



QUALIFICATION FILE

Dairy Processing and Development Supervisor

☒ 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: 5

Submitted By:

Centurion University of Technology and Management

Bhubaneswar, At Ramachandrapur, Jatni,

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Section 1: Basic Details

1.	Qualification Name	Dairy Processing and Development Supervisor																			
2.	Sector/s	Agriculture																			
3.	Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i> NA	Qualification Name of existing/previous version: NA																		
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-05-AG-04289-2025-V1-CUTM	6. NCrF/NSQF Level: 5																		
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate (Dairy Processing and Development Supervisor)																			
8.	Brief Description of the Qualification	The Individual is able to understand the technologies of raw milk processing operations, get hands-on experience to prepare different dairy products, microbiological analysis and role of dairy starters in manufacturing fermented dairy products, monitor safety and analyze chemical quality of milk and milk products.																			
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	Entry Qualification & Relevant Experience: <table border="1"> <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>UG Diploma in Biology/ Microbiology</td> <td>NA</td> </tr> <tr> <td>2</td> <td>UG Certificate in Biology/ Microbiology</td> <td>1.5 years of relevant Experience</td> </tr> <tr> <td>3</td> <td>12th Grade pass</td> <td>3 years of relevant Experience</td> </tr> <tr> <td>4</td> <td>Relevant NSQF level 4 job role certified person</td> <td>3 years of relevant Experience</td> </tr> <tr> <td>5</td> <td>Relevant NSQF level 4.5 job role certified person</td> <td>1.5 years of relevant experience</td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	UG Diploma in Biology/ Microbiology	NA	2	UG Certificate in Biology/ Microbiology	1.5 years of relevant Experience	3	12 th Grade pass	3 years of relevant Experience	4	Relevant NSQF level 4 job role certified person	3 years of relevant Experience	5	Relevant NSQF level 4.5 job role certified person	1.5 years of relevant experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																			
1	UG Diploma in Biology/ Microbiology	NA																			
2	UG Certificate in Biology/ Microbiology	1.5 years of relevant Experience																			
3	12 th Grade pass	3 years of relevant Experience																			
4	Relevant NSQF level 4 job role certified person	3 years of relevant Experience																			
5	Relevant NSQF level 4.5 job role certified person	1.5 years of relevant experience																			
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	19	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable):</i> III																		
12.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA																			

13.	Training Duration by Modes of Training Delivery (<i>Specify Total Duration as per selected training delivery modes and as per requirement of the qualification</i>)	☒ Offline ☐ Online ☐ Blended <table border="1"> <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>184</td> <td>326</td> <td>60</td> <td>0</td> <td>570</td> </tr> <tr> <td>Online</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	184	326	60	0	570	Online	-	-	-	-	-
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)															
Classroom (offline)	184	326	60	0	570															
Online	-	-	-	-	-															
14.	Aligned to NCO/ISCO Code/s (<i>if no code is available mention the same</i>)	NCO 2015: 7513.9900																		
15.	Progression path after attaining the qualification (<i>Please show Professional and Academic progression</i>)	Professional progression: Dairy Plant Manager ↑ Dairy Processing and Development Supervisor																		
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	☐ Yes ☒ No URLs of similar Qualifications:																		
18.	Is the Job Role Amenable to Persons with Disability	☐ Yes ☒ No If "Yes", specify applicable type of Disability:																		
19.	How Participation of Women will be Encouraged	An increasing population of educated and working women needs inclusion, by formulating policy measures on skilling, job creation, and support services. Women comprises of >30% of the laborers among micro, small and medium enterprises. Opportunities for work that is proximate, child care facilities, safe transportation, gender acceleration plan and return to work (women to join back the workforce after motherhood) go a long way in increasing the proportion of women in the workforce.																		
20.	Are Greening/ Environment Sustainability Aspects Covered (<i>Specify the NOS/Module which covers it</i>)	☐ Yes ☒ No																		
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☐ No Colleges ☒ Yes ☐ 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: ParthaSarathi Mohanty Email: partha@cutm.ac.in Contact No.:9937033338 Website: https://cutm.ac.in	
23.	Final Approval Date by NSQC: 08.05.2025	24. Validity Duration: 3 years from the date of NSQC approval	25. Next Review Date: 08.05.2028

