



QUALIFICATION FILE

FRUITS AND VEGETABLES PRODUCT PRODUCER

- ✓ 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: 3

Submitted By: West Bengal State Council of Technical & Vocational Education and Skill Development

Submitting Body Name> West Bengal State Council of Technical & Vocational Education and Skill Development, Karigari Bhavan (5th Floor), Plot-B/7,
Action Area-III
New Town, Kolkata-700160

Submitting Body Contact Details:

Position in the organization: Chief Administrative Officer

Address if different from above: Same as above

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Section 1: Basic Details

1. Qualification Name	Fruits and Vegetables Product Producer STC - AGR/NSQF-2022/0230																
2. Sector/s	Agriculture																
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: <i>(change to previous, once approved)</i> STC - AGR/NSQF-2022/0230	Qualification Name of existing/previous version: Fruits and Vegetables Product Producer															
4. a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>	NA																
5. National Qualification Register (NQR) Code &Version <i>(Will be issued after NSQC approval)</i>	QG-03-FI-00363-2023-V2-WBSC Version 2.0	6. NCrF/NSQF Level: 3															
7. Award (Certificate/Diploma/Advance Diploma/ Any Other <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate																
8. Brief Description of the Qualification	Fruit and Vegetable product Producer Operate machines and perform routine tasks to prepare canned and frozen fruit and vegetables, and make and package sauces, jams and juices and different product of fruits and vegetables.																
9. Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	Entry Qualification & Relevant Experience: <table border="1" data-bbox="719 967 1787 1366"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Grade 10</td> <td>Nil</td> </tr> <tr> <td>2</td> <td>Grade 8 pass and pursuing continuous schooling in regular school with vocational subject</td> <td>Nil</td> </tr> <tr> <td>3</td> <td>Grade 8 Pass with 2 year experience</td> <td>2 yrs</td> </tr> <tr> <td>4</td> <td>5th Grade Pass with 5 yrs experience</td> <td>5 yrs</td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Grade 10	Nil	2	Grade 8 pass and pursuing continuous schooling in regular school with vocational subject	Nil	3	Grade 8 Pass with 2 year experience	2 yrs	4	5th Grade Pass with 5 yrs experience	5 yrs
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)															
1	Grade 10	Nil															
2	Grade 8 pass and pursuing continuous schooling in regular school with vocational subject	Nil															
3	Grade 8 Pass with 2 year experience	2 yrs															
4	5th Grade Pass with 5 yrs experience	5 yrs															

10 Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	20	11. Common Cost Norm Category (I/II/III) (wherever applicable): NA																		
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)	<p><input checked="" type="checkbox"/>Offline <input type="checkbox"/>Online <input type="checkbox"/>Blended</p> <table border="1" data-bbox="723 384 1821 555"> <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>180</td> <td>270</td> <td>150</td> <td></td> <td>600</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)	180	270	150		600	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)															
Classroom (offline)	180	270	150		600															
Online																				
14 Aligned to NCO/ISCO Code/s (if no code is available mention the same)	7514.9900																			
15 Progression path after attaining the qualification (Please show Professional and Academic progression)	<p>Horizontal Progression: 1. Jam, Jelly, Ketchup and pickle making technician (L-3)</p> <p>Vertical Progression: 1. Preservation Technician-Fruits and Vegetable (L-4)</p>																			
16 Other Indian languages in which the Qualification & Model Curriculum are being submitted	NA																			
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", specify applicable type of Disability:																			
19 How Participation of Women will be Encouraged	Women as part of self-help groups take part in this training and then go for self-employment as well as wage employment																			
20 Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Apply Safe Working Practices AGR/0230/OC1,V2.0																			
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: Saequa Monazza , Chief Administrative Officer Email: caowbsctvesd@gmail.com Contact No.: 033-2340-3717 Website: sctvesd.wb.gov.in	
23 Final Approval Date by NSQC: 3.5.2023	24. Validity Duration: 3 years	25. Next Review Date 3.5.2026

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 **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF 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.	Apply Safe Working Practices	AGR/0230/OC1,V2.0	Core	3	1	10	20			30	14	40			54	5.4%
2.	Identify and select fresh fruits and vegetables with the help of checklist.	AGR/0230/OC2, V2.0	Core	3	1	10	20			30	14	40			54	5.4%
3.	Identify the spoilage in fruits and vegetables and state the reason for the spoilage.	AGR/0230/OC3, V2.0	Core	3	1	10	20			30	14	40			54	5.4%
4.	Recognize the different raw materials which will be Identify as spices and food additives by visual inspection.	AGR/0230/OC4, V2.0	Core	3	1	10	20			30	14	40			54	5.4%
5.	Prepare and pack perishables for storage with safety precautions.	AGR/0230/OC5,V2.0	Core	3	1	10	20			30	14	40			54	5.4%

