



QUALIFICATION FILE

Multi Skill Technician (Food Processing)

Short Term Training (STT) Long Term Training (LTT) Apprenticeship

Upskilling Dual/Flexi Qualification For ToT For ToA

General Multi-skill (MS) Cross Sectoral (CS) Future Skills OEM

NCrF/NSQF Level: 4.0

Submitted By:

Food Industry Capacity and Skill Initiative (FICSI)

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Section 1: Basic Details

1.	Qualification Name	Multi Skill Technician (Food Processing)																						
2.	Sector/s	Food Processing																						
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: 2021/FI/FICSI/04511 and Version 2.0	Qualification Name of existing/previous version: Multi Skill Technician (Food Processing)																					
4.	a. OEM Name b. Qualification Name (Wherever applicable)																							
5.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-04-FI-03237-2024-V3-FICSI	6. NCrF/NSQF Level: 4.0																					
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																						
8.	Brief Description of the Qualification	A Multi Skill Technician (Food Processing) is responsible for performing various activities related to food processing, such as sorting, grading, cleaning, processing and canning of various types of fruits and vegetables to produce pickle, jam, jelly, squash, ketchup and juices. The person may also produce spice products and baked products like breads, puffs, cookies, cakes/ pastries, desserts, etc. The responsibilities also include relevant maintenance activities, e.g. the maintenance of tools and equipment.																						
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S. No.</th> <th style="width: 60%;">Academic/Skill Qualification (with Specialization - if applicable)</th> <th style="width: 30%;">Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>12th Grade Pass</td> <td></td> </tr> <tr> <td>2.</td> <td>Completed 2nd year of 3-year diploma after 10th</td> <td></td> </tr> <tr> <td>3.</td> <td>10th or Equivalent</td> <td>3-years' experience in food processing</td> </tr> <tr> <td>4.</td> <td>8th Grade Pass</td> <td>6-years' experience in food processing</td> </tr> <tr> <td>5.</td> <td>Previous relevant Qualification of NSQF Level 3.0</td> <td>3-year experience in food processing</td> </tr> <tr> <td>6.</td> <td>Previous relevant Qualification of NSQF Level 3.5</td> <td>1.5-year of experience in food processing</td> </tr> </tbody> </table> b. Age: 16 Years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	12th Grade Pass		2.	Completed 2nd year of 3-year diploma after 10th		3.	10th or Equivalent	3-years' experience in food processing	4.	8th Grade Pass	6-years' experience in food processing	5.	Previous relevant Qualification of NSQF Level 3.0	3-year experience in food processing	6.	Previous relevant Qualification of NSQF Level 3.5	1.5-year of experience in food processing
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6.	Previous relevant Qualification of NSQF Level 3.5	1.5-year of experience in food processing																						

10. Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	29	11. Common Cost Norm Category (I/II/III) (wherever applicable): I																		
12. Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																			
13. Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1" data-bbox="894 402 1923 565"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>300</td> <td>480</td> <td>90</td> <td></td> <td>870</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>(Refer Blended Learning Annexure for details)</p>		Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	300	480	90		870	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)															
Classroom (offline)	300	480	90		870															
Online																				
14. Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/8160.2300,2400,3200,7514.1000, 0700, 7512.0100																			
15. Progression path after attaining the qualification (Please show Professional and Academic progression)	 <pre> graph LR A[Multi Skill Technician (Food Processing) (L4.0)] --> B[Supervisor-Food Processing Industries (L5.0)] </pre>																			
16. Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																			
17. Is similar Qualification(s) available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:																			
18. Is the Job Role Amenable to Persons with Disability	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "Yes", specify applicable type of Disability: <i>Hearing Impairments, Speech and Language disability</i>																			
19. How Participation of Women will be Encouraged	<p>The food processing sector has witnessed significant participation of women at the household level. FICSI aims to further enhance this by providing targeted training programs for women entrepreneurs in various food processing activities, such as pickle, jam, jelly, squash preparation, and bread and bakery products. By equipping women with the necessary skills and knowledge, FICSI encourages them to start their own ventures and contributes to their economic empowerment.</p> <p>To support these initiatives, FICSI will offer handholding support for setting up businesses, ensuring that women have the guidance and resources they need to succeed. Additionally, FICSI proposes to upskill self-help groups through specialized training and capacity-building programs. These efforts aim to provide</p>																			

		<p>enhanced livelihood opportunities and foster entrepreneurial qualities among the beneficiaries, thereby increasing women's participation in the food processing sector.</p> <p>Furthermore, FICSI plans to undertake projects aimed at upskilling street food vendors, providing them with better livelihood opportunities and inculcating entrepreneurial qualities. FICSI is committed to creating an inclusive environment that supports and encourages the participation of women in various job roles within the food processing industry.</p>
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Covered in FIC/N9906 and DGT/VSQ/N0101)
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Mr. Sunil K Marwah Email: admin@ficsi.in Contact No.: 9711260230 Website: https://www.ficsi.in/
23.	Final Approval Date by NSQC: 22-10-2024	24. Validity Duration: 3 years 25. Next Review Date: 21-10-2027

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Training Man.-Mandatory Rec.-Recommended Proj.-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Prepare for production	FIC/N9026, v1.0	Non-Core	3.0	2	20	40	-	-	60	30	50	-	20	100	10
2.	Produce Squash and Juice	FIC/N0103, v3.0	Core	3.0	5	60	60	30	-	150	30	50	-	20	100	10
3.	Produce a variety of pickles	FIC/N0209, v1.0	Core	3.0	3	30	60	-	-	90	30	50	-	20	100	10
4.	Carry out production of jam, jelly and ketchup	FIC/N0210, v1.0	Core	3.0	3	30	60	-	-	90	30	50	-	20	100	10
5.	Dry/ Dehydrate fruits and vegetables	FIC/N0118, v2.0	Core	4.0	3	20	40	30	-	90	30	50	-	20	100	10
6.	Produce fruit pulp from various fruits	FIC/N0122, v3.0	Core	4.0	2	20	40	-	-	60	30	50	-	20	100	10
7.	Sort, grade, pack and store the produce	FIC/N0129, v3.0	Core	3.0	5	30	90	30	-	150	30	50	-	20	100	10
8.	Carry out biscuit production in industrial units	FIC/N5022, v1.0	Core	4.0	2	20	40	-	-	60	30	50	-	20	100	10
9.	Carry out production of spices, curry powder and seasonings	FIC/N8517, v1.0	Core	3.0	2	30	30	-	-	60	30	50	-	20	100	10
10.	Apply food safety guidelines in Food Processing	FIC/N9906, v1.0	Non-Core	3.0	1	10	20	-	-	30	30	60	-	10	100	5

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
11.	Employability Skills (30 Hours)	DGT/VSQ/N0101, v1.0	Non-Core	2.0	1	30	-	-	-	30	20	30	-	-	50	5
Duration (in Hours) / Total Marks					29	300	480	90		870	320	540		190	1050	100

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: 70 % (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma / Hotel Management/ Certificate course in Fruits and Vegetables Processing with 5 years of experience in fruit and vegetable industry/bakery industry OR Diploma in Food Technology or Food Engineering with 4 years of experience in fruit and vegetable industry/ bakery industry with 2 years of experience of training of Multi Skill Technician OR B.Sc. in Food Science and Quality Control with 4 years of experience in fruit and vegetable industry/bakery industry OR B.Sc. or Graduate/ B.Tech/B.E. in Food Technology or Food Engineering with 3 years of experience in fruit and vegetable industry/bakery industry OR M.Sc./M.Tech./M.E. in Food Technology or Food Engineering with 2 years of experience in fruit and vegetable industry/bakery industry
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma / Hotel Management/ Certificate course in Fruits and Vegetables Processing with 7 years of experience in fruit and vegetable industry/bakery industry OR Diploma in Food Technology or Food Engineering with 6 years of experience in fruit and vegetable industry/ bakery industry with 2 years of experience of training of Multi Skill Technician

		OR B.Sc. in Food Science and Quality Control with 6 years of experience in fruit and vegetable industry/bakery industry OR B.Sc. or Graduate/ B.Tech/B.E. in Food Technology or Food Engineering with 5 years of experience in fruit and vegetable industry/bakery industry OR M.Sc./M.Tech./M.E. in Food Technology or Food Engineering with 4 years of experience in fruit and vegetable industry/bakery industry
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Sc./Diploma in Hotel management/Food Technology/Home Science/Agriculture/Post Harvest Processing with 5 years of experience in food processing/agricultural industry and 3 years of experience in assessment of Multi Skill Technician OR B.Tech/B.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 3 years of experience in food processing/agricultural industry and 2 years of experience in assessment of Multi Skill Technician OR M.Sc./M.Tech/M.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 2 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician OR MBA in Agri Business Management/FTM with 2 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	B.Sc./Diploma in Hotel management/ Food Technology/ Home Science with 3 years of Industry Experience in B.Sc./Diploma in Hotel management/Food Technology/Home Science/Agriculture/Post Harvest Processing with 5 years of experience in food processing/agricultural industry and 3 years of experience in assessment of Multi Skill Technician OR B.Tech/B.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 3 years of experience in food processing/agricultural industry and 2 years of experience in assessment of Multi Skill Technician OR M.Sc./M.Tech/M.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 2 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician OR

		MBA in Agri Business Management/FTM with 2 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	B.Sc./Diploma in Hotel management/Food Technology/Home Science/Agriculture/Post Harvest Processing with 7 years of experience in food processing/agricultural industry and 3 years of experience in assessment of Multi Skill Technician OR B.Tech/B.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 5 years of experience in food processing/agricultural industry and 2 years of experience in assessment of Multi Skill Technician OR M.Sc/M.Tech/M.E. in Food Technology/ Food Engineering/ Agriculture Engineering with 4 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician OR MBA in Agri Business Management/FTM with 4 years of experience in food processing/agricultural industry and 1 year of experience in assessment of Multi Skill Technician
4.	Assessment Mode <i>(Specify the assessment mode)</i>	Blended (only theory)
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(details to be provided in Annexure-if it is different for Assessment)</i>

