meat processing?		

22. What is bleeding time?		
23. What to do with inedible viscera?		
24. What is cross contamination?		

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

List of Tools and Equipment

Sr. no.	Name of tool	Quantity (25 candidates)
1	Knives	5
2	De-skinning kit	5
3	Chiller	1
4	Cutting boards	10
5	Cutters	5
6	Chopper	5
7	Mincer	5
8	Trolleys	5
9	Crates	10
10	Chiller and cold store	1
11	Packing machine	5
12	Buckets	10

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Chlorine	5 L

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level – 3 in Food Technology
Competency Standard	Perform Fruits and Vegetables Processing
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 time frame (for practical demonstration & assessment): <ol style="list-style-type: none"> 1. Receive fruits and vegetables according to quality parameters 2. Perform Cleaning of Fruits and Vegetables 3. Perform preparatory operations 4. Prepare value-added products from fruits 5. Prepare value- added products from vegetables 6. Perform Drying Process 7. Perform Freezing process
Time: 04.5 Hrs.	During a practical assessment, under observation by an assessor, you are required to: <ol style="list-style-type: none"> 1. Receive fruits and vegetables according to quality parameters 2. Perform Cleaning of Fruits and Vegetables 3. Perform preparatory operations 4. Prepare value-added products from fruits 5. Prepare value- added products from vegetables 6. Perform Drying Process 7. Perform Freezing process
Minimum Evidence Required	<ol style="list-style-type: none"> 1. Receive fruits and vegetables according to quality parameters <ul style="list-style-type: none"> ♦ Inspect fruits and vegetables as per food safety requirements (Pest contamination, cuts, appearance etc.) ♦ Perform sorting, sizing and grading to meet specifications. 2. Perform Cleaning of Fruits and Vegetables <ul style="list-style-type: none"> ♦ Perform washing and cleaning. ♦ Operate conveyers used to transfer materials to required locations. ♦ Maintain work area and equipment to meet housekeeping standards 3. Perform preparatory operations <ul style="list-style-type: none"> ♦ Perform blanching as per set specifications. ♦ Operate peeler. ♦ Operate destoner. ♦ Perform Cutting, Slicing, Dicing, Shredding, Pulping, Crushing etc. ♦ Perform Mixing according to product requirements

	<p>4. Prepare value-added products from fruits</p> <ul style="list-style-type: none"> ♦ Prepare batch according to set specifications by mixing fruits and additives. ♦ Perform Syruping for fruits. ♦ Check quality parameters (Brix, viscosity, acidity, sensory evaluation) <p>5. Prepare value-added products from vegetables</p> <ul style="list-style-type: none"> ♦ Prepare batch according to set specifications by mixing vegetables and additives. ♦ Perform brining for vegetables ♦ Check quality parameters (Brix, viscosity, acidity, sensory evaluation) <p>6. Perform Drying Process</p> <ul style="list-style-type: none"> ♦ Check control points to confirm performance is maintained within specification ♦ Operate dryer for fruit products ♦ Perform routine analysis to check the quality of the final product <p>7. Perform Freezing process</p> <ul style="list-style-type: none"> ♦ Check control points to confirm performance is maintained within specification ♦ Monitor equipment to confirm operating condition ♦ Identify out-of-specification product, process and equipment performance
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Fruits and Vegetables Processing
Purpose of Assessment	Formative Assessment
Assessment Tasks	<ol style="list-style-type: none"> 1. Receive fruits and vegetables according to quality parameters 2. Perform Cleaning of Fruits and Vegetables 3. Perform preparatory operations 4. Prepare value-added products from fruits 5. Prepare value- added products from vegetables 6. Perform Drying Process 7. Perform Freezing process

I can.....