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF 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)
6.	Prepare fruit juices with juice extracting machines with safety precautions and preserve fruit juices with addition of preservatives and determine the acidity and TSS content.	AGR/0230/OC6, V2.0	Core	3	1	5	25			30	6	50			56	5.6%
7.	Prepare and package fruit beverages such as Squashes, RTS, Nectar, Cordial, Crush and Syrup by using appropriate machines such as pulper, juice extractor, autoclave, and corking machine with safety precautions, determine the acidity and TSS content	AGR/0230/OC7, 2.0	Core	3	1	10	20			30	14	40			54	5.4%
8.	Prepare and preserve Tomato products by using appropriate machines such as pulper, Autoclave, and corking machine with safety precautions, determine acidity and TSS content.	AGR/0230/OC8, 2.0	Core	3	1	10	20			30	14	40			54	5.4%

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF 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)
9.	Prepare, dry and storage fruits and vegetables with appropriate methods such as drying, cabinet drying and solar drying with safety precautions and determine the moisture.	AGR/0230/OC9, V2.0	Core	3	1	10	20			30	14	40			54	5.4%
10.	Prepare, preserve and store jam, jelly and marmalades by using appropriate machines such as pulper, autoclave & sealer with safety precautions, determine acidity and TSS content, pectin test.	AGR/0230/OC10, V2.0	Core	3	2	20	40			60	12	80			92	9.2%
11.	Demonstrate the Canning process of fruits and vegetables and Identify defects by physical observation & its causes in canned foods and explain food safety standards.	AGR/0230/OC11, V2.0	Core	3	1	10	20			30	14	40			54	5.4%
12.	Prepare fruits/vegetables pickles with oil/salt/vinegar/spices, determine acidity content.	AGR/0230/OC12, V2.0	Core	3	1	5	25			30	6	50			56	5.6%

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF 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)
13.	Work in real job situation with special emphasis on basic safety and hazards in this domain.	AGR/0230/OC13, V2.0	Core	3	5	0	0	150		150	0	0	260		260	26%
14.	Employability Skills- 60 hrs.	DGT/VSQ/N0102	Core	3	2	60	0			60	50	0			50	5%
Duration (in Hours) / Total Marks					20	180	270	150		600	200	540	260		1000	

Elective NOS/s: NA

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF 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.																
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s: NA

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF 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.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

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

Minimum Pass Percentage – Aggregate at qualification level: Th. 60% & Pr70% (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (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)	CTS/ATS (Fruit and vegetable processing trade) 3 years' experience OR Diploma (Food processing technology) 2 years' experience OR B.Tech/B.E ((Food technology / Food technology and Biochemical engineering) 2 years' experience AND Certified for Job Role: Fruits and Vegetables Product Producer " mapped to QP: STC - AGR/NSQF-2022/0230".Minimum accepted score is 80%. Also Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". Minimum accepted score is 80%
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	CTS/ATS (Fruit and vegetable processing trade) 3 years' experience OR Diploma (Food processing technology) 2 years' experience OR B.Tech/B.E ((Food technology / Food technology and Biochemical engineering) 2 years' experience AND Certified for Job Role: Fruits and Vegetables Product Producer " mapped to QP: STC - AGR/NSQF-2022/0230".Minimum accepted score is 80%. And Certified on any domain skill of NSQF Level 5 with experience in training activities in similar field.
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	NO

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	CTS/ATS (Fruit and vegetable processing trade) 3 years' experience OR Diploma (Food processing technology) 2 years' experience OR B.Tech/B.E ((Food technology / Food technology and Biochemical engineering) 2 years' experience And Certified for Job Role: Fruits and Vegetables Product Producer" mapped to QP: STC - AGR/NSQF-2022/0230".Minimum accepted score is 80%. Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0". Minimum accepted score is 80%
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	CTS/ATS (Fruit and vegetable processing trade) 3 years' experience OR Diploma (Food processing technology) 2 years' experience OR B.Tech/B.E ((Food technology / Food technology and Biochemical engineering) 2 years' experience And Assessor will be required to be empaneled with WBSCTVESD upon successfully clearing TOA in relevant job role to be conducted from time to time by WBSCTVESD.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	CTS/ATS (Fruit and vegetable processing trade) 3 years' experience OR Diploma (Food processing technology) 2 years' experience OR B.Tech/B.E ((Food technology / Food technology and Biochemical engineering) 2 years' experience And Assessor will be required to be empaneled with WBSCTVESD upon successfully clearing TOA in relevant job role to be conducted from time to time by WBSCTVESD.
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)