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): No
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): No
3.	Government /Industry initiatives/ requirement (Yes/No): No
4.	Number of Industry validation provided: 21
5.	Estimated nos. of persons to be trained and employed: 2000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: <i>This is an old QP. We have Ministry concurrence</i> If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrF/NSQF level justification based on NCrF level/NSQF descriptors <i>(Mandatory)</i>	<i>Attached</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Attached</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Attached</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Attached</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	<i>NA</i>
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<i>NA</i>
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	<i>Attached</i>
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Attached</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	<i>Attached</i>
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Attached</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	<i>Attached</i>
12.	Any other document you wish to submit:	<i>No</i>

Annexure 1: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	<p>Prepare for Production</p> <ul style="list-style-type: none"> Plan for production, allocate resources, and schedule tasks. Clean and maintain work areas, machinery, and tools. Organize production area with necessary equipment and materials. <p>Produce Squash and Juice</p> <ul style="list-style-type: none"> Receive, wash, sort, and slice fruits. Extract and pasteurize fruit juice, clarify if needed. Prepare squash, fill, pack, and store juice and squash. Perform post-production cleaning and activities. <p>Carry out Production of Various Types of Pickles</p> <ul style="list-style-type: none"> Wash, sort, peel, and slice vegetables. Prepare brine solutions, cure vegetables. 	Multi-Skill Technician (Food Processing) during the job work should be able to identify materials, tools and equipment and basic application. He should also understand the context of work and quality.	4.0

	<ul style="list-style-type: none"> • Produce pickles. • Package products and complete post-production tasks. <p>Produce Jam, Jelly, and Ketchup</p> <ul style="list-style-type: none"> • Receive, wash, sort, and prepare fruits and vegetables. • Pulp fruits, prepare jams, jellies, and ketchup. • Fill, pack, and label products. • Clean equipment post-production. <p>Dry/Dehydrate Fruits and Vegetables</p> <ul style="list-style-type: none"> • Wash, sort, peel, slice, blanch fruits and vegetables. • Treat with sulphur, dry by sun, hot air, or freeze-drying. • Inspect, pack, and store dried/dehydrated products. • Conduct post-production cleaning and maintenance. <p>Produce Fruit Pulp from Various Fruits</p> <ul style="list-style-type: none"> • Ripen, wash, sort, and prepare fruits. • Pulp, pre-cook, sterilize, and pack fruit pulp. • Can fruit pulp and maintain post-production standards. <p>Sort, Grade, Pack, and Store the Produce</p> <ul style="list-style-type: none"> • Wash, dry, sort, grade, and pack produce. • Store produce correctly. • Clean equipment post-production. <p>Carry out biscuit production in industrial units</p> <ul style="list-style-type: none"> • Select and prepare ingredients for production • Prepare the dough • Produce and pack biscuits • Carry out the post-production activities <p>Produce Spices, Curry Powder and Seasoning</p> <ul style="list-style-type: none"> • Produce whole spices, spice powders, and seasonings. • Wrap, label, and ensure product quality. • Clean equipment post-production. <p>Apply Food Safety Guidelines in Food Processing</p> <ul style="list-style-type: none"> • Maintain personal hygiene and follow GMP. • Implement food safety and PRP programs. 		
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Professional and Technical Skills/ Expertise/ Professional Knowledge	<ul style="list-style-type: none"> Understand the principles of food safety and hygiene to prevent contamination during production and processing. Know the various methods of preserving food, including pickling, canning, and drying, to extend shelf life. Knowledge of different fruit and vegetable varieties and their suitability for squash, juice, and other products. Understand the significance of pH levels and acidity in jam, jelly, and ketchup production to ensure safety and quality. Know how to accurately measure and mix ingredients to achieve consistent product quality in baking and other food processing tasks. Knowledge of equipment used in food processing, including mixers, grinders, and dehydrators, to operate them effectively and safely. Understand the process of fermentation and its role in producing pickles and other fermented products. Know how to conduct quality checks and sensory evaluations to ensure the final product meets established standards. Knowledge of packaging materials and techniques that preserve freshness and quality while complying with regulatory standards. Understand the importance of proper storage conditions (temperature and humidity) for different types of food products. Know how to troubleshoot common issues in food processing equipment and perform basic maintenance. Knowledge of sensory characteristics of food products, including flavor, texture, and aroma, to enhance product development. Understand the regulations and guidelines set by food safety authorities, including FSSAI, to ensure compliance in production. Know how to document production processes accurately for traceability and quality control. Knowledge of waste management practices in food processing to minimize environmental impact and promote sustainability. 	<p>The Multi-Skill Technician (Food Processing) should be able to identify materials, tools and equipment and basic application. He should also understand the context of work and quality.</p> <p>The Multi-Skill Technician (Food Processing) is required to know basic facts; process and principle applied in trade of employment and hence fall under level 4.</p>	4.0
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<p>The participant should be able to:</p> <ul style="list-style-type: none"> Identify opportunities for process improvement and innovation in food production techniques. Select appropriate tools and equipment for efficient food processing operations. Check and ensure compliance with food safety and hygiene standards at all stages of production. Use problem-solving skills to troubleshoot equipment malfunctions and process inefficiencies. Adapt to new technologies and methodologies in food processing and 	<p>The Multi-Skill Technician (Food Processing) identifies opportunities for process improvement and innovation in food production techniques, selects appropriate tools and equipment for efficient operations, and ensures compliance with food safety and hygiene standards at all stages of production.</p> <p>The Multi-Skill Technician (Food Processing) may be required to</p>	4.0

	<p>production.</p> <ul style="list-style-type: none"> • Demonstrate effective time management and organizational skills in a fast-paced production environment. • Implement quality control measures to maintain consistent product standards. • Collaborate effectively with team members and communicate clearly in a multicultural workplace. • Foster a proactive approach to learning and acquiring new skills related to food processing techniques. • Practice flexibility and adaptability to handle varying production demands and schedules. • Cultivate a strong work ethic and commitment to safety protocols in all aspects of work. • Manage inventory and raw material supplies efficiently to minimize waste and downtime. • Develop leadership qualities to oversee and train junior technicians in production tasks. • Promote sustainability practices in food processing operations, such as waste reduction and energy conservation. • Engage in continuous professional development to stay updated on industry trends and regulations. 	demonstrate practical skills, but he works under supervision. Hence this job role is considered under level 4.	
Broad Learning Outcomes/Core Skill	<p>Language to communicate written or oral, with required clarity, skill to basic arithmetic and algebraic principles, basic understanding of social political and natural environment.</p> <p>The job holder is expected to communicate with clarity, have basic arithmetic skills and a basic understanding of political and natural environment. For instance, s/he should be able to note the information communicated by the supervisor, note the readings of process parameters, write information documents to internal departments/internal teams, read and interpret the process flow chart for products produced, effectively communicate with team members and communicate clearly with cross department teams on the issues faced during process.</p>	The Multi-Skill Technician (Food Processing) receives oral / written instruction from the supervisor. He is responsible for maintaining cleanliness at his workplace and follows hygiene requirements as mentioned in the organization policy. Refer to evidence provided in adjacent column. Hence it falls under Level 4.	4.0
Responsibility	<p>Responsibility for own work and learning.</p> <ul style="list-style-type: none"> • Plan and schedule production tasks, allocate resources, and maintain work areas, machinery, and tools. • Handle various tasks including washing, sorting, slicing fruits and vegetables. 	A Multi Skill Technician (Food Processing) is responsible for performing various activities related to food processing, such as sorting, grading, processing and canning of various types of fruits and vegetables to produce pickle, jam, jelly, squash, ketchup	4.0

	<ul style="list-style-type: none"> • Extract, pasteurize, clarify fruit juice; prepare and pack squash. • Prepare different types of pickles; package products. • Prepare jams, jellies, and ketchup; pulp fruits, fill, pack, and label products. • Dry and dehydrate fruits and vegetables using appropriate methods; inspect, pack, and store products. • Produce fruit pulp from various fruits, ripen, wash, sort, and prepare fruits for pulping. • Pulp, pre-cook, sterilize, and pack fruit pulp while maintaining production standards. • Sort, grade, pack, and store produce, ensuring proper storage and cleanliness. • Prepare, Produce and Pack the biscuits • Carry out the post-production activities Produce spice and seasoning products, process whole spices, spice, curry powders, and seasonings. • Wrap, label, and ensure product quality while maintaining cleanliness of equipment. • Apply food safety guidelines, maintain personal hygiene, follow Good Manufacturing Practices (GMP), and implement food safety programs. 	and juices. The person may also produce spice products and baked products like breads, puffs, cookies, cakes/ pastries, desserts, specialty baked products etc.	
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Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	Sorting Table	Nos	3
2.	Conveyor Belt	Nos	1
3.	Fruits and Vegetables Grading Machine	Nos	1
4.	Bucket	Nos	3
5.	Can Sealing Machine	Nos	1
6.	Fruit Tray	Nos	6
7.	Cutting Knives	Nos	6
8.	Electric Mixer	Nos	1
9.	Pressure Cooker	Nos	1
10.	Coring Knives	Nos	6
11.	Slicer	Nos	6