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	Understand and execute collection, validation, processing and storage of raw milk	CUTM/AGR/N120 1,V.1.0	Core	5	3	30	40	20	0	90	30	40	0	30	100	20%
2	Apply dairy starters and execute microbiological analysis of milk and milk products	CUTM/AGR/N120 2,V.1.0	Core	5	4	40	60	20	0	120	30	40	0	30	100	20%
3	Process different types of dairy products	CUTM/AGR/N120 3,V.1.0	Core	5	4	30	70	20	0	120	30	40	0	30	100	20%
4	Perform chemical quality testing of raw milk, processed milk and milk products	CUTM/AGR/N120 4,V.1.0	Core	5	3	30	60	0	0	90	30	40	0	30	100	20%
5	Ensure organizational health, safety and	CUTM/VSQ/N780 4,V.1.0	Non-Core	5	3	30	60	0	0	90	30	70	0	0	100	10%

	security for self and others															
6	Employability skills	DGT/VSQ/N0102, V.1.0	Non- Core	5	2	24	36	0	0	60	20	30	0	0	50	10%
Duration (in Hours) / Total Marks					19	184	326	60	0	570	170	260	0	120	550	100%

Elective NOS/s:

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.	NA															
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

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.	NA															
2.																
Duration (in Hours) / Total Marks																

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: 60 % (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.) sss

Section 3: Training Related

1	Trainer's Qualification and experience in the relevant sector (in years) <i>(as per NCVET guidelines)</i>	Bachelor in Agriculture/Dairy Technology with 3 years of Industry experience and 1 year training experience
2	Master Trainer's Qualification and experience in the relevant sector (in years) <i>(as per NCVET guidelines)</i>	Bachelor in Agriculture/Dairy Technology with 7 years of Industry experience and 1 year training experience
3	Tools and Equipment Required for Training	☒ Yes ☐ No <i>(If "Yes", details to be provided in Annexure)</i>
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) <i>(as per NCVET guidelines)</i>	Bachelor in Dairy Technology with 3 years of Industry experience and 1 year training experience
2.	Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Bachelor degree in Dairy Technology with 1 year online assessment experience
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	☒ Yes ☐ No <i>(If "Yes", details to be provided in Annexure)</i> Graduate in Agriculture or Science with 5 years of industry relevant experience and 1 year of Training experience
4.	Assessment Mode <i>(Specify the assessment mode)</i>	Offline / Online mode for special cases
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ 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): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 35 industry validation
5.	Estimated nos. of persons to be trained and employed: 600 in 3 years
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 <i>(Mandatory)</i>	Yes
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	Yes
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	Yes
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	Yes
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>	NA
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	NA
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	Yes
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	Yes
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	Yes
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	Yes
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	Yes
12.	Any other document you wish to submit:	NA

Annexure: 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.	Work in familiar, predictable, routine, situation of clear choice • Understand milk pricing policies • Knowledge on milk preservation system • Understand concepts and SOPs of equipment's related to dairy processing • Familiarize with the milk processing operations • Knowledge on production processes of standardized milks and dairy products • Awareness of dairy detergents and sanitization protocols • Concept of dairy starters and their propagation • Comprehensive understanding of microbiological principles relevant to dairy products • Principles of food safety including Hazard Analysis and Critical Control Points (HACCP) systems. • Chemical quality checking of milk and milk products	The Dairy Processing and Development Supervisor is aware of the clean milk production, milk processing operations, production of high-quality dairy products, assess safety by microbiological analysis of the sample products and monitor chemical quality control of the dairy products. Hence it falls under Level 5.	5
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual knowledge of field of knowledge or study. • Handle the raw milk and how to prevent them from spoilage. • How to store them for future use. • Chilling methods for transportation to different places • Different methods of milk preservation. • Understand the source of raw materials, process flow, receiving, processing and storage of collected milk • Various extrinsic and intrinsic factors affecting the quality of raw and processed milk • Clean milk production in dairy supply chain and good manufacturing practice (GMP). • Understand the microbiological procedures and Equipment used for controlling spoilage in milk and milk products. • Management of quality parameters within the prescribed limits as per regulatory guidelines. • Adulteration detection and control in dairy supply chain. • Significance of chemical quality control, quality assurance and total quality management in dairy industry.	Dairy Processing and Development Supervisor should have knowledge on dairying operations, managing milk-processing, production of diverse dairy products in hygienic conditions and conducting microbiological and chemical analyses of both milk and its derivatives. Refer to evidence provided in adjacent column. Hence it falls under Level 5	5

Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Recall and demonstrate practical skill, routine and repetitive in narrow range of application ● Maintain and document records of processing activities ● Read the relevant literature to get the latest updates about the field of work ● Contribute to improvement initiatives to enhance efficiency and optimize process protocol ● Listen attentively to understand the shared information/ instructions ● Communicate concisely, clearly and politely ● Plan and prioritize tasks to ensure timely completion ● Evaluate all possible solutions to a problem to select the best one ● Co-ordinate with the co-workers to achieve the work objectives ● Identify possible disruptions to work and take appropriate preventive measures ● Implement quick decisions to deal with workplace emergencies/ accidents	Dairy Processing and Development Supervisor should possess practical skills and routine involvement in processing clean milk from procurement to processing into different dairy products aseptically as well as accomplishing microbial and chemical analysis of the milk and milk products Refer to evidence provided in adjacent column. Hence it falls under Level 5.	5
Broad Learning Outcomes/Core Skill	Language to communicate written or oral, with required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding, understanding of social and natural environment ● Maintain and document records of processing activities ● Communicate concisely, politely and professionally ● Read the relevant literature to learn about the latest developments in the field of work ● Listen attentively to understand the shared information/ instructions ● Plan and prioritize tasks to ensure timely completion ● Co-ordinate with the co-workers to achieve the work objectives ● Evaluate all possible solutions to a problem to select the best one ● Identify possible disruptions to work and take appropriate preventive measures ● Adhere to GMP, GHP and HACCP protocols ● Interpret concept and SOPs of equipment's in working place.	Dairy Processing and Development Supervisor would be able to communicate effectively, adhere to relevant regulations and standards governing dairy processing and food safety, basic understanding of organization procedures and policies and clean working environment. Refer to evidence provided in adjacent column. Hence it falls under Level 5	5

Responsibility	Responsibility for own work and learning • Milk procurement and processing operations • Production of standardized milks and various dairy products • Dairy starters and microbiological enumeration of processed milk products • Chemical quality analysis of the milk and milk products • Maintain safety and hygiene at work place	Dairy Processing and Development Supervisor should have the responsibility for own work and learning. Refer to evidence provided in adjacent column. Hence it falls under Level 5	5
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Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 25

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Weighing balance (10 kg)		1
2	Weighing balance (200 g)	mg scale convertible	1
3	pH meter	0.05 Accuracy	1
4	Lactometer	BIS lactometer	3
5	Portable milk analyzer	FAT, SNF, Water and SP. Gr. data	1
6	Refrigerator	300 L Capacity (Double Door)	1
7	Cream separator (200 litre/hr)		1
8	Milk pasteurization unit (200 litre/hr)	Chilling Unit, Milk Pasteurizer with FDV Valve, Homogenizer, Boiler, Storage Tank and Accessories (SS 304)	1 Set
9	BMC cooler (500 litre capacity)	SS 304	1
10	Stainless steel milk can (40 litre capacity)		10
11	Temperature controlled incubator	Accuracy ± 0.5 °C with 300 L Capacity and Digital Display	1
12	Kova machine	300 Lt Capacity (SS 304, Motor Operated)	1
13	Packaging machine and accessories	500 Pouches/ Hr	1
14	Sealing machine and accessories		1
15	Autoclave	Horizontal Autoclave (200 L Capacity)	1
16	Laminar air flow	4 feet working space	1
17	Compound microscope		1
18	Microwave	30 Lt	1
19	Hot plate magnetic stirrer	1000 RPM	1
20	Ostwald viscometer		1