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: 3
5.	Estimated nos. of persons to be trained and employed:
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: yes 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 (Mandatory)	Annexure 1
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Annexure 2
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Annexure 6
4.	Annexure: Assessment Strategy (Mandatory)	Annexure 7
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended Learning")	NA
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	NA
7.	Annexure: Acronym and Glossary (Optional)	Annexure 8
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Yes
9.	Supporting Document: Career Progression (Mandatory - Public view)	Yes in Q file

10.	Supporting Document: Occupational Map (Mandatory)	Yes in Q File
11.	Supporting Document: Assessment SOP (Mandatory)	Yes in Model Curriculum
12.	Any other document you wish to submit:	NO

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	<ul style="list-style-type: none"> Identify, select, use and store tools, equipment and materials used in Food Preservation in a safe manner. Preserve seasonal fruits and Vegetables using drying process 	<ul style="list-style-type: none"> The job holder will understand and comply with Food safety practices while undertaking fruits and Vegetables works. The job holder also require to preserve seasonal fruits and Vegetables to make jam, jelly, fruit juice, pickle and Tomato product and analyse the components of fruits and vegetables. Both the responsibilities, the job holder needs to carry out a job which may require limited range of activities routine and predictable. Hence the Qualification may be placed at level 3 	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	<ul style="list-style-type: none"> Identify the spoilage in fruits and vegetables and state the reason for the spoilage. Produce pickles, Jam, Jelly, Murabbas, Syrups, Squash, Sauces, Chutneys and vinegar 	<ul style="list-style-type: none"> The job holder will needs to have an understanding of basic principles and knowledge about the preparation of pickles, Jam, Jelly, Murabbas, Syrups, Squash, Sauces, Chutneys and canned foods. Hence the Qualification may be placed at level 3 	3
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<ul style="list-style-type: none"> Ability to prepare different fruit vegetable product like pickles, Jam, Jelly, Murabbas, Syrups, Squash, Sauces, Chutneys and canned foods. 	The job holder will demonstrate practical skill on preparation of pickles, Jam, Jelly, Murabbas, Syrups, Squash, Sauces, Chutneys and Canned foods using appropriate equipment and machineries. All of these activities are routine and repetitive in nature with narrow range of application. Hence the Qualification may be placed at level 3	3
Broad Learning Outcomes/Core Skill	<ul style="list-style-type: none"> Ability to start and run fruits and vegetable product manufacturing plant on scientific lines in profitable 	<ul style="list-style-type: none"> The job holder will be able to communicate clearly, both in writing and orally, with co-workers, 	3

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment for Batch Size: 30

Table A

	<p>manner.</p> <ul style="list-style-type: none"> ● Communicate effectively with subordinates/co-workers and convey and share work related information clearly using appropriate language. ● Fundament knowledge of computer and basic understanding personal banking ● Since this training leads to self- employment as well, responsibility for won work and learning is to be present and demonstrated ● Check-up procedures to ensure that project objectives are finished within specified time frames are developed. 	<p>supervisors and customers. The job holder also need to use basic arithmetic calculations for their work (to calculate the basic time of production, labour cost etc.).</p> <p>The job holder will be able to prepare various types of fruits vegetable products like pickles, Jam, Jelly, Murabbas, Syrups, Squash, Sauces, Chutneys and canned foods independently and under</p>	
<p>Responsibility</p>	<ul style="list-style-type: none"> ● Read circulars/notifications issued by appropriate authority or concerned agency on information related to work. ● Comply with occupational health and safety requirements relevant to worker. ● Assess possible risks and hazards in the work environment and exercise safety. ● Precautions to minimize injury to self and others comply with relevant safety practices while handling sharp tools and equipment 	<p>supervision for large production. Hence, he/she needs to take some responsibility for own work within defined limit. So the Qualification may be placed at level 3</p>	<p>3</p>