12.	Peeler	Nos	6
13.	Pitting Knives	Nos	6
14.	Juice Extractor	Nos	1
15.	Pulper	Nos	1
16.	Oven (drying)	Nos	1
17.	Solar dryer (cabinet type) complete with solar box. Size app 6'*3'	Nos	1
18.	Lab Scale Ovens	Nos	1
19.	Baking Sheet & Racks	Nos	1
20.	Commercial Mixers	Nos	1
21.	Wire Whiskers	Nos	3
22.	Baking Pan	Nos	3
23.	Cooling Racks	Nos	3
24.	Bread Slicer Manual/ Mechanical	Nos	1
25.	Cake Decorative Tools	Sets	3
26.	Mixing Bowl	Nos	3
27.	Aprons	Nos	30
28.	Heat Resistant Gloves, Protective Gloves	Pair	30
29.	Pulveriser/Grinder	Nos	1
30.	Polisher	Nos	1
31.	Sifter	Nos	1
32.	Sieves	Nos	1
33.	Blender	Nos	1
34.	Mortar and Pestle	Nos	1
35.	De stoner	Nos	1
36.	Conveyor	Nos	1
37.	Roaster	Nos	1
38.	Dryer	Nos	1
39.	Weighing balance (Digital)	Nos	1
40.	Brix meter/refractometer	Nos	3
41.	Deep fridge	Nos	1
42.	Refrigerator	Nos	1
43.	Gas burner with cylinder	Nos	1
44.	Lab Coat	Nos	30
45.	Hairnet and Gloves	Nos	30
46.	pH Meter (Digital)	Nos	1
47.	Thermometer (Digital)	Nos	2
48.	Beakers	Nos	3
49.	Fire Extinguishers	Nos	2
50.	Measuring Cup & Spoon	Sets	3

51.	Hygrometer	Nos	1
52.	Packaging Material	Nos	1
53.	Timer	Nos	2

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

Annexure 3: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No.	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	AARSSS Global Food Tech	Mr. Sumit Dutta	Technical Advisor & Lecturer in Food Processing Technology	ICHHEPURAN, GRD FLOOR, 32/3, UMESH MUKHERJEE ROAD KOLKATA – 700056	9007138878	aarsssgyft@gmail.com	https://www.linkedin.com/in/sumit-dutta-8225a515/
2	Ambriona Cacao Blends Pvt. Ltd.	Mr. Shubham Joshi	General Manager	302 The Summit Business Bay, H-2, Western Express Hwy, Nav Prabhat Society, Navpada, Vile Parle East, Vile Parle, Mumbai, Maharashtra 400057	7999833329	ambrionablends@gmail.com	
3	Amity Institute of Food Technology	Dr. Alok Saxena	Associate Professor	Amity Institute of Food Technology, I-1 Block, IV Floor, Amity University, Uttar Pradesh Sec-125, Noida – 201303, U.P.	9899690717	asaxena3@amity.edu	https://www.linkedin.com/in/aloksaxena156/

4	Banskantha District Cooperative Milk Producer's Union	Ms. Vanshikha Arora	Milk Procurement Supervisor	Banas Dairy, Post box no. 20, Palanpur: 358001	8960011905	vaniorora080599@gmail.com	
5	Somics Life Sciences Pvt Ltd	Mr. Gaurav Sharma	Research Associate	Bareilly, Uttar Pradesh – 243001	8126146448	gaurav.upbly1693@gmail.com	
6	Dhenki Foods Pvt. Ltd. (A Greenthink Ventures Pvt. Ltd. company)	Mr. Md. Arifuzzaman	Assistant Manager – Product Development	4th Floor, Monibhandar Building, WEBEL Bhaban Sector V, Salt Lake, Kolkata – 700091	7003490034	md.arifuzzaman@ingreens.in	https://www.linkedin.com/in/arifuzzaman-food-tech/
7	Shree Sharnam Spices	Mr. Aayush Chandaliya	Chairperson and Partner	Lalakheda Chouraha, Ujjain Bypass, Jaora (MP)	7000697722	shreesharnamspices@gmail.com	
8	FREAKEAT FOODS OPC PVT LTD	Mr. Rishabh Mahajan	Director	Plot no.2230,Phase ii,Sector 38, HSIIDC Rai, Industrial area, Sonipat-131029,Haryana	9996290209	freakheatfoods@gmail.com	https://www.linkedin.com/in/rishabh-mahajan-57103ba3/
9	Kayem Foods Industries Private Limited	Mr. Rajender Kumar Sharma	GM Operations & R&D	G.T Road Panipat ,132103	7206026011	rajender.sharma@kayemfoods.in	https://www.linkedin.com/in/rajender-kumar-sharma-88684030/
10	Sahasra Food Consultancy	CH. Subramanyam	CEO	25-6-79/1,, Vijay Nagar Colony, Rahamatnagar, Kazipet, Telangana 506003	9393406062/8884627255	sahasra.chs@gmail.com	
11	DS Group	Mr. Bikash Jain	Marketing Manager	C-6 – 10, DS Road, Sec - 67, Noida	9999009564	bikash.jain@dsgroup.com	
12	Ruhi Corporation	Mr. Vaibhav Kumar Jain	Chairman	No. 7, Namkeen & Allied Food Cluster, Industrial Park, Karamdi Rd, Ratlam, Madhya Pradesh-457001	7771970097	ruhicorp@gmail.com	
13	Consultant	Mr. Vishal Verma	Visiting Faculty and Food Consultant	IIM, Indore	9415626526	cppm24b10vishalv@iimdr.ac.in	
14	Hatsun Agro Products Ltd.	Mr. Naresh R	QA Officer	No. 114, Aangadu Road, Sirinium Village, Nellore Road, Redhills, Chennai	9080224273	naresh.rrr@hap.in	
15	Pravin Masalewala Pvt. Ltd.	Hariom Bhargava	ZSM	Hadapsar Industrial Estate, Pune - 411013	9358887812	bhargav.hariom@gmail.com	https://www.linkedin.com/in/hariom-bhargav-69375487/

16	Shiv Charan Dass Spices	Sagar	Market Research Analyst	Kundli , Sonipat	9560296747	sagarsainatrash@gmail.com	
17	Vadilal Enterprises Ltd.	Navodit Kanchan	Marketing	Vadilal House 53, Shrimali Society, Nr.Navrangpura Railway, Crossing,Ahmedabad-380009,Gujarat, India.	8279706424	navodit.kanchan@gmail.com	
18	LT Foods Ltd	Hardik Mittal	GET	Sonipat , Sonipat	7056788986	hardik.mittal@ltgroup.in	
19	Laplap Natural Herbs and Spices LLP	Sagar Sachan	Designated Partner	Noida	8826010682	laplapspices@gmail.com	
20	Gustora Foods Pvt Ltd	Rohit Ojha	DGM – Plant	Jaipur	9351335331	planthead@gustora.co	
21	Food Science and Nutrition, Yuvaraja's College	Dr. Devaki C S	Sr. Food Scientist	Mysore	9845308181	devaki.s.kiran@gmail.com	

Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2025	600	600	20	20	-	
2026	700	700	30	30	-	
2027	700	700	50	50	-	

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
2.0	2022-23	526	400	378									

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. SDIS-NULM-SUDA
2. PMKVY-4.0-CSCM STT
3. PMKVY-4.0-CSCM RPL
4. PMKVY-4.0-CSCM SP
5. RPL Campus
6. Short Term Training
7. Seekho aur Kamao (सीखो और कमाओ)- MoMA (NSDC)

Content availability for previous versions of qualifications:

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available:

Annexure 5: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	<input type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	<ul style="list-style-type: none"> ▪ Books/ e-books ▪ Presentations ▪ Reference Material ▪ Audio / Video Modules 	40:60
2	<input type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	<ul style="list-style-type: none"> ▪ Self-Learning Videos ▪ Broadcasts ▪ Mobile Learning ▪ Curated Digital content 	40:60
3	<input type="checkbox"/> Showing Practical Demonstrations to the learners	<ul style="list-style-type: none"> ▪ Video Content ▪ E-Resource library ▪ AR/ VR/ XR 	40:60
4	<input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	<ul style="list-style-type: none"> ▪ Training tools (tools list attached) ▪ Video Play ▪ Presentations 	40:60
5	<input type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	<ul style="list-style-type: none"> ▪ Online Question Bank ▪ Mobile Quick test app ▪ MCQ based tests 	40:60

6	<input type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	<ul style="list-style-type: none"> ▪ Assessment engine for Essays ▪ Up-loadable file examinations ▪ Mock test sessions 	40:60
7	<input type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	<ul style="list-style-type: none"> ▪ Online tests ▪ Offline assessments 	40:60

Annexure 6: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
FIC/N9026: Prepare for production	<i>Plan for production</i>	13	21	-	9
	PC1. identify work requirements by obtaining instructions from the supervisor. Instructions: process chart, product flow chart, formulation, chart, etc.	2	3	-	1
	PC2. plan and prioritize tasks as per work schedule. Tasks: inspect, clean, maintain, verify, etc.	2	3	-	2
	PC3. estimate manpower and material requirements as per work requirements. Material: raw materials and packaging materials	3	4	-	2
	PC4. ensure the required quantity of raw materials, packaging materials, equipment, and manpower for production	2	4	-	2
	PC5. plan capacity utilization of machinery with respect to the processing time, production order, and batch size for each product	2	4	-	1
	PC6. plan the changeover to minimize the impact on production schedules	2	3	-	1
	<i>Clean and maintain work area, machinery, and tools for production</i>	11	18	-	7
	PC7. clean and maintain the work area as per organizational procedures	3	4	-	2
	PC8. clean and maintain the machines and tools and sanitize them as per the organization's specifications and standards	2	4	-	2
	PC9. dispose of the waste material at the designated place safely. Waste material: hazardous waste, food waste, packaging waste, etc.	2	4	-	1
	PC10. inspect the tools, equipment, and machinery to ascertain suitability for use	2	3	-	1
	PC11. report information such as faulty tools and equipment to the concerned authority	2	3	-	1
	<i>Organize for production</i>	6	11	-	4
PC12. organize tools and equipment	2	4	-	2	
PC13. receive and organize production materials appropriately. Production materials: raw materials, packaging materials, etc.	2	4	-	1	
PC14. allot responsibilities/work to the assistants and helpers	2	3	-	1	
Total Marks		30	50	-	20
FIC/N0103: Produce Squash and Juice	<i>Receive, wash, sort and slice fruits</i>	3	5	-	2
	PC1. check the weight and quality of the fruits received from the supplier/vendor based on appearance, colour, texture, maturity, etc.	0.5	1	-	0.5
	PC2. wash fruits using water to remove dirt, soil and other impurities from fruits	0.5	1	-	-
	PC3. rinse fruits by spraying fresh water on them at the recommended pressure	0.5	1	-	0.5
	PC4. examine and remove damaged, blemished and rotten fruits, and dispose of them following the standard procedure	0.5	1	-	0.5
	PC5. cut/grate fruits to the required size and collect the sliced/grated fruits hygienically for further processing	1	1	-	0.5
<i>Extract fruit juice</i>	5	9	-	4	