21	Stalagmometer		1
22	Pycnometer		1
23	Hot air oven	200 L Capacity with Temperature control, digital Display	1
24	Water bath Shaker (Temperature control)	150 L capacity	1
25	Gerber centrifuge	12 sample slots	1
26	Vortex machine		1
27	UV Visible Spectrophotometer		1
28	Glass desiccator	50 L Capacity	1
29	Kjeldahl apparatus		1
30	Muffle furnace		1
31	Vacuum sealing machine		1
32	Soxhlet assembly and accessories		1 Set
33	Heating mantle (1 litre)	1-2 L	1
34	Deep freezer (-80 C)		1
35	Lyophilization unit		1
36	Operating Manual		
37	Personal Protective Equipment (PPE)		
38	First aid kit		5 sets

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Personal Computer
2. Projection Equipment
3. White Board
4. Board Marker
5. PowerPoint Presentation

6. Participant's Handbook.

Annexure: 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	Arogya Millets Producer Company Limited	Usharani Ganthakora	Director	Arogya Millets Producer Company Limited Office Address: Flat no.6, first floor of SBI, Opp: Police station, Kothavalasa, Vizianagaram, Andhra Pradesh, PIN: 535183	8639277205	arogyamilletsfpo@gmail.com	-
2	ANGARALAMMA SAHAJA FARMERS PRODUCER COMPANY LIMITED	Chiranjeevi Neechuka	Director	Office Address: - Pedakarja, Gummalexmi Puram Vizianagaram, Vizianagaram, Andhra Pradesh - 535523	-	artskurupam@yahoo.com	-
3	BLOSSOM EDUCATION AND SOCIAL TRUST	Maheebub Shariff	Chairman	Office Address: At- Municipality Square, Ramachandrapur Bazar PO- Jatni, Dist- Khordha State- Odisha, Pin- 752050	8280172557	-	-

4	Bishwa Seva Pratishtan	Arun Kumar Nayak	Secretary	Bishwa Seva Pratishtan Registration No: 20489/39, sundargarh (ORISSA) Bargaon ITI Campus, At/Po- Bargaon District-Sundargarh Odisha-770016	9777354017	dr.aknayak17@gmail.com	-
5	BLISS Foundation	Tirtha Chandan Patra	Chairman	Registered Office Address: C/O Joel Raju Gupta, Nehru Nagar, Second Lane, Near Balaji Sweet, Jyoti Foundry, Rayagada – 765001	9437018337	foundationbliss@gmail.com	-
6	Bapuji Rural and Development Society	Tara Srinivas	Project Head	Registered Office Address: Madhavadhara, Visakhapatnam – 530018, Andhra Pradesh	9348385804	tsreddy74@gmail.com	-
7	Choudhury Agro Industry	Susil Dwari	COO	Gundadwar, Badamba, Odisha	8249337429	susildwari@gmail.com	-
8	Eastern Ghat Farmer Producer Pvt Ltd	Pasupuleti Subbarao	Board of Director	Chinna korada street, srikakulam, AP	7569570724	easternghatsfpci@outlook.com	-
9	FRIEND'S ASSOCIATION FOR RURAL RECONSTRUCTION (FARR)	Bijay Kumar Baboo	Chairman	Registered Office Address: Muniguda, Muniguda, Rayagada, Odisha – 765020	6670 230105	farrbkumar@gmail.com	-