SI No.	Item description/technical specification (Glassware and accessory)	Qty (Nos)
A1	Test tube ,borosilicate glass	50
	18x15 ml	50
	15x15 ml	
A2	Beaker, graduated , borosilicate glass	
	1000ml	5
	500 ml	10
	250 ml	10
	100ml	10
A3	Conical flask, graduated, borosilicate glass	
	1000ml	5
	500 ml	10
	250 ml	10
	100ml	10
A4	Pipette , graduated , borosilicate glass	
	50 ml	6
	25 ml	6
	10 ml	6
	5 ml	6
	2ml	6

	1 ml	6
A5	Burette 50ml , graduated , borosilicate glass (with ptfе stoppered),	8
A6	Volumetric Flask , borosilicate glass 1000ml 500 ml 250ml 100ml	6 6 10 10
A7	Measuring cylinder, graduated, borosilicate glass 1000ml 500 ml 250 ml 100ml 50 ml 25 ml 10ml	5 5 5 5 5 5 5
A8	Funnel 60 deg angle long stem , borosilicate glass 75mm	10
A9	Glass rod 6 inch long, 5-6 mm dia borosilicate glass	10
A10	Porcelain basin 4 inch dia	10
A11	Reagent bottle, borosilicate glass 250ml	10

	500ml	10
A12	Beaker, (Plastic)graduated , 1000ml 500 ml 250 ml 100ml	10 10 10 10
A13	Pasteur pipette glass made with rubber head used for pickup of acid	12
TABLE-B		
Sl No.	Item description/technical specification (Instruments and equipment)	Qty (Nos)
B1	Hot air oven (18''x18''x18'')inch or (24''x24''x24'') with blower digital temp(Multispan) and time control, inside made of 304SS of 20gage, outside of MS with powder coated finish, ball catcher heavy door.	1
B2	Autoclave (14x18 inch) double coil, double wall, digital temperature controller, timer arrangement vertical with control cut off pressure (15-30psi) temperature indicator, inner and outer wall 304SS of 14 gage, heavy lid of 304SS 12mm thickness, 20gage 304SS perforated container with handle. Autoclave have central out let at the bottom and also have water level indicator.	1
B3	Rectangular hot plate of, (12''x16''x9'') 304SS top of 20 gauge/fully SS body of 20 gauge, digital temperature indicator cum controller.	1
B4	Digital pH meter, bench top with probe, Measuring Range :	2

	0.00.....14.00 pH - Resolution : 0.01 pH - Error Limits : \pm 0.01 pH	
B5	Micro Controller Based Colori Meter, , wave length 400nm to 700 nm selected by filters mounted on a turret, light source- 6.3V, 6W, Detector- Photo-Cell, mode- absorbance, concentration, display 16*2 digit LCD,Accessory test tube- 4nos, Black rod-1nos.	1
B6	Digital electronics balance, capacity : 5mg-210gm, accuracy 0.001gm	1
B7	Physical rough balance Capacity=30Kg Readability=1gm SS Pan size (mm) = 250×330	2
B8	Magnetic Starrer, 2Lt stirring capacity (Deluxe models with speed indicator), with Hot Plate, with Step less Speed control &S.S. body and top. Max. Speed: 1800 RPM.	1
B9	Refrigerator with stabilizer , 240lit,	1
B10	Potable temperature indicator Temp range- 0°C to 100.00°C, resolution=0.1°C	3
B11	Muffle furnace, size of inner chamber (5''x 5''x 10'') inch, for 1000°C working, outer casing made of heavy duty M.S. materials and sheet	1

	duly painted finished, heating elements are better quality. For 1000°C working 3.0KW.	
B12	Serological water bath, Double wall insulation, total 304SS of 20gage (inner and outer), capacity (12x250ml) (16''x12''x10'') 304SS lid, Ambient to 110 °C and digital temperature indicator. one outlet with ball valve	1
B13	Hand Refractometer, with three range 0-32%.29-62%, 0-95% brix	3
TABLE-C		
Sl No.	Item description/technical specification (Miscellaneous Item)	Qty (Nos)
C1	Spoon Spatula non-magnetic stainless steel with high polish one side spoon 4'' long ,SS 6'' long, SS 8'' long ,SS	5 5 5
C2	Crucible tongs non-magnetic stainless steel with high polish 6'' long 8'' long 10'' long	3 3 3
C3	Spirit lamp SS with brass cover125ml	10
C4	Wire gauge with asbestos	10
C5	Porcelain basins, R.B with spout glazed, Dia	