Performance Criteria	Yes	No
1. Inspect fruits and vegetables as per food safety requirements (Pest contamination, cuts, appearance etc.)	<input type="checkbox"/>	<input type="checkbox"/>
2. Perform sorting, sizing and grading to meet specifications.	<input type="checkbox"/>	<input type="checkbox"/>
3. Perform washing and cleaning.	<input type="checkbox"/>	<input type="checkbox"/>
4. Operate conveyers used to transfer materials to required locations.	<input type="checkbox"/>	<input type="checkbox"/>
5. Maintain work area and equipment to meet housekeeping standards	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform blanching as per set specifications.	<input type="checkbox"/>	<input type="checkbox"/>
7. Operate peeler.	<input type="checkbox"/>	<input type="checkbox"/>
8. Operate destoner.	<input type="checkbox"/>	<input type="checkbox"/>
9. Perform Cutting, Slicing, Dicing, Shredding, Pulping, Crushing etc.	<input type="checkbox"/>	<input type="checkbox"/>
10. Perform Mixing according to product requirements	<input type="checkbox"/>	<input type="checkbox"/>
11. Prepare batch according to set specifications by mixing fruits and additives.	<input type="checkbox"/>	<input type="checkbox"/>
12. Perform Syruping for fruits.	<input type="checkbox"/>	<input type="checkbox"/>

13. Check quality parameters (Brix, viscosity, acidity, sensory evaluation)	<input type="text"/>	<input type="text"/>
14. Prepare batch according to set specifications by mixing vegetables and additives.	<input type="text"/>	<input type="text"/>
15. Perform brining for vegetables	<input type="text"/>	<input type="text"/>
16. Check control points to confirm performance is maintained within specification	<input type="text"/>	<input type="text"/>
17. Operate dryer for fruit products	<input type="text"/>	<input type="text"/>
18. Perform routine analysis to check the quality of the final product	<input type="text"/>	<input type="text"/>
19. Monitor equipment to confirm operating condition	<input type="text"/>	<input type="text"/>
20. Identify out-of-specification product, process and equipment performance	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Fruits and Vegetables Processing
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

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Inspected fruits and vegetables as per food safety requirements (Pest contamination, cuts, appearance etc.)	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Performed sorting, sizing and grading to meet specifications.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Performed washing and cleaning.	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Operated conveyers used to transfer materials to required locations.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Maintained work area and equipment to meet housekeeping standards	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Performed blanching as per set specifications.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Operated peeler.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Operated destoner.	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Performed Cutting, Slicing, Dicing, Shredding, Pulping, Crushing etc.	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Performed Mixing according to product requirements	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Prepared batch according to set specifications by mixing fruits and additives.	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Performed Syruping for fruits.	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Checked quality parameters (Brix, viscosity, acidity, sensory evaluation)	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Prepared batch according to set specifications by mixing vegetables and additives.	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Performed brining for vegetables	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Checked control points to confirm performance is maintained within specification	<input type="checkbox"/>	<input type="checkbox"/>	
17.	Operated dryer for fruit products	<input type="checkbox"/>	<input type="checkbox"/>	
18.	Performed routine analysis to check the quality of the final product	<input type="checkbox"/>	<input type="checkbox"/>	
19.	Monitored equipment to confirm operating condition	<input type="checkbox"/>	<input type="checkbox"/>	

20.	Identified out-of-specification product, process and equipment performance	<input type="text"/>	<input type="text"/>	
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	National Vocational Qualification Food Technology (Level 3)
Competency Standard	Perform Fruits and Vegetables Processing
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)	Satisfactor y	Not Satisfactor y
1. What is grading of fruits?		
2. What is difference between wet and dry cleaning?		
3. What is blanching?		
4. What is acidity?		
5. What is brining?		

6. What is syruiping?		
7. What is difference between washing and cleaning?		
8. What is fruit?		
9. What is ripening?		
10. What is maturity?		
11. What is destoning?		
12. Why to do blanching?		
13. What is water activity?		
14. What is canning?		
15. What is lye peeling?		
16. What are peeling loss?		
17. Define Jam?		
18. What is brix?		
19. What is difference between brix and TDS?		
20. What is brix for jam?		
21. What is marmalade?		

22. What is vinegar?		
23. What is fermentation?		
24. Give two benefits of fermented foods?		
25. What is chlorophyll?		
26. How to confirm blanching?		