10	General Aeronautics Innovation in Aviation	Abhisek Barman	CEO and Founder Director	F86, First Floor, Vinyas Building, ITI Campus, Doorvaninagar, KR Puram, Bangalore- 560016	-	info@generalaeronautics.com	-
11	Gramasiri Farmer Producer Company Ltd	R. Gouri Naidu	Chief Executive Officer	Baskar Colony, Chanapuram Limits,SBI Staff colony,Srikakulam	6300976023	gramsirifpo@gmail.com	-
12	Ganapati Agro	Prasant Kunal	Managing Director	Bhagabanpur,Patrapada,BBSR	9439085732	prasantkunal1994@gmail.com	-
13	Gogu Kiranal Producer Company Ltd	N.Srinivas Rao	Chief Executive Officer	Bejipuram Village and post ,Laveru Mandal, Srikakulam	9573401471	gogukiranalufpo@gmail.com	-
14	Green Bird Farmer Producer Company Ltd		Board of Director	Chinna korada street, srikakulam, AP	9550806518	greenbirdfpcl@gmail.com	-
15	Gram Tarang Inclusive Development Services Pvt. Ltd	B. Venkata Sivananda Kumar	Managing Director	Door No: 39-33-33, 1st Floor, B-107, Vuda Colony, Madhavadhara, Visakhapatnam - 530018	7382092355	venkat@gramtarang.org	-
16	Gram Tarang Technology	B. Venkata Sivananda Kumar	Director	Admin Office: D No-50-42/21/4, Flat No 501, P& T Colony, Seethammadhara, Vishakhapatnam - 530013 Registered Office: B107 KSR Pleasant Valley, Madhavadhara, Vishakhapatnam - 530018	7382092355	venkat@gramtarang.org	

17	General Aeronautics	Abhisek Burman	CEO	Doorvaninagar, KR Puram, Bangalore		info@generalaeronautics.com	-
18	Jagannath Agro Industry	Subrat Sahu	CEO	Jagatpur Industry Estate, Jagatpur, Odisha	9861329308	sahu.sks@gmail.com	-
19	Kathya Agro Industry Pvt Ltd	Diptimayee Sinha	CEO	Tankapani Road, Bhubaneswar	9861805588	diptilohita@gmail.com	-
20	Krisivala Mitra Agriculture and Allied Producer Mutually Aided cooperative Society Ltd	K.Lakhsamana Rao	Chief Executive Officer	Divanjipeta village, Srikakulam, AP	9963203885	lakhsamanaraokoti@gmail.com	-
21	Karsaka Mitra Agriculture and Allied Producers Mutually Aided Cooperative Society Ltd	K.Sriramulu	Chief Executive Officer	Laveru Mandal, Srikakulam	9704021677	kallasriram86@gmail.com	-
22	Kulamani Agro Industry	Kulamani Bastia	Deputy Manager	Malia Chakka, Asureswar, Odisha	8270343670	bastia_657@gmail.com	-
23	Maa Byaghradevi Agro Industry	Sunil Patnaik	Director	Dadaralunda, Mujagada, Ganjam, Odisha	9439913653	patnaiksunil1@gmail.com	-

24	Mahalaxmi Agro Industry	Biraja Prasad Senapati	Manager	Aul, Odisha	9778862233	birajapr007@gmail.com	-
25	Rivan Smart Manufacturing Pvt. Ltd	Arun Manohar	CEO	Rollawaka Village, Vizianagaram	7751053118	amgurram@cutmap.ac.in	-
26	Rameswar Agro Industry Pvt. Ltd	Ranjit Pradhan	Manager	Bhubaneswar, Odisha	7735321383	ranjitpradhan995@gmail.com	-
27	Sagarmal Fisheries Producer Company limited	Duvvarapu Venkateswarelu	Board of Director	Gandhinagar Street, Mandal, Srikakulam, AP	9494234519	sagarmalafpcl@outlook.com	-
28	Samridhi Sagara Mitra Producer company ltd	M. Pattabhi	Chief Executive Officer	Palakonda Road, Srikakulam	9177809166	samridhisagarmitrafpo@gmail.com	-
29	SB Agro Vision Pvt. Ltd	Ankita Nayak	Manager	Phulachhachuni, Odisha	7008112866	nayakankita95@gmail.com	-
30	Shreejew Agro Industries Corporation Ltd	Masang Murmu	Manager	Badagada village, Pandav Nagar, Bhubaneswar	9337586486	masang2011@gmail.com	-
31	Shakti Organization Catalysing Sustainable Development	Akhil Ranjan Panda	CEO	Sai Priya Nagar, Rayagada	9437125605	shaktiorg@gmail.com	-
32	Sun Enterprises	Surravaram Raveender	Managing Partner	Gajpati, Odisha	9492220567	sunenterprisesbbsr@gmail.com	-