PC6. remove stem and seeds from fruits such as grapes and berries	0.5	1	-	0.5
PC7. remove the peel and seeds of citrus fruits and extract their juice	0.5	1	-	0.5
PC8. collect the extracted citrus juice, maintaining hygiene	0.5	1	-	-
PC9. grind fruits such as apple and pear into appropriate gratings, depending on the type of fruit	0.5	1	-	0.5
PC10. determine the correct type and quantity of enzymes required for different types of fruits	0.5	1	-	0.5
PC11. use the appropriate quantity of enzymes to treat different types of fruits for the recommended duration to allow for optimum fruit-enzyme contact	0.5	1	-	0.5
PC12. remove the fruit peel, stem and seeds, and extract the juice	0.5	1	-	0.5
PC13. collect the extracted juice and filter it to remove small suspended particles	0.5	1	-	0.5
PC14. check the quality of filtered juice based on appearance, colour, consistency, flavour, taste, etc	1	1	-	0.5
<i>Pasteurize fruit juice</i>	<i>3</i>	<i>4</i>	<i>-</i>	<i>2</i>
PC15. concentrate fruit juice and recover aroma	1	1	-	0.5
PC16. pasteurize fruit juice at the recommended temperature and other process parameters	1	1	-	0.5
PC17. cool the pasteurized juice to the required temperature	0.5	1	-	0.5
PC18. collect the pasteurized juice, ensuring hygiene	0.5	1	-	0.5
<i>Clarify fruit juice</i>	<i>4</i>	<i>6</i>	<i>-</i>	<i>2</i>
PC19. determine the quantity of enzymes required for the clarification of juice, based on the formulation chart	1	1	-	0.5
PC20. add the required quantity of enzymes to the pasteurized juice	0.5	1	-	0.5
PC21. identify and remove the smallest particles from enzyme-treated juice to obtain clear juice	0.5	1	-	-
PC22. check the quality of juice based on colour, appearance, flavour, taste, etc.	0.5	1	-	0.5
PC23. prepare juice samples and coordinate their quality analysis with the quality-testing lab to ensure conformance to the applicable standards	1	1	-	-
PC24. store the processed juice at the recommended temperature and humidity until packaging or further processing	0.5	1	-	0.5
<i>Prepare squash</i>	<i>6</i>	<i>11</i>	<i>-</i>	<i>4</i>
PC25. prepare sugar syrup using the recommended quantity of sugar and permitted acids	0.5	1	-	-
PC26. maintain the recommended pressure and temperature for the appropriate duration to heat the syrup	0.5	1	-	0.5
PC27. check the quality of sugar syrup to ensure conformance to the applicable specifications and standards	0.5	1	-	0.5
PC28. filter the sugar syrup to remove undesirable particles and sediments	0.5	1	-	0.5
PC29. blend the recommended quantity of juice concentrate/ clarified juice, water, sugar syrup, acids, preservatives, colour, flavour at the appropriate mixing speed and duration	0.5	2	-	0.5
PC30. collect squash sample and check for uniform mixing	0.5	1	-	0.5
PC31. pasteurize the squash blend at the recommended pressure, temperature and process parameters	1	1	-	0.5

	PC32. cool the pasteurized squash following the appropriate method	0.5	1	-	0.5
	PC33. check the quality of pasteurized squash based on appearance, colour, consistency, flavour, taste etc.	1	1	-	0.5
	PC34. sample squash and coordinate with the quality-testing lab for the quality analysis of squash to ensure conformance to the applicable quality standards	0.5	1	-	-
	<i>Fill, pack and store juice and squash</i>	5	9	-	4
	PC35. transfer the finished product into the filling tank of the packing machine up to the recommended level	0.5	1	-	0.5
	PC36. load the packing materials in the packaging machine, sealing materials in the sealing machine, and labels in the labelling machine Packing material: Tetra packs, glass bottles, plastic containers, etc.	1	1	-	0.5
	PC37. set the appropriate filling volume on the filling machine according to the company standards	0.5	1	-	0.5
	PC38. set the date coding machine with the batch number, manufacturing date, expiry date, etc.	0.5	1	-	0.5
	PC39. carry out packing, sealing and labelling of juice and squash following the applicable procedure	0.5	1	-	0.5
	PC40. check the weight of the packed product periodically to ensure conformance to the applicable standards	0.5	1	-	0.5
	PC41. attach straw in the packaging of packed products	0.5	1	-	0.5
	PC42. store the packed and labelled products in storage area under the appropriate conditions, using the relevant storage accessories	0.5	1	-	0.5
	PC43. report discrepancies/concerns to the department supervisor for immediate action	0.5	1	-	-
	<i>Carry out post production activities</i>	4	6	-	2
	PC44. clean the work area, tools, equipment and machinery using the approved cleaning agents and sanitizers	0.5	1	-	0.5
	PC45. follow the Clean-in-Place (CIP) and Clean-out-of-Place (COP) procedures	1	1	-	0.5
	PC46. carry out basic repair and maintenance of the tools, equipment and machinery	0.5	1	-	0.5
	PC47. follow the maintenance schedule and procedure for the tools, equipment and machinery in the manuals provided by the manufacturer	0.5	1	-	0.5
	PC48. collect and dispose of the waste generated during fruit juice extraction and squash production	1	1	-	-
	PC49. carry out appropriate documentation concerning the fruit juice extraction and squash production	0.5	1	-	-
	Total Marks	30	50	-	20
FIC/N0209: Produce a variety of pickles	<i>Wash, sort and grade fruits and vegetables</i>	5	8	-	3
	PC1. sample and test the water quality following the appropriate procedures before use	0.5	1	-	0.5
	PC2. fill in water up to the recommended level in the water tank for washing the fruits and vegetables	1	1	-	0.5
	PC3. wash fruits and vegetables by submerging them appropriately in water	0.5	2	-	0.5
	PC4. rinse fruits and vegetables thoroughly with fresh water	1	1	-	-

PC5. dry the fruits and vegetables following the appropriate drying method, as required, to concentrate the flavour and achieve the appropriate texture before pickling	1	1	-	0.5
PC6. inspect and discard damaged fruits and vegetables	0.5	1	-	0.5
PC7. grade fruits and vegetables based on the applicable parameters, such as size, shape, colour, appearance, etc.	0.5	1	-	0.5
<i>Peel and slice fruits and vegetables</i>	<i>2</i>	<i>3.5</i>	-	<i>1.5</i>
PC8. peel and wash fruits and vegetables following the appropriate peeling and washing methods	1	1.5	-	0.5
PC9. slice fruits and vegetables to the required size	0.5	1	-	0.5
PC10. check the sliced fruits and vegetables for spoilage and remove the ones unsuitable for further processing	0.5	1	-	0.5
<i>Prepare the brine solution</i>	<i>3.5</i>	<i>6</i>	-	<i>2.5</i>
PC11. measure the ingredients, such as vinegar, salt, and sugar, to prepare the brine solution according to the brine recipe	1	1.5	-	0.5
PC12. prepare the brine solution following the applicable procedure	1	1.5	-	0.5
PC13. check the salt concentration in the brine solution to ensure it is within the permitted limits	0.5	1	-	0.5
PC14. store the prepared brine solution in clean and appropriately labelled containers	0.5	1	-	0.5
PC15. maintain the appropriate temperature and humidity in the storage to preserve the brine's quality	0.5	1	-	0.5
<i>Cure fruits and vegetables</i>	<i>4</i>	<i>7</i>	-	<i>3</i>
PC16. steam fruits and vegetables, as required	0.5	1	-	0.5
PC17. carry out necessary pre-treatments like blanching or soaking to prepare the produce for curing	1	1.5	-	0.5
PC18. maintain the cut fruits and vegetables in the brine solution for fermentation for the recommended duration	0.5	1	-	0.5
PC19. maintain salt equilibrium by stirring fruits and vegetables periodically	0.5	1	-	0.5
PC20. check the acidity levels to ensure the fermentation process is complete	0.5	1	-	0.5
PC21. check the curing progress for any signs of spoilage or contamination and take appropriate corrective measures	1	1.5	-	0.5
<i>Prepare, pack and store pickles</i>	<i>10</i>	<i>16</i>	-	<i>6</i>
PC22. prepare the spice mix as per the formulation using the measured quantity of spices and oil	1	2	-	0.5
PC23. mix the spice mix and fermented fruits and vegetables appropriately to ensure consistency	1	2	-	0.5
PC24. check the finished product to ensure it meets the applicable quality standards	1	1	-	0.5
PC25. select the appropriate packaging materials considering the type of product and packaging requirements	1	1	-	0.5
PC26. ensure packaging materials meet the applicable quality standards and regulatory requirements	1	1	-	0.5
PC27. pack pickles in the selected packaging materials	1	2	-	1
PC28. label the packaging material with the necessary information as per the applicable FSSAI standards	0.5	1	-	0.5