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

List of Tools and Equipment

Sr. no.	Name of tool	Quantity (25 candidates)	
1	Refractometer	5	
2	Brix meter	5	Range 0-90
3	Titration apparatus	5	
4	chiller	1	1-4 °C
5	Freezer	1	-20 °C
6	Vegetable dryer	1	
7	Humidity chamber	1	
8	Oven	2	
9	Thermometer	5	
10	Bowls	5	
11	Glass bottles	10	
12	Cutting boards	10	
13	Choppers	5	
14	Knives	5	
15	Pans	5	
16	Peelers	5	
17	Juicer	5	
18	Slicer	5	
19	Blenders	5	
20	Crusher	5	
21	Boiler	1	

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Seasonal vegetables	5
2	Seasonal fruits	5
3	Chemical preservatives	1

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Processing Of Edible Oils And Fats
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 the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Perform load and unload tankers 2. Perform Fats and oil analysis 3. Perform neutralization process 4. Perform bleaching process 5. Perform deodorizing process 6. Perform hydrogenation process 7. Perform interesterification process 8. Perform fractionation process 9. Perform processed liquid fill process
Time: 03 hrs.	During a practical assessment, under observation by an assessor, you are required

Minimum Evidence Required	<p>to</p> <ol style="list-style-type: none"> 1. Perform load and unload tankers <ul style="list-style-type: none"> ♦ Prepare the tanker loading/unloading process ♦ Ensure the tanker loading/ unloading process is set-up according to company procedures ♦ Perform tanker loading/ unloading process ♦ Monitor Control points to confirm that performance is maintained within specification ♦ Identify out-of-specification product, process and equipment performance ♦ Shut down tanker loading/unloading process ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format 2. Perform Fats and oil analysis <ul style="list-style-type: none"> ♦ Perform representative sampling for raw and processed oil for analysis ♦ Prepare all required reagents and solutions for analysis ♦ Perform all Physico-chemical analysis of oils and fats ♦ Maintain stock and record of all required chemicals and reagents 3. Perform neutralization process <ul style="list-style-type: none"> ♦ Prepare neutralization process for operation ♦ Ensure the availability of materials to meet production requirements ♦ Check equipment to confirm readiness for use ♦ Set the neutralisation process to achieve production requirements ♦ Perform neutralization process ♦ Monitor control points to confirm that performance is maintained within specification ♦ Check neutralized product meets FFA and soap target specifications ♦ Maintain stock-flow to and from neutralization process within production requirements ♦ Identify out-of-specification product, process and equipment performance ♦ Shut down the neutralization process according to company procedures ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format 4. Perform bleaching process <ul style="list-style-type: none"> ♦ Prepare bleaching process for operation ♦ Set the bleaching process to meet production specifications ♦ Perform bleaching process ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure bleached product meets color specifications ♦ Maintain stock-flow to and from bleaching within production
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	<p>requirements</p> <ul style="list-style-type: none"> ♦ Identify out-of-specification product, process and equipment performance ♦ Shut down bleaching process ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format <p>5. Perform deodorizing process</p> <ul style="list-style-type: none"> ♦ Prepare deodorizing process for operation ♦ Set the deodorising process to meet production requirements ♦ Perform deodorizing process ♦ Start the deodorising process according to company specifications ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure deodorized product meets odor and flavor specifications ♦ Check equipment to confirm operating condition ♦ Identify out-of-specification product, process and equipment performance ♦ Shut down the deodorising process according to company procedures ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format <p>6. Perform hydrogenation process</p> <ul style="list-style-type: none"> ♦ Prepare hydrogenation process for operation ♦ Set the hydrogenation process to meet production requirements ♦ Perform hydrogenation process ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure Hydrogenated product meets melting point and fat profile specifications ♦ Identify out-of-specification product, process and equipment performance ♦ Shut down hydrogenation process ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format <p>7. Perform interesterification process</p> <ul style="list-style-type: none"> ♦ Prepare interesterification process for operation ♦ Set the interesterification process to meet production requirements ♦ Perform interesterification process ♦ Ensure the interesterification process is started up according to company specifications ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure product modification meets melting point and odor specifications ♦ Check equipment to confirm operating condition ♦ Stock flow to and from interesterification process is maintained within
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	<p>production requirements</p> <ul style="list-style-type: none"> ♦ Identify and report out-of-specification product, process and equipment performance ♦ Shut down Interesterification process according to company procedures ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format <p>8. Perform fractionation process</p> <ul style="list-style-type: none"> ♦ Prepare fractionation process for operation ♦ Ensure the availability of materials to meet production requirements ♦ Confirm readiness of services for the operation ♦ Check equipment to confirm readiness for use ♦ Set the fractionation process to meet production requirements ♦ Perform fractionation process ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure fractionated product meets melting point specifications ♦ Maintain stock-flow to and from fractionation process within production requirements ♦ Identify and report out-of-specification product, process and equipment performance ♦ Shut down the fractionation process according to company procedures ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Record workplace information in the appropriate format <p>9. Perform processed liquid fill process</p> <ul style="list-style-type: none"> ♦ Prepare processed liquid fill process for operation ♦ Set processed liquid fill process is set to meet production requirements ♦ Perform a processed liquid fill process according to company specifications ♦ Monitor control points to confirm that performance is maintained within specification ♦ Ensure processed liquid fill meets specifications ♦ Identify and report out-of-specification product, process and equipment performance ♦ Shut down processed liquid fill process according to company procedures ♦ Collect, treat, dispose off or recycle waste according to company procedures ♦ Ensure complete cleaning of filling line ♦ Ensure routine maintenance of filling line ♦ Record workplace information in the appropriate format
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard	Perform Pickling Process
Assessment Task	<ol style="list-style-type: none"> 1. Perform load and unload tankers 2. Perform Fats and oil analysis 3. Perform neutralization process 4. Perform bleaching process 5. Perform deodorizing process 6. Perform hydrogenation process 7. Perform interesterification process 8. Perform fractionation process 9. Perform processed liquid fill process