	60mm	6
	75mm	6
	85mm	6
C6	Desiccators Dia , plastic made	
	140mm	1
	187mm	1
C7	Mortar & pestle, Dia	
	110mm	2
	130mm	2
C8	Silica Crucible without lid	
	50ml	6
C9	Test tube holder (heavy)	10
C10	Rubber Gloves 14 no, pair	10
C11	Tripod Stand, iron made properly paint polish	10
C12	Burette stand with double clamp, (plastic)	8
C13	Pipette stand (plastic) (Vertical)	8
C14	Test tube stand (plastic) ,	10
C15	Wash bottle, (plastic), 500 ml, cap, pack of six	10
C16	Handy pipette aid (pipette sacker) 10ml and 25ml	6
	(plastic)	6

C17	Pressure cooker,5lit capacity	2
C18	pH paper, E Merck,1.00-14.00, 10 bks	10
C19	Litmus paper, red& blue,Emerck,10 bks	10
C20	Ordinary Filter paper, 125mm dia	10
C21	Tissue paper roll	10
C22	Grouch crucible 50ml with rubber gasket	6
C23	carboy funnel Material :PP , 50mm	6

TABLE –D

SI No.	Item description/technical specification (Food processing machineries)	Qty (Nos)
D1	<p>Tray dryer, horizontal cross air flow system, inner 304SS wall of 20gauge & with six 304SS tray of 18gauge</p> <p>Tray size : (16''x32''x1'')inch</p> <p>Solid SS tray/perforated SS tray / wire net SS try, all trays adjustable type with gape of 6'' per tray.</p> <p>Digital PID type temperature controller. Temperature range 50° -300°C with accuracy $\pm 1^{\circ}\text{C}$</p> <p>1HP. Crompton brand motor with fittings of 304SS made blower.</p>	1
D3	<p>Can seaming machine,1 ADS</p> <p>1 H.P. motor operated</p> <p>with 300, 401 seaming roller& seaming chuck</p>	1

D4	Can reforming machine 1 H.P. motor operated with ,300, 401	1
D5	Can flanging machine,1 H.P. motor operated with 300, 401	1
D6	Flange Rectifier machine hand operated, both for 300 and 401 can with dies, base, handle	1
D7	Can pressure gauge both for 300 and 401 can	2
D8	Can Vacuum gauge both for 300 and 401 can	2
D9	Can cutter / opener both for 300 and 401 can	2
D10	Potato peeler, abrasion method, laboratory model, hand operated or ½ HP motor operated, totally made of AISI Stainless Steel 304 Quality of 20gauge	1
D11	Mixer grinder,600watt	2
D12	Potato Slicer, hand operated laboratory model With thickness adjustment system, totally made of AISI Stainless Steel 304 Quality of 20gauge	1
D13	Vegetable Slicer, ½ HP motor operated laboratory model With thickness adjustment system, totally made of AISI Stainless Steel 304 Quality of 20gauge	1
D14	Electric Heater, 1500W,coil type (nicrome wire),ceramic body	1
D15	Blanching Unit (SS made) with steam charging, lab model, totally made of AISI Stainless Steel 304 Quality of 20gauge, Perforated SS tray and SS Busket, digital temp controller. Electrically operated ,SS,	1

	capacity 30 cans at a time	
D16	Fruit pulper, laboratory model Contacts parts are made of 304SS, With 1/32 sieve, ½ HP motor operated, with nylon brush	1
D17	Fruit miller, hand operated or ½ HP motor operated laboratory model Contacts parts are made of 304SS	1
D18	Screw type juice extractor, made 304SS laboratory model, hand operated or ½ HP motor operated,	1
D19	Crown corking machine, Baby type, hand operated magnetic cork holder	1
D20	Solar Drier of lab model	1
D21	Dekchi, 10 lits, SS Gamla, 5lit, 2 lits, SS, Ladle, kitchen std,SS Spoon (table), SS Teaspoon ,SS Plastic bucket of different size Cooking pan,5 lit Cutting knife made of high quality steel, manual	5 5 each 5 10 20 10 3 20

	Basket ,plastic	10
	Tray ,plastic	10
	Tray,SS(kitchen std)	10
	Karai, 5lit,SS	3
	Khunti ,kitchen std,SS	5
	Jug SS	5
	Plastic jar of different size	30
	Plastic pouch with zip	200
	Glass bottle with cap for fruit juice, sauce etc. 250ml and 500ml	50 each
	Glass jar with plastic cap for fruit juice, sauce etc. 250ml and 500ml	50each
	Lacquered 300 and 401 tin can with lid for canned food product	200 piece each
	Stainless steel knives, 12-15 cm blade	20
	Stainless steel pots of different capacities	10
D22	gas oven	2
D23	Commercial LPG Cylinder	3

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. White Board
2. White board writing pen
3. Projector
4. Computer

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.	Red Cow Dairy Pvt. Ltd	Bijan Bishnu	Asst. Manager	Nandan Housing Complex, Station Road, Hooghly	90730 22965	Bishnubijanfp7007@gmail.com	
2.	Krishna Chandra Dutta (Spice) Pvt Ltd	Dr.Dipan Chatterjee	Food technology & quality control manager		98305 65872	dipanchatterjee@cookme.com	
3.	M/s Foodies Agro	Mr. Monoj Mishra	Proprietor	Beharampur, Murshidabad	97751 86565	foodiesagro@rediffmail.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
2023	400	400	----	----	----	----

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
		----	----	----	----	----	----	----	----	----	----	----	----
		----	----	----	----	----	----	----	----	----	----	----	----

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

NA

Content availability for previous versions of qualifications:

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: English

Annexure 5: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools: NA

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

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

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	NA	NA
2	<input type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	NA
3	<input type="checkbox"/> Showing Practical Demonstrations to the learners	NA	NA
4	<input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	<input type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	<input type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	<input type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	NA

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
AGR/0230/OC1,V2.0	Apply Safe Working Practices	14	40		
	(1.1.) Maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements according to site policy. (1.2) Recognize any unsafe situations according to site policy, and assess his report accordingly. (1.3) Identify and take necessary precautions on fire and safety hazards and				

	report according to site policy and procedures. (1.4) Demonstrate Personal Productive Equipment (PPE) , safety glove etc etc. and use the same as per related working environment. (1.5) Demonstrate basic first aid & CPR and use them under different circumstances.				
	Total Marks	14	40		
AGR/0230/OC2,V2.0	Identify and select fresh fruits and vegetables with the help of checklist.	14	40		
	(2.1) Identify different fruits and vegetables (2.2) Prepare selection criteria check list for fruits and vegetables. (2.3) Select fresh fruits and vegetables				
	Total Marks	14	40		
AGR/0230/OC3,V2.0	Identify the spoilage in fruits and vegetables and state the reason for the spoilage.	14	40		
	(3.1) Observe the spoiled fruits and vegetables and its products (3.2) Identify and record the cause of spoilage.				
	Total Marks	14	40		
AGR/0230/OC4,V2.0	Recognize the different raw materials which will be Identify as spices and food additives by visual inspection.	14	40		
	(4.1) Identify spices (4.2) Identify food additives (4.3) Select the raw materials				
	Total Marks	14	40		
AGR/0230/OC5,V2.0	Prepare and pack perishables for storage with safety precautions.	14	40		
	(5.1) Prepare fruits/vegetables for Refrigeration (5.2) Fill and seal the fruits/vegetables into packaging material. (5.3) Store under refrigerated condition				
	Total Marks	14	40		
AGR/0230/OC6,V2.0	Prepare fruit juices with juice extracting machines with safety precautions and preserve fruit juices with addition of preservatives and determine the acidity and TSS content.	6	50		
	(6.1) Maintain the perfect hygiene standard (6.2) Select perfect fruits (6.3) Prepare fruits juice (6.4) Measure juice (6.5) Determine TSS and acidity				

	(6.6) Fill the preserved fruit juices in sterilized bottles, (6.7) Cork and crown the bottles (6.8) Label the bottles.				
	Total Marks	6	50		
	Prepare and package fruit beverages such as Squashes, RTS, Nectar, Cordial, Crush and Syrup by using appropriate machines such as pulper, juice extractor, autoclave, and corking machine with safety precautions, determine the acidity and TSS content	14	40		
AGR/0230/OC7,V2.0	(7.1) Maintain perfect hygiene standard (7.2) Identify and select perfect fruits (7.3) Prepare fruits for juice extraction (7.4) Prepare fruit juice (7.5) Measure fresh fruit juice (7.6) Determine TSS and Acidity (7.7) Perform calculations for Squashes, RTS, Nectar, Cordial, Crush and Syrup preparation and mixing of ingredients (7.8) Fill beverage into sterilized bottles (7.9) Cork and crown the bottles				
	Total Marks	14	40		
	Prepare and preserve Tomato products by using appropriate machines such as pulper, Autoclave, and corking machine with safety precautions, determine acidity and TSS content.	14	40		
AGR/0230/OC8,V2.0	(8.1) Maintain perfect hygiene standard (8.2) Prepare tomato juice/ tomato puree/ tomato paste/ tomato sauce/ tomato ketchup/ tomato chutney/ tomato soup (8.3) Preserve and store tomato juice/ tomato puree/ tomato paste/ tomato sauce/ tomato ketchup/ tomato chutney/ tomato soup. (8.4) Determine TSS and acidity				
	Total Marks	14	40		
	Prepare, dry and storage fruits and vegetables with appropriate methods such as drying, cabinet drying and solar drying with safety precautions and determine the moisture.	14	40		
AGR/0230/OC9,V2.0	(9.1) Maintain perfect hygiene standard (9.2) Select fruits/vegetables for drying prepare fruits/vegetables for				

	drying (9.3)Dry the fruits/vegetables by sun drying/ cabinet drying /solar drying. (9.4)Determine the moisture content. (9.5) Pack and store				
	Total Marks	14	40		
	Prepare, preserve and store jam, jelly and marmalades by using appropriate machines such as pulper, autoclave & sealer with safety precautions, determine acidity and TSS content, pectin test.	12	80		
AGR/0230/OC10,V2.0	(10.1)Maintain perfect hygiene standard (10.2)Select fruits (10.3)prepare fruit (10.4)prepare fruit juice for fruit jelly (10.5)Pectin test of fruit juice (10.6)prepare jam/jelly/marmalades (10.7)Determine the end point for jam/jelly/marmalades. (10.8)Identify the consistency For jam/jelly/marmalades. (10.9)Preserve and store jam/jelly/marmalades.				
	Total Marks	12	80		
	Demonstrate the Canning process of fruits and vegetables and Identify defects by physical observation & its causes in canned foods and explain food safety standards.	14	40		
AGR/0230/OC11,V2.0	(11.1) Explain process of canning, causes of defects in canned foods. (11.2) State the food safety standards.				
	Total Marks	14	40		
	Prepare fruits/vegetables pickles with oil/salt/vinegar/spices, determine acidity content.	6	50		
AGR/0230/OC12,V2.0	(12.1)Maintain perfect hygiene standard (12.2)Select fruits/vegetables (12.3)Wash fruits/vegetables (12.4)Prepare fruit/vegetables (12.5)Prepare spices for pickle (12.6)Prepare pickles with oil/salt/vinegar (12.7)Test titrable Acidity in pickle (12.8) Pack and store				

	Total Marks	6	50		
AGR/0230/OC13,V2.0	Work in real job situation with special emphasis on basic safety and hazards in this domain.	0	0	260	
	(13.1) Assessor will check report prepared for this component of training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain.				
	Total Marks				
DGT/VSQ/N0102	Employability Skills- 60 hrs.	50	0		
	As per NCVET guided course module for 60 Hrs				
Grand Total		200	540	260	

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.

Mention the detailed assessment strategy in the provided template.

<1. Assessment System Overview:

- Batches assigned to WBSCTVE&SD for conducting the assessment online through Portal with two probable dates for Assessment
- WBSCTVE&SD deploys the ToA certified Assessor for executing the assessment
- WBSCTVE&SD monitors the assessment process & records

2. Testing Environment:

- Check the Assessment location, date and time
- If the batch size is more than 30, then Assessment will spill over to consecutive days.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.

3. Assessment Quality Assurance levels/Framework:

- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified.

4. Types of evidence or evidence-gathering protocol:

- reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding

5. Method of verification or validation:

- Surprise visit to the assessment location

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored

On the Job:

1. Each module will be assessed separately.
2. The pass criteria is as per norms set by WBSCTVE&SD in respect of Qualification Files
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills, understanding needs & requirements, and perform Soft Skills effectively:
 - Videos / portfolio of Trainees during OJT
4. Assessment of each Module will ensure that the candidate is able to:
 - Effective engagement with the stakeholders
 - Understand the working of various tools and equipment
 - Deliver the job assigned to him/her in conformity with job responsibility ascribed to Qualification File.

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

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