	PC29. ensure effective sealing of packaging materials to prevent contamination or damage to the product	0.5	2	-	0.5
	PC30. sample the pickles and coordinate with the quality-testing laboratory for its quality analysis	1	1	-	0.5
	PC31. store the packed pickles in a hygienic storage under the recommended temperature and humidity	1	1.5	-	0.5
	PC32. use the appropriate storage accessories, e.g. crates and cartons, for safe storage of pickles	1	1.5	-	0.5
	<i>Carry out the post-production activities</i>	<i>5.5</i>	<i>9.5</i>	<i>-</i>	<i>4</i>
	PC33. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	1	1	-	0.5
	PC34. use and store the recommended disinfectants and sanitizers safely	0.5	2	-	0.5
	PC35. follow the appropriate Clean-in-Place and Clean-out-of-place (COP) methods	1	2	-	0.5
	PC36. carry out basic repair and maintenance of the tools, equipment and machinery	1	2	-	0.5
	PC37. report any concerns to supervisor for immediate resolution	0.5	1	-	0.5
	PC38. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	0.5	0.5	-	0.5
	PC39. carry out appropriate documentation concerning pickle production	0.5	0.5	-	0.5
	PC40. dispose of the waste following the organizational procedure	0.5	0.5	-	0.5
	Total Marks	30	50	-	20
FIC/N0210: Carry out production of jam, jelly and ketchup	<i>Wash and sort fruits and vegetables</i>	<i>3</i>	<i>5</i>	<i>-</i>	<i>2</i>
	PC1. check the quantity and quality of the fruits and vegetables received from the supplier/vendor, to ensure conformance to the order specifications and applicable standards	0.5	1	-	0.5
	PC2. perform primary and secondary washing of fruits and vegetables using appropriate washing methods	1	1	-	0.5
	PC3. inspect fruits and vegetables for signs of damage or spoilage and sort out the unsuitable ones	0.5	1	-	0.5
	PC4. rinse fruits and vegetables appropriately using fresh water	0.5	1	-	-
	PC5. grade fruits and vegetables according to applicable industry parameters, e.g. size, shape, colour, etc	0.5	1	-	0.5
	<i>Peel, cut, and deseed/de-stone fruits and vegetables</i>	<i>3</i>	<i>5</i>	<i>-</i>	<i>2</i>
	PC6. remove the peel of fruits and vegetables following the appropriate method	1	1	-	0.5
	PC7. wash the peeled fruits and vegetables properly	0.5	1	-	0.5
	PC8. cut the fruits and vegetables fruits to the required size	0.5	1	-	0.5
	PC9. destone or de-seed the relevant fruits and vegetables following the appropriate methods	0.5	1	-	0.5
	PC10. dispose of the waste according to the applicable regulations and organizational standards	0.5	1	-	-

<i>Pulp fruits and vegetables and extract fruit juice</i>	3	5	-	2
PC11. pulp fruits and vegetables using the pulping machine or other appropriate tools and equipment	1	1	-	0.5
PC12. extract fruit juice following the appropriate hygienic practices	0.5	1	-	0.5
PC13. refine the pulp and fruit juice using the sieving machine with appropriate sieves	0.5	1	-	0.5
PC14. check the quality of fruit pulp and fruit juice based on appearance, colour, odour, etc.	0.5	1	-	0.5
PC15. sample fruit pulp and fruit juice and coordinate their quality analysis with the quality-testing lab	0.5	1	-	-
<i>Prepare jam and jelly</i>	5	8	-	3
PC16. cook the measured quantity of fruit pulp and fruit juice at the recommended temperature to prepare jam and jelly	0.5	1	-	0.5
PC17. ensure continuous stirring of fruit pulp and fruit juice to prevent sticking/scorching	1	1	-	-
PC18. prepare pectin solution using the recommended quantity of water and pectin	1	1	-	0.5
PC19. add the recommended quantity of ingredients, such as sugar, pectin solution, flavouring agents, and colouring agents to the fruit pulp and fruit juice as per the formulation	0.5	1	-	0.5
PC20. ensure proper cooking of fruit pulp and fruit juice for the recommended duration	1	1	-	0.5
PC21. check the quality of cooked fruit pulp and fruit juice based on applicable parameters, such as colour, appearance, texture, taste, etc.	0.5	1	-	0.5
PC22. sample the cooked fruit pulp and fruit juice and coordinate their quality analysis with the quality-testing lab to ensure conformance to the applicable quality standards	0.5	1	-	0.5
<i>Prepare ketchup</i>	4	6.5	-	2.5
PC23. cook the measured quantity of tomato pulp/puree at the recommended temperature to prepare ketchup	1	1	-	0.5
PC24. ensure continuous stirring of tomato pulp/puree to prevent sticking/scorching	0.5	1	-	-
PC25. add the recommended quantity of ingredients, such as sugar, salt, spice powder, and vinegar to the tomato pulp/puree as per the formulation	0.5	1	-	0.5
PC26. ensure proper cooking of tomato pulp/puree for the recommended duration	1	1	-	0.5
PC27. check the quality of cooked tomato pulp/puree based on applicable parameters, such as colour, appearance, texture, taste, etc.	0.5	1.5	-	0.5
PC28. sample the ketchup and coordinate its quality analysis with the quality-testing lab to ensure conformance to the applicable quality standards	0.5	1	-	0.5
<i>Pack jam, jelly and ketchup</i>	7	12	-	4.5
PC29. select appropriate packaging materials to pack jam, jelly and ketchup	0.5	1	-	0.5
PC30. ensure the packaging materials are clean and sterilized	1	1	-	-
PC31. fill in the packaging materials with jam, jelly and ketchup, taking appropriate measures to minimize air exposure	0.5	1.5	-	0.5
PC32. maintain the recommended headspace in the packaging material during filling to allow for product expansion during heat processing	0.5	1	-	0.5
PC33. ensure consistent weight in the packaging material	0.5	1	-	0.5
PC34. seal the packaging following the appropriate method	0.5	1	-	0.5

	PC35. pasteurize the packed jam, jelly and ketchup at the recommended temperature for the appropriate duration to destroy harmful bacteria and extend shelf life	0.5	1	-	0.5
	PC36. cool the packed jam, jelly and ketchup following the appropriate method	1	1	-	0.5
	PC37. label the packed jam, jelly and ketchup with the necessary information in compliance with the applicable FSSAI regulations	1	1	-	0.5
	PC38. examine the packaging for leaks, damage, and proper labelling	0.5	1	-	-
	PC39. store the packed jam, jelly and ketchup at the recommended temperature and humidity in a hygienic storage	0.5	1.5	-	0.5
	<i>Carry out the post-production activities</i>	<i>5</i>	<i>8.5</i>	<i>-</i>	<i>4</i>
	PC40. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	0.5	1.5	-	0.5
	PC41. use and store the recommended disinfectants and sanitizers safely	1	1	-	0.5
	PC42. follow the appropriate Clean-in-Place and Clean-out-of-place (COP) methods	1	1	-	0.5
	PC43. carry out basic repair and maintenance of the tools, equipment and machinery	0.5	1	-	0.5
	PC44. report any concerns to supervisor for immediate resolution	0.5	1	-	0.5
	PC45. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	0.5	1	-	0.5
	PC46. carry out appropriate documentation concerning jam, jelly and ketchup production	0.5	1	-	0.5
	PC47. dispose of the waste following the organizational procedure	0.5	1	-	0.5
	Total Marks	30	50	-	20
FIC/N0118: Dry/ Dehydrate fruits and vegetables	<i>Wash fruits and vegetables</i>	<i>3.5</i>	<i>6</i>	<i>-</i>	<i>2</i>
	PC1. check the weight and quality of fruits and vegetables received from the supplier/vendor based on appearance, colour, texture, maturity, etc.	0.5	1	-	0.5
	PC2. fill in the washing tank up to the recommended level and dump fruits and vegetables into it for washing	0.5	1	-	0.5
	PC3. immerse and wash fruits and vegetables appropriately in water to remove dirt, soil, etc.	0.5	1	-	0.5
	PC4. transfer fruits safely from the washing tank to the washing line conveyor	0.5	1	-	-
	PC5. wash fruits and vegetables appropriately with chlorinated or ozonated water	1	1	-	0.5
	PC6. rinse fruits and vegetables thoroughly with fresh water	0.5	1	-	-
	<i>Sort, peel, slice and blanch fruits and vegetables</i>	<i>5.5</i>	<i>10</i>	<i>-</i>	<i>3.5</i>
	PC7. sort fruits and vegetables and remove the unsuitable ones, e.g. damaged, blemished and rotten fruits and vegetables	1	1	-	0.5
	PC8. grade fruits and vegetables on the basis of different sizes	0.5	1	-	0.5
	PC9. remove the peel or core of fruits and vegetables	0.5	1	-	0.5
	PC10. prepare the lye solution using lye chemical and water in the recommended quantity at the appropriate pressure and temperature	1	2	-	0.5
	PC11. remove the skin or membrane of fruits and vegetables using lye solution, as appropriate	0.5	1	-	0.5
	PC12. carry out steam peeling of fruits and vegetables, as appropriate	0.5	1	-	-
PC13. chop/ cut/ slice fruits and vegetables to the specified size and shape using the appropriate tools and equipment	0.5	1	-	0.5	