I can.....

Performance Criteria	Yes	No
1. Prepare the tanker loading/unloading process		
2. Ensure the tanker loading/ unloading process is set-up according to company procedures		
3. Perform tanker loading/ unloading process		
4. Monitor Control points to confirm that performance is maintained within specification		
5. Identify out-of-specification product, process and equipment performance		
6. Shut down tanker loading/unloading process		
7. Collect, treat, dispose off or recycle waste according to company procedures		
8. Record workplace information in the appropriate format		
9. Perform representative sampling for raw and processed oil for analysis		
10. Prepare all required reagents and solutions for analysis		
11. Perform all Physico-chemical analysis of oils and fats		

12. Maintain stock and record of all required chemicals and reagents		
13. Prepare neutralization process for operation		
14. Ensure the availability of materials to meet production requirements		
15. Check equipment to confirm readiness for use		
16. Set the neutralisation process to achieve production requirements		
17. Perform neutralization process		
18. Monitor control points to confirm that performance is maintained within specification		
19. Check neutralized product meets FFA and soap target specifications		
20. Maintain stock-flow to and from neutralization process within production requirements		
21. Identify out-of-specification product, process and equipment performance		
22. Shut down the neutralization process according to company procedures		
23. Collect, treat, dispose off or recycle waste according to company procedures		
24. Record workplace information in the appropriate format		
25. Prepare bleaching process for operation		
26. Set the bleaching process to meet production specifications		
27. Perform bleaching process		
28. Monitor control points to confirm that performance is maintained within specification		
29. Ensure bleached product meets color specifications		
30. Maintain stock-flow to and from bleaching within production requirements		
31. Identify out-of-specification product, process and equipment performance		
32. Shut down bleaching process		
33. Collect, treat, dispose off or recycle waste according to company procedures		
34. Record workplace information in the appropriate format		

35. Prepare deodorizing process for operation		
36. Set the deodorising process to meet production requirements		
37. Perform deodorizing process		
38. Start the deodorising process according to company specifications		
39. Monitor control points to confirm that performance is maintained within specification		
40. Ensure deodorized product meets odor and flavor specifications		
41. Check equipment to confirm operating condition		
42. Identify out-of-specification product, process and equipment performance		
43. Shut down the deodorising process according to company procedures		
44. Collect, treat, dispose off or recycle waste according to company procedures		
45. Record workplace information in the appropriate format		
46. Prepare hydrogenation process for operation		
47. Set the hydrogenation process to meet production requirements		
48. Perform hydrogenation process		
49. Monitor control points to confirm that performance is maintained within specification		
50. Ensure Hydrogenated product meets melting point and fat profile specifications		
51. Identify out-of-specification product, process and equipment performance		
52. Shut down hydrogenation process		
53. Collect, treat, dispose off or recycle waste according to company procedures		
54. Record workplace information in the appropriate format		
55. Prepare interesterification process for operation		
56. Set the interesterification process to meet production requirements		