33	Udyam Vikash Farmer Producer Company Ltd	Tara Srinivas Mobile	Project Head	ADS Compound, Gumma, Gaiba Road, Gajapati, Odisha, 761207	9348385804	tsreddy74@gmail.com	-
34	Vaksana Farmer Production Company Ltd	Boyina Mangama	Board of Director	Chinna korada street, srikakulam, AP	8985158518	vaksanafpcl@gmail.com	-
35	Vinna Producer Company Ltd	Gadhipalli Chinnayya	Director	Office Address: LIG 147, 1St Floor, Vuda Colony Baba Metta Vizianagaram AP 535002	-	gudipatirkrishna@yahoo.co.in	-

Annexure: 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	100	100	40	40	-	-
2026	200	200	160	160	-	-
2027	300	300	200	200	-	-

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
NA													

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. NA
- 2.

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: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

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	☐ Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	
2	☐ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	
3	☐ Showing Practical Demonstrations to the learners	NA	
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	
5	☐ Tutorials/ Assignments/ Drill/ Practice	NA	
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	
7	☐ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	

Annexure: Detailed Assessment Criteria

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

NOS / Module Name	Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
CUTM/AGR/N1201: Understand and execute collection, validation, processing and storage of raw milk.	<i>Hygienic milk production and milk pricing policies</i>	9	10	-	8
	PC1. Milk collection and pricing system based on fat content, volume, total milk solids, species of milch animals and cost of milk production	3	2	-	1
	PC2. Clean milk production practices in dairy farm	2	3	-	3
	PC3. Hygienic production of milk by inspecting raw milk for fulfilment to physical, chemical, and microbiological parameters	2	3	-	2
	PC4. Milk preservation system	2	2		2
	<i>Milk procurement and processing operations with complete documentation</i>	21	30	-	22
	PC5. Sampling and lactometer reading of procured milk to determine quality following standard operating protocols	1	3	-	2
	PC6. Platform tests (COB, alcohol, sediment, organoleptic evaluation etc.) related to appearance, smell, acidity, consistency, color, temperature etc.	4	6	-	4
	PC7. Filtration and checking microbial quality of milk according to standard protocol	2	2	-	2
	PC8. Process of separation through separator to separate cream from milk according to standard protocol	2	2	-	2
	PC9. Homogenization of milk in homogenizer to obtain desirable size of milk fat globule according to standard protocol	2	2	-	2
	PC10. Milk pasteurization according to standard protocol	2	4	-	2
	PC11. Milk cooling in chilling tank until packing	2	2	-	2
	PC12. Standardized and flavored milks (fruit, chocolate etc.) following standard protocol	2	3	-	2

	PC13. CIP cleaning of valves, pipes and pipeline circuits with proper process operations after product manufacture	2	3	-	2
	PC14. Documentation of processed milk related to parameters analyzed, milk storage conditions, process of analysis, equipment usage etc.	2	3	-	2
	NOS Total	30	40	0	30
CUTM/AGR/N1202 : Apply dairy starters and execute microbiological analysis of milk and milk products	<i>Selection and importance of dairy starters</i>	<i>10</i>	<i>12</i>	<i>0</i>	<i>11</i>
	PC1. Concept and role of dairy starters in dairy and food fermentations	2	-	-	2
	PC2. Starter culture purity check: Gram's staining and catalase test	2	3	-	2
	PC3. Starter activity check: Dye reduction tests	2	3	-	3
	PC4. Dairy starter cultures propagation under stern hygienic conditions	2	3	-	2
	PC5. Preservation of dairy starters	2	3		2
	<i>Microbiological analysis of milk and milk products</i>	<i>20</i>	<i>28</i>	<i>-</i>	<i>19</i>
	PC6. Preparation and sterilization of agar media/broth (specific (MRS/M17/PDA/Mac-Conkey)/non-specific (Nutrient agar) with other pre-requisites as per standard operating procedure	3	3	-	2
	PC7. Serial dilutions with the sample as per standard protocol	1	2	-	1
	PC8. Aseptic techniques (streak/spread/pour plate) for diluted sample in prepared media plates to isolate single colonies	2	4	-	2
	PC9. Identify various morphological characteristics of selected, desirable isolated cultures	2	3	-	2
	PC10. Gram's staining for microscopical examination of the specific culture	2	3	-	2
	PC11. Biochemical analysis of isolated dairy cultures	4	5	-	4
	PC12. Preservation selected pure cultures in appropriate broth/glycerol for long term use	3	3	-	2
	PC13. Microbial enumeration techniques of dairy foods using specific microbial medium	3	5	-	4
	NOS Total	30	40	-	30
	<i>Processing and sustaining quality in manufacturing dairy products</i>	<i>30</i>	<i>40</i>	<i>0</i>	<i>30</i>

CUTM/AGR/N1203: Process different types of dairy products	PC1. Indian dairy products and their classification	2	2	-	2
	PC2. Preparation and manufacture of khoa	2	2	-	2
	PC3. Preparation and manufacture of khoa based sweets (burfi, peda, kalakand, rabidi, milk cake etc.)	2	3	-	2
	PC4. Preparation and manufacture of channa	2	3	-	2
	PC5. Preparation and manufacture of channa based sweets (gulab jamun, rasomalai, rasogolla, rajbhog etc.)	2	3	-	2
	PC6. Preparation of paneer and yield calculations	2	2	-	2
	PC7. Preparation of fermented dairy products (dahi, lassi and mishti dahi)	3	4		3
	PC8. Preparation of cereal based dairy products (kheer and payasam)	2	2		2
	PC9. Cream and cream standardization	2	3	-	2
	PC10. Production of butter	2	4	-	2
	PC11. Production of ghee from cream and butter	2	3	-	2
	PC12. Utilization of butter milk and ghee residues	2	3	-	2
	PC13. Accomplish packaging and proper storage of prepared dairy products	2	3	-	2
	PC14. Data documentation for type of milk used, milk received from milk collection centers, BMCs, chilling centers etc., information on raw materials, packaging materials, temperature records of cold room/ storage tanks, pasteurizer, chillers and packaging machine	2	2	-	2
	PC15. Collect and study market information of dairy products	1	1	-	1
	NOS Total	30	40	0	30
CUTM/AGR/N1204 : Perform chemical quality testing of raw milk, processed milk and milk products	<i>Chemical quality checking of raw and processed milk</i>	<i>18</i>	<i>26</i>	<i>0</i>	<i>18</i>
	PC1. Demonstrate preparation and standardization of dairy chemical reagents	2	2	-	2
	PC2. Calculate density and specific gravity of milk at a fixed temperature by using standard formula.	2	2	-	2

	PC3. Calculate viscosity and surface tension of milk at a fixed temperature by using standard formula	2	2	-	2
	PC4. Impact of essential chemical parameters such as pH, titratable acidity and peroxide value on milk quality	2	3	-	2
	PC5. Detect the presence of sugar in milk by resorcinol test	1	2	-	1
	PC6. Detect the presence of starch in milk by iodine test	1	2	-	1
	PC7. Detect the presence of salt in milk	1	2	-	1
	PC8. Detect the presence of neutralizer in milk by rosolic acid test	1	2	-	1
	PC9. Detect the presence of detergent in milk by methylene blue reduction test	2	2	-	1
	PC10. Fat content in pasteurized milk by using Gerber method or using a milk analyzer	2	3	-	2
	PC11. Solids-not-fat content in pasteurized milk by using lactometer or using a milk analyzer	1	2	-	1
	PC12. Phosphatase test to check the pasteurization efficiency	1	2	-	2
	<i>Chemical quality checking of processed dairy products</i>	<i>12</i>	<i>14</i>	<i>0</i>	<i>12</i>
	PC13. Moisture and fat content in ghee and butter using standard methodology	2	2	-	2
	PC14. Salt and curd content in butter using standard methodology	2	2	-	2
	PC15. Free fatty acid content in ghee using standard methodology	1	2	-	2
	PC16. Fat, moisture and protein content of chhana and paneer using standard methodology	2	2	-	2
	PC17. Fat, moisture and protein content of khoa using standard methodology	1	2	-	1
	PC18. Acidity and pH of dahi and lassi using standard methodology	2	2	-	1
	PC19. Fat, protein and lactose content of dahi and lassi using standard methodology	2	2	-	2
	NOS Total	30	40	0	30
CUTM/VSQ/N7804,					
	<i>Maintain personal hygiene</i>	<i>10</i>	<i>20</i>	<i>-</i>	<i>-</i>