PC14. carry out blanching of different types of fruits and vegetables for the appropriate duration	0.5	1	-	0.5
PC15. examine the blanched fruits and vegetables visually and through feel/texture to determine the adequacy of softening	0.5	1		-
<i>Treat fruits and vegetables with Sulphur</i>	<i>2</i>	<i>3</i>	<i>-</i>	<i>1</i>
PC16. spread the relevant fruits and vegetables uniformly on trays for the application of Sulphur	0.5	1	-	-
PC17. use the recommended quantity of Sulphur to generate Sulphur fumes or prepare Sulphur mix in water	0.5	1	-	0.5
PC18. carry out Sulphur treatment of fruits and vegetables by exposing them to Sulphur fumes or water mixed with Sulphur for the recommended duration	1	1	-	0.5
<i>Dry fruits and vegetables under the sun</i>	<i>3</i>	<i>5</i>	<i>-</i>	<i>2</i>
PC19. weigh the pre-processed fruits and vegetables and spread them uniformly over trays for drying	0.5	1	-	0.5
PC20. arrange the trays loaded with fruits and vegetables in the drying area/yard for exposure to direct sunlight	0.5	1	-	-
PC21. maintain fruits and vegetables under sunlight for an appropriate duration, depending on the intensity of sunlight	0.5	1	-	0.5
PC22. check the fruits and vegetables for the removal of moisture and complete dryness	1	1	-	0.5
PC23. identify and remove unwanted particles from the dried fruits and vegetables	0.5	1	-	0.5
<i>Hot air-dry fruits and vegetables</i>	<i>3.5</i>	<i>6</i>	<i>-</i>	<i>3</i>
PC24. set the appropriate hot air drier temperature and duration for drying various types of fruits and vegetables	1	1	-	0.5
PC25. dry fruits and vegetables using a hot air dryer by exposing them to hot air for the recommended duration	0.5	1	-	0.5
PC26. cool the dry fruit and vegetables under the fan at an appropriate speed in the cooling area	0.5	1	-	0.5
PC27. dry fruits and vegetables using the tunnel drier, as required, maintaining the recommended tunnel drier parameters	0.5	1	-	0.5
PC28. check the colour, appearance, dryness, and firmness of fruits and vegetables after tunnel drying to ensure conformance to the applicable standards	0.5	1	-	0.5
PC29. cool the dried fruits and vegetables in the cooling area, by maintaining the appropriate temperature	0.5	1	-	0.5
<i>Freeze-dry fruits and vegetables</i>	<i>3</i>	<i>5</i>	<i>-</i>	<i>2.5</i>
PC30. set the appropriate temperature and duration for the freezing room	0.5	1	-	0.5
PC31. maintain different types of fruits and vegetables in the freezing room for the recommended duration for the optimum freezing	0.5	1	-	0.5
PC32. identify and remove the fruits and vegetables that do not conform to the applicable standards	0.5	1	-	0.5
PC33. freeze-dry fruits and vegetables in the freeze-drying chamber under the appropriate conditions for the recommended duration	0.5	1	-	0.5

	PC34. check the colour, flavour, appearance, and dryness of fruits and vegetables after freeze-drying to ensure conformance to the applicable standards	1	1	-	0.5
	<i>Inspect, pack and store dried/dehydrated fruits and vegetables</i>	<i>6.5</i>	<i>11</i>	<i>-</i>	<i>5</i>
	PC35. check the dry fruits and vegetables and sort them based on applicable parameters, such as size, shape, colour, maturity, and variety	0.5	1	-	0.5
	PC36. transfer the dried/ dehydrated products to the packaging machine for packing	0.5	1	-	-
	PC37. load appropriate packing materials in the packaging machine	0.5	1	-	0.5
	PC38. set the packing quantity, and the date coding machine for date code details, e.g. batch number, date of manufacture, date of expiry, etc.	0.5	1	-	0.5
	PC39. fill and seal the measured quantity of finished products using the packaging machine	1	1	-	0.5
	PC40. check the weight of packed product periodically to ensure its conformance to the applicable standards	1	1	-	0.5
	PC41. carry out labelling of the packed fruits and vegetables with the required information using the appropriate equipment	0.5	1	-	0.5
	PC42. sample the packed fruits and vegetables and coordinate their quality-analysis with quality-testing lab to ensure conformance with the applicable quality standards	0.5	1	-	0.5
	PC43. store the packed fruits and vegetables in a hygienic storage under the appropriate conditions	0.5	1	-	0.5
	PC44. use the appropriate storage accessories, such as cartons and crates to store the packed products	0.5	1	-	0.5
	PC45. report discrepancies/concerns to department supervisor for immediate action	0.5	1	-	0.5
	<i>Carry out the post-production activities</i>	<i>3</i>	<i>4</i>	<i>-</i>	<i>1</i>
	PC46. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	0.5	1	-	-
	PC47. carry out basic repair and maintenance of the tools, equipment and machinery	0.5	1	-	0.5
	PC48. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	1	1	-	-
	PC49. carry out appropriate documentation concerning the drying and dehydration of fruits and vegetables	1	1	-	0.5
	Total Marks	30	50	-	20
FIC/N0122: Produce fruit pulp from various fruits	<i>Ripen the fruits</i>	<i>5</i>	<i>8</i>	<i>-</i>	<i>3</i>
	PC1. check the weight and quality of fruits received from the supplier/vendor based on appearance, colour, texture, maturity, etc.	0.5	2	-	0.5
	PC2. pre-cool the fruits at the recommended temperature and relative humidity for the appropriate duration	0.5	1	-	-
	PC3. use the recommended quantity of ethylene for ripening fruits	1	1	-	0.5
	PC4. maintain optimal air circulation for uniform ethylene flow for fruit ripenings	1	1	-	0.5
	PC5. maintain the recommended temperature and relative humidity for the appropriate duration during fruit ripening	1	1	-	0.5
	PC6. follow the proper measures to control the carbon dioxide and ethylene levels during fruit ripening	1	1	-	0.5

PC7. check the quality of fruits after ripening and take appropriate corrective measures, as required	1	1	-	0.5
<i>Wash and sort fruits</i>	<i>3</i>	<i>5</i>	-	<i>2</i>
PC8. wash fruits to remove any impurities, such as dirt, soil, etc.	1	1	-	0.5
PC9. rinse fruits thoroughly with fresh water	0.5	1	-	-
PC10. sort fruits based on applicable parameters	0.5	1	-	0.5
PC11. identify and remove damaged, blemished and rotten fruits	0.5	1	-	0.5
PC12. dispose of the fruits unsuitable for pulping, following the organisational procedure	0.5	1	-	0.5
<i>Peel/de-seed/ destone fruits</i>	<i>4</i>	<i>7</i>	-	<i>3</i>
PC13. remove the peel or core of fruits	1	1	-	0.5
PC14. carry out steam peeling, as required, maintaining the appropriate steam pressure	1	1	-	0.5
PC15. wash the peeled fruits to ensure their cleanliness before pulping	0.5	1	-	0.5
PC16. carry out chopping/ cutting/ slicing of fruits to the required size	0.5	1	-	0.5
PC17. carry out de-stoning of the relevant fruits	0.5	1	-	0.5
PC18. collect and dispose of the waste generated during the removal of fruit peel, seeds and stones	0.5	2	-	0.5
<i>Pulp fruits and pre-cook the pulp</i>	<i>6</i>	<i>10</i>	-	<i>4</i>
PC19. pulp fruits using the pulping machine or other appropriate tools and equipment	1	1	-	0.5
PC20. sieve the fruit pulp to the required fineness	1	1	-	0.5
PC21. check the refined pulp to ensure it is free from seeds and fiber	1	1	-	0.5
PC22. pre-cook the fruit pulp at the recommended temperature for an appropriate duration	0.5	1	-	0.5
PC23. check the texture of the pulp to ensure proper pre-cooking	0.5	1	-	0.5
PC24. identify and remove black specks from fruit pulp	0.5	1	-	0.5
PC25. coordinate with quality-testing lab for the quality analysis of fruit pulp	0.5	1	-	-
PC26. remove air from pulp following the appropriate method	0.5	1	-	0.5
PC27. carry out evaporation to reduce the water content concentrate the pulp	0.5	2	-	0.5
<i>Carry out aseptic sterilization and packing of fruit pulp</i>	<i>5</i>	<i>8</i>	-	<i>3</i>
PC28. sterilize fruit pulp at the recommended temperature for an appropriate duration as per the organizational standards	0.5	2	-	0.5
PC29. store the sterilized pulp under the recommended conditions before packing	0.5	1	-	-
PC30. pack the fruit pulp using the appropriate aseptic packing material to preserve the pulp's quality for extended periods	0.5	1	-	0.5
PC31. ensure proper sealing of the fruit pulp packing material	0.5	1	-	0.5
PC32. check the weight of the packed fruit pulp to ensure the correct weight as per the organizational standards	1	1	-	0.5
PC33. label the packaging with the necessary information, such as batch number, manufacturing date, and expiry date, in compliance with the applicable regulations	1	1	-	0.5
PC34. store the packed fruit pulp in a hygienic storage with the appropriate conditions	1	1	-	0.5
<i>Can the fruit pulp</i>	<i>5</i>	<i>8</i>	-	<i>3</i>