57. Perform interesterification process		
58. Ensure the interesterification process is started up according to company specifications		
59. Monitor control points to confirm that performance is maintained within specification		
60. Ensure product modification meets melting point and odor specifications		
61. Check equipment to confirm operating condition		
62. Stock flow to and from interesterification process is maintained within production requirements		
63. Identify and report out-of-specification product, process and equipment performance		
64. Shut down Interesterification process according to company procedures		
65. Collect, treat, dispose off or recycle waste according to company procedures		
66. Record workplace information in the appropriate format		
67. Ensure complete cleaning of filling line		
68. Ensure routine maintenance of filling line		
69. Record workplace information in the appropriate format		

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard	Perform Pickling Process
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	<ol style="list-style-type: none"> 1. Perform load and unload tankers 2. Perform Fats and oil analysis 3. Perform neutralization process 4. Perform bleaching process 5. Perform deodorizing process 6. Perform hydrogenation process 7. Perform interesterification process 8. Perform fractionation process 9. Perform processed liquid fill process 		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Prepared the tanker loading/unloading process			
2. Ensured the tanker loading/ unloading process is set-up according to company procedures			
3. Performed tanker loading/ unloading process			
4. Monitored Control points to confirm that performance is maintained within specification			
5. Identified out-of-specification product, process and equipment performance			
6. Shut down tanker loading/unloading process			
7. Collected, treat, dispose off or recycle waste according to company procedures			
8. Recorded workplace information in the appropriate format			
9. Performed representative sampling for raw and processed oil for analysis			
10. Prepared all required reagents and solutions for analysis			
11. Performed all Physico-chemical analysis of oils and fats			
12. Maintained stock and record of all required chemicals and reagents			
13. Prepared neutralization process for operation			
14. Ensured the availability of materials to meet production requirements			
15. Checked equipment to confirm readiness for use			

16. Set the neutralisation process to achieve production requirements			
17. Performed neutralization process			
18. Monitored control points to confirm that performance is maintained within specification			
19. Checked neutralized product meets FFA and soap target specifications			
20. Maintained stock-flow to and from neutralization process within production requirements			
21. Identified out-of-specification product, process and equipment performance			
22. Shut down the neutralization process according to company procedures			
23. Collected, treat, dispose off or recycle waste according to company procedures			
24. Recorded workplace information in the appropriate format			
25. Prepared bleaching process for operation			
26. Set the bleaching process to meet production specifications			
27. Performed bleaching process			
28. Monitored control points to confirm that performance is maintained within specification			
29. Ensured bleached product meets color specifications			
30. Maintained stock-flow to and from bleaching within production requirements			
31. Identified out-of-specification product, process and equipment performance			
32. Shut down bleaching process			
33. Collected, treat, dispose off or recycle waste according to company procedures			
34. Recorded workplace information in the appropriate format			
35. Prepared deodorizing process for operation			
36. Set the deodorising process to meet production requirements			
37. Performed deodorizing process			

38. Started the deodorising process according to company specifications			
39. Monitored control points to confirm that performance is maintained within specification			
40. Ensured deodorized product meets odor and flavor specifications			
41. Checked equipment to confirm operating condition			
42. Identified out-of-specification product, process and equipment performance			
43. Shut down the deodorising process according to company procedures			
44. Collected, treat, dispose off or recycle waste according to company procedures			
45. Recorded workplace information in the appropriate format			
46. Prepared hydrogenation process for operation			
47. Set the hydrogenation process to meet production requirements			
48. Performed hydrogenation process			
49. Monitored control points to confirm that performance is maintained within specification			
50. Ensured Hydrogenated product meets melting point and fat profile specifications			
51. Identified out-of-specification product, process and equipment performance			
52. Shut down hydrogenation process			
53. Collected, treat, dispose off or recycle waste according to company procedures			
54. Recorded workplace information in the appropriate format			
55. Prepared interesterification process for operation			
56. Set the interesterification process to meet production requirements			
57. Performed interesterification process			
58. Ensured the interesterification process is started up according to company specifications			
59. Monitored control points to confirm that performance is maintained within			

specification			
60. Ensured product modification meets melting point and odor specifications			
61. Checked equipment to confirm operating condition			
62. Stocked flow to and from interesterification process is maintained within production requirements			
63. Identified and report out-of-specification product, process and equipment performance			
64. Shut down Interesterification process according to company procedures			
65. Collected, treat, dispose off or recycle waste according to company procedures			
66. Recorded workplace information in the appropriate format			
67. Ensured complete cleaning of filling line			
68. Ensured routine maintenance of filling line			
69. Recorded workplace information in the appropriate format			
Competent	Not Yet Competent		

Knowledge Assessment

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Processing Of Edible Oils And Fats
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> 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 the tanker loading/unloading process?		
2.	What is the loading and unloading procedure?		
3.	Name the quality parameters to be achieved during the loading/unloading process?		
4.	What is the compatibility of different oils for loading/unloading?		
5.	What is the temperature requirement for the transfer of different oils?		
6.	Enlist the common problems in the tanker loading/unloading process?		
7.	Which services are used in the tanker loading/unloading process?		
8.	What is the basic principle of the deodorizing process?		

9.	What are the Parameters to determine rancidity in oils and fats?		
10.	What are the steps involved in hydrogenation?		
11.	Define fractionation process?		
12.	What is the basic principle of the interesterification process?		
13.	What is the effect of the interesterification process on the end product?		

List of Tools and Equipment

Sr. No.	Name of tool	Quantity (25 candidates)
1	Lovibond tintometer	5
2	Pycnometer	5
3	Analysis lab for all fats and oil analysis	1
4	Measuring Scale	5
5	Thermometer	5
6	Chemicals & reagents	5
7	Titration equipment	5
8	Analyzer	5

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Ghee	2
2	Oil	2

Feedback to the Candidate

<p>Candidate's Signature_____ Assessor's Signature</p> <p>_____</p>

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Milling of Grains
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 the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Perform milling of wheat 2. Perform milling of rice 3. Perform milling of corn
Time: 03 hrs.	<p>During a practical assessment, under observation by an assessor, you are required to</p> <ol style="list-style-type: none"> 1. Perform milling of wheat <ul style="list-style-type: none"> ♦ Perform cleaning ♦ Ensure tempering and conditioning of wheat grains ♦ Ensure grinding of wheat grains as per specifications and requirements ♦ Monitor sifting of milled wheat products ♦ Ensure packaging and storage of wheat products 2. Perform milling of rice <ul style="list-style-type: none"> ♦ Perform cleaning of paddy ♦ Monitor par boiling of paddy ♦ Operate husker ♦ Operate whitener ♦ Operate polisher ♦ Perform sorting to remove broken rice kernels ♦ Ensure packaging and storage of rice products 3. Perform milling of corn <ul style="list-style-type: none"> ♦ Perform cleaning ♦ Ensure tempering and conditioning of corn grains ♦ Ensure grinding of corn grains as per specifications and requirements ♦ Monitor sifting of milled corn products ♦ Monitor separation of starch from corn ♦ Monitor separation of gluten from corn ♦ Perform oil processing from corn ♦ Ensure packaging and storage of wheat products

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standards	Perform Milling of Grains
Assessment Task	1. Perform milling of wheat 2. Perform milling of rice 3. Perform milling of corn

I can.....

Performance Criteria	Yes	No
1. Perform cleaning		
2. Ensure tempering and conditioning of wheat grains		
3. Ensure grinding of wheat grains as per specifications and requirements		
4. Monitor sifting of milled wheat products		
5. Ensure packaging and storage of wheat products		
6. Perform cleaning of paddy		
7. Monitor par boiling of paddy		
8. Operate husker		
9. Operate whitener		
10. Operate polisher		
11. Perform sorting to remove broken rice kernels		
12. Ensure packaging and storage of rice products		
13. Perform cleaning		
14. Ensure tempering and conditioning of corn grains		
15. Ensure grinding of corn grains as per specifications and requirements		
16. Monitor sifting of milled corn products		
17. Monitor separation of starch from corn		
18. Monitor separation of gluten from corn		
19. Perform oil processing from corn		
20. Ensure packaging and storage of wheat products		