V.1.0: Ensure organizational health, safety and security for self and others	PC1. wash hands, legs and face with soap/alcohol based sanitizer at reasonable intervals	2	5	-	-
	PC2. wash the worn clothes with soap and sundry before use next time	2	5	-	-
	PC3. ensure the face is covered with mask or three layers of cloth-piece	2	5	-	-
	PC4. follow the workplace sanitization norms including distancing from sick people	4	5	-	-
	<i>Maintain clean and safe workplace</i>	10	34	-	-
	PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor	2	6	-	-
	PC6. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc to avoid hazards	2	5	-	-
	PC7. sanitize equipment, tools and machinery before and after use	2	6	-	-
	PC8. dispose waste safely and correctly in the designated area	2	6	-	-
	PC9. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed	1	6	-	-
	PC10. follow government / workplace advisories in case of outbreak of any disease/disaster	1	5	-	-
	<i>Administer appropriate emergency procedures</i>	10	16	-	-
	PC11. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements	2	6	-	-
	PC12. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques	2	5	-	-
	PC13. report details of first aid administered in accordance with workplace procedures	6	5	-	-
NOS Total		30	70	0	0
DGT/VSQ/N0102:Employability Skills	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-

PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. practice the 21st Century Skills such as Self- Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-

PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline/online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and	-	-	-	-

	requirements				
	NOS Total	20	30	-	-
	TOTAL	170	260	0	120

Annexure: Assessment Strategy

Annexure: Assessment Strategy

1. Assessment System Overview:

- Batches would be assigned to Assessment Agencies as per the sectors for conducting assessment on CUTM portal or by email.
- Assessment agencies will have to give a confirmation regarding the assigned batches and share the particular Question set to Centurion University.
- Assessment agency deploys the ToA certified Assessor for conducting the assessment from the pool of verified assessor by Centurion University.
- Centurion University will monitor the assessment process and keep the records online or offline (wherever needed)

2. Procedure at Testing Centre:

- Check the Assessment location, date and time
- Maximum batch size will be of 30.
- Assessor will Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Assessor will ensure all the equipment's and required materials are available at the testing centre.

3. Assessment Quality Assurance:

- Question bank is created by the Subject Matter Experts (SME) of Assessment Agencies verified by Centurion University.
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified & trainer must be ToT Certified
- Surprise visit would be done time to time.

4. Assessment Evidence collection:

- Geo tagged photographs of assessment sessions would be captured by the Assessor.
- Video call verification will be done by Centurion University during assessment and keep the recorded videos.

5. Document storing:

- Hard copies will be stored in the respective files.
- Some of documents will kept in both soft copies and hardcopies.
- All the assessment related data will be kept in CUTM portal.

On the Job:

1. Each module will be assessed separately.
2. The candidate must score 70% in each module to successfully complete the OJT.
3. Acquiring job-specific technical skills related to the industry or field.
4. Learning how to operate and maintain relevant tools, equipment, and machinery.
5. Gaining proficiency in tasks and procedures directly related to the job role.

6. Developing problem-solving skills by addressing real-time challenges encountered on the job.
7. Learning to troubleshoot issues and find practical solutions.
8. Enhancing verbal and written communication skills in a professional context.
9. Learning how to communicate effectively with colleagues, superiors, and clients.
10. Learning to prioritize tasks and manage time efficiently to meet deadlines.
11. Understanding the importance of time management in a work setting.
12. Developing skills related to customer interaction, satisfaction, and conflict resolution.
13. Understanding how to address customer needs and provide excellent service.

Annexure: 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