	PC35. fill in the cans with pre-cooked/pre-heated fruit pulp, ensuring the cans are sterilized	1	2	-	0.5
	PC36. remove the air from fruit pulp cans to create a vacuum and extend the shelf life	0.5	1	-	0.5
	PC37. seal the cans appropriately to prevent contamination	0.5	1	-	0.5
	PC38. sterilize, cool and dry the sealed cans following the recommended methods	0.5	1	-	0.5
	PC39. label the sealed fruit pulp cans with the necessary information in compliance with the applicable regulations	1	1	-	0.5
	PC40. store the fruit pulp cans under the recommended conditions to extend their shelf life	1	1	-	0.5
	PC41. report any discrepancies/concerns to the department supervisor for immediate action	0.5	1	-	-
	<i>Carry out the post-production activities</i>	<i>2</i>	<i>4</i>	<i>-</i>	<i>2</i>
	PC42. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	0.5	1	-	0.5
	PC43. carry out basic repair and maintenance of the tools, equipment and machinery	0.5	1	-	0.5
	PC44. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	0.5	1	-	0.5
	PC45. carry out appropriate documentation concerning the pulping, packing, canning and storage of fruit pulp	0.5	1	-	0.5
	Total Marks	30	50	-	20
FIC/N0129: Sort, grade, pack and store the produce	<i>Wash and dry the produce</i>	<i>11</i>	<i>20</i>	<i>-</i>	<i>7</i>
	PC1. retrieve agricultural produce from the warehouse/cold storage	1	2	-	0.5
	PC2. check the quality of produce based on physical and sensory parameters	1	2	-	1
	PC3. set controls for float/water tank and pump water to the required level for washing produce	2	3	-	1
	PC4. use chlorine in the recommended quantity in the water to kill pathogenic and non-pathogenic micro-organisms	2	3	-	1
	PC5. wash the produce to remove impurities including chlorine from their surface	1	3	-	1
	PC6. dry the washed fruits and vegetables following the appropriate method	1	1	-	0.5
	PC7. clean the produce unsuitable for water treatment	1	3	-	1
	PC8. apply waxing treatment depending on the type of produce to reduce water loss and improve appearance	2	3	-	1
	<i>Sort and grade produce</i>	<i>8</i>	<i>14</i>	<i>-</i>	<i>6</i>
	PC9. identify and remove the severely damaged produce	1	2	-	1
	PC10. separate the unwanted material from the produce following the appropriate method	1	2	-	0.5
	PC11. remove dry foliage attached to the onion and garlic bulbs and sort them based on their size using measurement rings of different diameters	1	1	-	1
	PC12. sort the produce based on colour, and record the readings	1	2	-	0.5
	PC13. grade the produce based on diameter, length, weight and size	1	2	-	1
PC14. sample the produce and coordinate their quality analysis with the quality-testing lab, as required	1	1	-	0.5	
PC15. collect the sorted and graded produce using appropriate accessories, such as baskets, tubs, crates, etc.	1	2	-	0.5	

	PC16. identify and report any malfunctions/ discrepancies to the supervisor and take appropriate corrective action, as instructed	1	2	-	1
	<i>Pack and store the produce</i>	6	8	-	4
	PC17. carry the containers with sorted and graded produce to the packaging area safely	1	1	-	0.5
	PC18. carry out primary and secondary packaging of the produce, as applicable	1	2	-	1
	PC19. carry out labelling of the produce with the necessary information as per the applicable FSSAI guidelines, e.g. net weight, batch code, date of packing, best before date, storage conditions, country of origin, etc.	1	1	-	0.5
	PC20. store the packed produce in a clean and hygienic storage area, under the recommended temperature and humidity	1	1	-	0.5
	PC21. use appropriate storage accessories, such as cartons, crates, gunny bags, and mesh, to store the packed produce	1	1	-	0.5
	PC22. follow the organisational procedure to dispatch the packed produce to their destination using a suitable transportation method	1	2	-	1
	<i>Carry out post-production activities</i>	5	8	-	3
	PC23. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	1	2	-	0.5
	PC24. follow the appropriate Clean-in-place (CIP) and Clean-out-of-Place (COP) methods	1	2	-	0.5
	PC25. carry out basic repair and maintenance of the tools, equipment and machinery	1	2	-	1
	PC26. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	1	1		0.5
	PC27. carry out appropriate documentation concerning the sorting, grading, packing and storage of fruits and vegetables	1	1		0.5
	Total Marks	30	50	-	20
FIC/N5022: Carry out biscuit production in industrial units	<i>Select and prepare ingredients for production</i>	5	10	-	3
	PC1. check the production order and formulation for the product	1	0.5	-	0.5
	PC2. select raw materials based on the applicable criteria for the product/batch	1	1.5	-	0.5
	PC3. check the quality of each ingredient based on parameters, such as appearance, colour, odour, and texture, to ensure conformance to the applicable standards and specifications	1	1.5	-	0.5
	PC4. weigh each ingredient and take the specified amount as per the formulation of the product being produced	1	1.5	-	0.5
	PC5. sift the flour using the flour sifter machine to remove lumps	1	1.5	-	0.5
	<i>Prepare the dough</i>	5	10	-	3
	PC6. mix the ingredients appropriately with the flour at the recommended temperature and speed	1	0.5	-	0.5
	PC7. knead the dough manually or in a mixing machine, ensuring the appropriate dough temperature	1	1	-	-
	PC8. check the viscosity and quality of the dough to ensure it conforms to the applicable specifications	1	1	-	1
	PC9. extrude the dough taking appropriate precautions	1	0.5	-	0.5
	PC10. laminate the dough, as required	1	2	-	-
<i>Produce and pack biscuits</i>	15	20	-	10	

	PC11. carry out sheeting and rolling of the dough to the required thickness	1	2	-	1
	PC12. cut the rolled dough into appropriate shapes depending on the type and design of biscuits being produced	1	1	-	0.5
	PC13. carry out moulding to create specific shapes or designs, as required, e.g. for sandwich biscuits	1	1	-	0.5
	PC14. load the cut or moulded dough pieces into industrial ovens, taking appropriate measures to prevent any damage to them	1	1	-	0.5
	PC15. bake biscuits at the appropriate temperature for an appropriate duration, depending on the type of biscuits	1	3	-	1
	PC16. cool the baked biscuits at the recommended temperature to prevent moisture buildup and maintain texture	1	1		1
	PC17. carry out coating of biscuits with chocolate, sugar, or other toppings, depending on the type of biscuits	1	2		1
	PC18. sandwich biscuits with appropriate fillings, such as jam, cream, or chocolate, depending on the type of biscuits	1	2		1
	PC19. check the biscuits for uniformity in size, shape, colour, and texture	1	1		0.5
	PC20. identify and remove the defective biscuits, e.g. malformed biscuits	1	1		0.5
	PC21. sort and align biscuits for packaging	1	1		0.5
	PC22. pack biscuits into appropriate types of packaging, such as wrappers, boxes, and tins	1	1		0.5
	PC23. follow appropriate measures during packaging to protect biscuits from moisture	1	1		0.5
	PC24. label the packaging with the necessary information, e.g. ingredients, nutritional facts, and manufacturing and expiration dates	1	1		0.5
	PC25. store the packed biscuits in a controlled environment to maintain their freshness	1	1	-	0.5
	<i>Carry out the post-production activities</i>	<i>5</i>	<i>10</i>	<i>-</i>	<i>4</i>
	PC26. clean and disinfect the work area, tools, equipment, and machinery using the recommended cleaning agents	1	2	-	0.5
	PC27. follow the appropriate Clean-in-Place (CIP) and Clean-out-of-Place (COP) procedures	0.5	1	-	0.5
	PC28. carry out basic repair and maintenance of the tools, equipment, and machinery	0.5	2	-	1
	PC29. report any discrepancies/concerns to the supervisor for immediate resolution	1	2	-	1
	PC30. ensure periodic maintenance of the tools, equipment, and machinery as per the manufacturer's instructions	1	2	-	0.5
	PC31. carry out appropriate documentation concerning the baking operations	1	1	-	0.5
	Total Marks	30	50	-	20
FIC/N8517: Carry out production of spices, curry powder and seasonings	<i>Produce whole spices</i>	<i>4.5</i>	<i>8</i>	<i>-</i>	<i>3</i>
	PC1. clean unprocessed whole spices to ensure complete removal of dirt and foreign particles	0.5	1	-	0.5
	PC2. dry the whole spices following the appropriate drying method	1	1.5	-	0.5
	PC3. cut the whole spices to obtain the powdered whole spices for further processing	1	1.5	-	0.5
	PC4. sterilize the whole spices following the standard procedure	1	1.5	-	0.5
	PC5. follow the recommended measures to ensure food safety and prevent contamination	0.5	1.5	-	0.5
	PC6. check the quality of processed whole spices based on relevant parameters, such as size, moisture content, colour retention ability, etc.	0.5	1	-	0.5

<i>Produce spices and curry powder</i>	8.5	13	-	5
PC7. sort and grade the whole spices as per production requirements based on colour, size, appearance, etc.	0.5	1	-	0.5
PC8. roast the whole spices at the recommended temperature for an appropriate duration	1	1.5	-	0.5
PC9. grind the spices into fine powder or coarse granules, depending on the intended use of spices	1	1.5	-	0.5
PC10. cool the ground spices adequately	0.5	1	-	0.5
PC11. sieve the ground spices and curry powder to remove impurities and achieve a uniform particle size	1	1.5	-	0.5
PC12. blend the appropriate quantities of selected spices to produce curry powder with a consistent flavour	1	1.5	-	0.5
PC13. sterilize the spices and curry powder at the recommended temperature for an appropriate duration to remove microbial contaminants	1	1.5	-	0.5
PC14. dry the spices and curry powder to the appropriate moisture level, following the appropriate drying method	1	1.5	-	0.5
PC15. grade the spices and curry powder based on relevant parameters, e.g. fineness, texture, aroma, flavour, etc.	1	1	-	0.5
PC16. sample spices and curry powder and coordinate their quality analysis with the quality-testing laboratory to ensure conformance to the applicable standards	0.5	1	-	0.5
<i>Produce seasonings</i>	5	9	-	4
PC17. mix the relevant ingredients, such as whole spices, salt, oleoresins, flavouring, curry, and ground spices as per type of seasoning to be produced	1	1.5	-	0.5
PC18. identify and remove any impurities from the mixture	0.5	1	-	0.5
PC19. dry the mixture of ingredients following an appropriate method, to prevent mould growth and preserve the flavours and aromas of the seasonings	1	1.5	-	1
PC20. grind the dried ingredients to the appropriate fineness to achieve fine powder or coarse granules as per the requirement	1	1.5	-	0.5
PC21. follow appropriate measures during grinding to preserve volatile oils responsible for the seasoning's flavour	0.5	1	-	0.5
PC22. sieve the ground seasoning using different types of sieves to achieve appropriate grades of seasoning, e.g. fine, medium and coarse	0.5	1.5	-	0.5
PC23. sample the seasoning and coordinate its quality analysis with the quality-testing laboratory	0.5	1	-	0.5
<i>Pack and label spices, curry powder and seasonings</i>	6	10	-	4
PC24. select the appropriate packaging materials, e.g. airtight glass jars, metal tins and plastic pouches, to pack spices, curry powder and seasonings	0.5	1	-	0.5
PC25. ensure the packaging material is clean and sterilized	0.5	1	-	0.5
PC26. pack spices, curry powder and seasonings, taking appropriate measures to prevent moisture absorption and preserve freshness	1	1.5	-	0.5
PC27. seal the packaging material, following the appropriate measures to remove air and maintain freshness	1	1.5	-	0.5
PC28. carry out labelling of the packaging material with the necessary information as per the applicable FSSAI regulations	1	1.5	-	0.5