Candidate's Signature_____

Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Milling of Grains
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-between; align-items: center;"> COMPETENT <input type="checkbox"/> NOT <input type="checkbox"/> ET </div> <div style="display: flex; justify-content: space-between; align-items: center;"> COMPETENT </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. Perform milling of wheat 2. Perform milling of rice 3. Perform milling of corn		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Performed cleaning			
2. Ensured tempering and conditioning of wheat grains			
3. Ensured grinding of wheat grains as per specifications and requirements			
4. Monitored sifting of milled wheat products			
5. Ensured packaging and storage of wheat products			
6. Performed cleaning of paddy			
7. Monitored par boiling of paddy			
8. Operated husker			
9. Operated whitener			
10. Operated polisher			
11. Performed sorting to remove broken rice kernels			
12. Ensured packaging and storage of rice products			
13. Performed cleaning			
14. Ensured tempering and conditioning of corn grains			
15. Ensured grinding of corn grains as per specifications and requirements			
16. Monitored sifting of milled corn products			
17. Monitored separation of starch from corn			
18. Monitored separation of gluten from corn			
19. Performed oil processing from corn			
20. Ensured packaging and storage of wheat products			
Competent	Not Yet Competent		

Knowledge Assessment

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Milling of Grains
Candidate Details	Name: _____
	Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-between; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET <input type="checkbox"/> COMPETENT </div> <div style="margin-top: 10px;"> Name of the Assessor: _____ Assessor's code: _____ </div> <div style="margin-top: 10px;"> Signature of the Assessor: _____ </div>

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 Milling of wheat		
2.	what is Milling of rice		
3.	Define Milling of corn		
4.	Enlist Nutritional benefits of bran		
5.	Can we do oil extraction from corn?		
6	Define husking of rice		
7	What is tempering?		
8	What is conditioning?		

9	What is the difference between whole wheat and fine flour?		
10	What is sifter?		

List of Tools and Equipment

Sr. No.	Name of tool	Quantity (25 candidates)
1	Milling Machine	1
2	Sifter	1
3	Rice Sorter	1
4	Measuring Scale	5
5	Packaging Machine	2
6	De-Husker	1
7	Whitener	1
8	Polisher	1

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Wheat	5
2	Rice	5
3	Corn	2

Feedback to the Candidate

Candidate's Signature _____	Assessor's Signature _____

Instruction Sheet for the Candidate

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Butter Making Process
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 the given time frame (for practical demonstration & assessment):</p> <ol style="list-style-type: none"> 1. Receive milk for process 2. Prepare cream 3. Inoculate culture 4. Perform butter churning 5. Add butter additives 6. Perform testing of prepared butter 7. Perform butter pressing/moulding 8. Perform Packaging and labeling 9. Ensure optimum storage conditions
Time: 03 hrs.	<p>During a practical assessment, under observation by an assessor, you are required to</p> <ol style="list-style-type: none"> 1. Receive milk for process <ul style="list-style-type: none"> ♦ Conduct sensory evaluation ♦ Analyze quality of milk 2. Prepare cream <ul style="list-style-type: none"> ♦ Separate fat from milk ♦ Maintain temperature of separated cream ♦ Pasteurize cream 3. Inoculate culture <ul style="list-style-type: none"> ♦ Monitor culture temperature

<p>Minimum Evidence Required</p>	<ul style="list-style-type: none"> ♦ Apply appropriate dosage according to batch size ♦ Maintain batch temperature ♦ Check pH of cream <p>4. Perform butter churning</p> <ul style="list-style-type: none"> ♦ Operate butter churner ♦ Maintain specification by monitoring control points ♦ Ensure butter product meets specifications ♦ Collect whey and pumped to a designated storage location for further processing <p>5. Add butter additives</p> <ul style="list-style-type: none"> ♦ Apply salt, colors and flavors according to set specification ♦ Mix additives properly <p>6. Perform testing of prepared butter</p> <ul style="list-style-type: none"> ♦ Determine moisture percentage ♦ Determine fat percentage ♦ Determine salt contents <p>7. Perform butter pressing/moulding</p> <ul style="list-style-type: none"> ♦ Operate pressing machine ♦ Prepare moulds/blocks of butter <p>8. Perform Packaging and labeling</p> <ul style="list-style-type: none"> ♦ Operate packaging machine ♦ Ensure labeling <p>9. Ensure optimum storage conditions</p> <ul style="list-style-type: none"> ♦ Monitor storage temperature ♦ Control cross contamination
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standards	Perform Butter Making Process
Assessment Task	<ol style="list-style-type: none"> 1. Receive milk for process 2. Prepare cream 3. Inoculate culture 4. Perform butter churning 5. Add butter additives 6. Perform testing of prepared butter 7. Perform butter pressing/moulding 8. Perform Packaging and labeling 9. Ensure optimum storage conditions

I can.....

Performance Criteria	Yes	No
1. Conduct sensory evaluation		
2. Analyze quality of milk		
3. Separate fat from milk		
4. Maintain temperature of separated cream		
5. Pasteurize cream		
6. Monitor culture temperature		
7. Apply appropriate dosage according to batch size		
8. Maintain batch temperature		
9. Check pH of cream		
10. Operate butter churner		
11. Maintain specification by monitoring control points		
12. Ensure butter product meets specifications		
13. Collect whey and pumped to a designated storage location for further processing		
14. Apply salt, colors and flavors according to set specification		
15. Mix additives properly		

16. Determine moisture percentage		
17. Determine fat percentage		
18. Determine salt contents		
19. Operate pressing machine		
20. Prepare moulds/blocks of butter		
21. Operate packaging machine		
22. Ensure labeling		
23. Monitor storage temperature		
24. Control cross contamination		

Candidate's Signature_____

Signature_____

Date: _____

Assessor's

Assessors Judgment Guide

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Butter Making Process
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	<ol style="list-style-type: none"> 1. Receive milk for process 2. Prepare cream 3. Inoculate culture 4. Perform butter churning 5. Add butter additives 6. Perform testing of prepared butter 7. Perform butter pressing/moulding 8. Perform Packaging and labeling 9. Ensure optimum storage conditions 		
During the practical assessment, candidate demonstrated the following:	Yes	No	Remarks
1. Conducted sensory evaluation			
2. Analyzed quality of milk			
3. Separated fat from milk			
4. Maintained temperature of separated cream			
5. Pasteurized cream			
6. Monitored culture temperature			
7. Applied appropriate dosage according to batch size			
8. Maintained batch temperature			
9. Checked pH of cream			
10. Operated butter churner			
11. Maintained specification by monitoring control points			
12. Ensured butter product meets specifications			
13. Collected whey and pumped to a designated storage location for further processing			
14. Applied salt, colors and flavors according to set specification			
15. Mixed additives properly			
16. Determined moisture percentage			
17. Determined fat percentage			
18. Determined salt contents			

19. Operated pressing machine			
20. Prepared moulds/blocks of butter			
21. Operated packaging machine			
22. Ensured labeling			
23. Monitored storage temperature			
24. Controlled cross contamination			
Competent		Not Yet Competent	

Knowledge Assessment

Qualification	National Vocational Qualification Level-3 in Food Technology
Competency Standard(s)	Perform Butter Making Process
Candidate Details	Name: _____ _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> 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 the butter making process?		
2.	What is relationship between the butter making process and other dairy processes?		
3.	What are the stages which occur during butter making?		
4.	What are the principles of product preservation?		
5.	What are the types of additives/ingredients?		
6.	Which are the microbiological considerations in butter making?		
7.	What is the effect of butter making process on the end product?		
8.	Enlist quality characteristics to be achieved in butter?		

9.	Enlist process specifications?		
10.	What is the principle of product preservation?		
11.	Which services are used in butter making process?		
12.	Define Additives?		

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

List of Tools and Equipment

Sr. No.	Name of tool	Quantity (25 candidates)
1	Churning machine	1
2	Butter cream separator	1
3	Butyrometer	2
4	Measuring Scale	5
5	Gerber machine	2
6	Pasteurizer	1
7	Strainer	1
8	Pressing machine	1

List of Consumables

Sr. no.	Name of tool	Quantity (Kg) (25 candidates)
1	Milk	15