	PC29. check the integrity of the packaging seal to prevent leaks during storage and transportation	0.5	1	-	0.5
	PC30. store the packed spices, curry powder and seasonings under the recommended temperature and humidity in a hygienic storage	1	1.5	-	0.5
	PC31. use the appropriate storage accessories, such as pallets, cartons and crates for the safe storage of packed spices, curry powder and seasonings	0.5	1	-	0.5
	<i>Carry out the post-production activities</i>	<i>6</i>	<i>10</i>	<i>-</i>	<i>4</i>
	PC32. clean and disinfect the work area, tools, equipment and machinery using the recommended cleaning agents	0.5	1	-	0.5
	PC33. use and store the recommended disinfectants and sanitizers safely	0.5	1	-	0.5
	PC34. follow the appropriate Clean-in-Place and Clean-out-of-place (COP) methods	1	1.5	-	0.5
	PC35. carry out basic repair and maintenance of the tools, equipment and machinery	1	1.5	-	0.5
	PC36. report any concerns to the supervisor for immediate resolution	1	1.5	-	0.5
	PC37. ensure periodic maintenance of the tools, equipment and machinery as per the manufacturer's instructions	0.5	1	-	0.5
	PC38. carry out appropriate documentation concerning the production of spices, curry powder and seasonings	1	1.5	-	0.5
	PC39. dispose of the waste following the organizational procedure	0.5	1	-	0.5
	Total Marks	30	50	-	20
FIC/N9906: Apply food safety guidelines in Food Processing	<i>Apply personal hygiene and follow Good Manufacturing practices at workplace</i>	<i>22</i>	<i>44</i>	<i>-</i>	<i>6</i>
	PC1. follow a site relevant documented procedure for Personal Hygiene and Visitor/ Contractor rules	2	4	-	-
	PC2. follow work instructions at levels of employees inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines	2	4	-	2
	PC3. ensure timely participate and carry out the relevant training and awareness sessions on personal hygiene, GMP, and related topics	2	4	-	-
	PC4. ensure timely medical examination from a prescribed and authorized doctor and comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines	2	4	-	-
	PC5. fill in data in the daily monitoring checklist related to personal hygiene, food safety, and GMP	2	4	-	-
	PC6. follow a site-relevant documented procedure and area-wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site. procedure: Hand washing requirements, Gowning & De gowning protocols, cleaning, and sanitation of employee lockers, follow the protocols as laid down in the different categories of processing areas like Low Risk, High Risk, High Care areas, etc.	2	4	-	2
	PC7. follow all validated Do's & Don'ts inside a food manufacturing firm	1	2	-	1
	PC8. follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross-contaminate the products which are being manufactured in the facility	2	4	-	-
	PC9. refer to the process flow charts, HACCP summary plan, and critical process parameters in each and respective areas of the production line	1	2	-	1

	PC10. identify the material requirements such as manufacturing equipments, Utensils, and other processing aids, cleaning chemicals, and cleaning work instructions in all the relevant areas of the manufacturing facility. Also, a special focus shall be given to Allergens and their risks. Wherever required, the allergen requirements shall be separately addressed	2	4	-	-
	PC11. ensure to properly tag and number all the equipment, machinery, tools, and other processing aids to keep proper traceability of the product being manufactured and handled at the site	1	2	-	-
	PC12. follow and implement all training and awareness guidelines in the manufacturing area and regularly participate in training effectiveness for evaluation	1	2	-	-
	PC13. participate in audits and address the aspects of Good Manufacturing Procedures, personal hygiene, and food safety	1	2	-	-
	PC14. ensure the record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters, etc.	1	2	-	-
	<i>Implement food safety practices at the workplace</i>	8	16	-	4
	PC15. maintain updated facilities, equipment, and tool and design requirements to minimize the risks associated with the products being handled at the site	2	4	-	-
	PC16. follow the instruction in the raw and packaging materials warehouse and ensure receiving material parameters match all the laid requirements. parameters: Incoming vehicles Visual report, storage, and handling requirements, hazardous and non-hazardous goods, allergens, cross-contamination risks, Quarantine, Accepted & rejected goods, monitoring temperature and humidity, etc.	1	2	-	1
	PC17. follow FSSAI Schedule IV requirements related to Pest Control, Cleaning, and Sanitation, Utilities, Waste Disposal, Prevention of Cross-Contamination, allergen management, corrective action, preventive actions, food operation control etc.	2	4	-	2
	PC18. ensure timely check of the critical control points and product parameters	1	2	-	-
	PC19. record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters, etc.	1	2	-	1
	PC20. report any food safety and GMP issue to the supervisor, if any	1	2	-	-
	Total Marks	30	60	-	10
DGT/VSQ/N0101: Employability Skills (30 Hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
	PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-	

	PC5. follow good manners while communicating with others	-	-	-	-
	PC6. work with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC8. report any issues related to sexual harassment	-	-	-	-
	<i>Financial and Legal Literacy</i>	3	4	-	-
	PC9. use various financial products and services safely and securely	-	-	-	-
	PC10. calculate income, expenses, savings etc.	-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	<i>Essential Digital Skills</i>	4	6	-	-
	PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
	PC13. use internet and social media platforms securely and safely	-	-	-	-
	<i>Entrepreneurship</i>	3	5	-	-
	PC14. identify and assess opportunities for potential business	-	-	-	-
	PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
	<i>Customer Service</i>	2	2	-	-
	PC16. identify different types of customers	-	-	-	-
	PC17. identify customer needs and address them appropriately	-	-	-	-
	PC18. follow appropriate hygiene and grooming standards	-	-	-	-
	<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
	PC19. create a basic biodata	-	-	-	-
	PC20. search for suitable jobs and apply	-	-	-	-
	PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
	Total Marks	20	30	-	-
	Grand Total	320	540	-	190

Annexure 7: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Assessment will be based on the concept of Independent Assessors empanelled with Assessment Agencies, identified, selected, trained and certified on Assessment techniques. These Assessors would be aligned to assess as per the laid down criteria.

Assessment Agency would conduct assessment only at the training centres of Training Partner or designated testing centers authorized by FICSI.

Ideally, the assessment will be a continuous process comprising of three distinct steps:

- A. Mid-term assessment
- B. Term/Final Assessment

Each National Occupational Standard (NOS) in the respective QPs will be assigned weightage. There in each Performance Criteria in the NOS will be assigned marks for theory and/or practical based on relative importance and criticality of function.

This will facilitate preparation of question bank / paper sets for each of the QPs. Each of these papers sets/question banks created by the Assessment Agency will be validated by the industry subject matter experts through FICSI, especially with regard to the practical test and the defined tolerances, finish, accuracy etc.

The following tools are proposed to be used for final assessment:

- i. Written Test: This will comprise of
 - (I True/False Statements,
 - (ii) Multiple Choice Questions,
 - (iii) Matching Type Questions. Online system for this will be preferred.
- ii. Practical Test: This will comprise a test job to be prepared as per project briefing following appropriate working steps, using necessary tools, equipment and instruments. Through observation it will be possible to ascertain candidate's aptitude, attention to details, quality consciousness etc. The end product will be measured against the pre-decided MCQ filled by the Assessor to gauge the level of his skill achievements.
- iii. Structured Interview: This tool will be used to assess the conceptual understanding and the behavioral aspects as regards the job role and the specific task at hand.

On the Job:

1. Each module which covers the job profile of Multi Skill Technician will be assessed separately.
2. The candidate must score 70% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
 - Answer Sheets of Question Banks
 - Assessing the Log Book entries of Trainees at Employer location
 - Employer Performance Feedback.
4. Assessment of each Module will ensure that the candidate is able to:
 - Carry out production of fortified food

- Work effectively and efficiently as per schedules and timelines.
- Escalate the problem to appropriate authority.
- Implement safety practices.
- Optimize the use of resources to ensure less wastage and maximum conservation.

Annexure 8: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCRF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training
ES	Employability Skills
NCVET	National Council for Vocational Education and Training
FICSI	Food Industry Capacity & Skill Initiative
HACCP	Hazard Analysis and Critical Control Points
GMPs	Good Manufacturing Practices
GHP	Good Hygiene Practices
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
QMS	Quality Management System
FEFO	First Expiry First Out
FIFO	First In First Out
COP	Clean Out of Place
CIP	Clean In Place

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf