



QUALIFICATION FILE

Tractor Operator

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

Submitted By:

Agriculture Skill Council of India

Unit No. 101, First Floor, Greenwoods Plaza, Block 'B', Greenwoods City, Sector 45, Gurugram -122009, Haryana.

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Section 1: Basic Details

1.	Qualification Name	Tractor Operator																
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 qualification: QG-04-AG-00283-2023-V1.1-ASCI & Version 1.1	Qualification Name of existing/previous version: Tractor Operator															
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-AG-03565-2025-V2-ASCI & Version 2.0	6. NCrf/NSQF Level: 4															
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 Tractor Operator operates a tractor for various farm operations, uses additional machinery and implements according to the task, and performs basic repair and maintenance to keep the tractor operational.																
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="margin-left: 40px;"> <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>12th or equivalent</td> <td></td> </tr> <tr> <td>2</td> <td>10th Class Pass</td> <td>3 years of relevant experience in Agriculture and allied sectors</td> </tr> <tr> <td>3</td> <td>Previous NSQF Level 3.5</td> <td>1.5 years of relevant experience in Agriculture and allied sectors</td> </tr> <tr> <td>4</td> <td>Previous NSQF Level 3.0</td> <td>3 years of relevant experience in Agriculture and allied sectors</td> </tr> </tbody> </table> b. Age: 18		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12 th or equivalent		2	10 th Class Pass	3 years of relevant experience in Agriculture and allied sectors	3	Previous NSQF Level 3.5	1.5 years of relevant experience in Agriculture and allied sectors	4	Previous NSQF Level 3.0	3 years of relevant experience in Agriculture and allied sectors
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																
1	12 th or equivalent																	
2	10 th Class Pass	3 years of relevant experience in Agriculture and allied sectors																
3	Previous NSQF Level 3.5	1.5 years of relevant experience in Agriculture and allied sectors																
4	Previous NSQF Level 3.0	3 years of relevant experience in Agriculture and allied sectors																
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	13	11. Common Cost Norm Category (I/II/III) (wherever applicable): I															

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/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	Operate Tractor for farm operations	AGR/N1101 (v 3.0)	Core	4	5	55	95			150	30	40		30	100	45	
2	Perform regular maintenance and basic repair of tractor	AGR/N1102 (v 3.0)	Core	4	2	20	40			60	30	40		30	100	35	
3	Maintain health and safety at the workplace	AGR/N9903 (v 4.0)	Non-Core	4	1	15	15			30	40	25		35	100	15	
4	Employability Skills (60 Hours)	DGT/VSQ/N 0102 (v 1.0)	Non-Core	4	2	60				60	20	30			50	5	
5	OJT (Mandatory)				3			90		90							
Duration (in Hours) / Total Marks						13	150	150	90		390	120	135		95	350	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: ____% (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)	<p>12th Class with 5 years of relevant industry experience in Agriculture Farm Machinery*</p> <p>*Class 12th with Science and having any Certificate course in Driver or Tractor Mechanic Training from a recognised organisation</p> <p>OR</p> <p>Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honorable Discharge/Pension**</p> <p>**SSC would consider a relaxation/waiver of sector specific experience on case to case basis.</p> <p>OR</p> <p>Diploma (Mechanical / Agriculture engineering/Tractor Operator) with 3 years of relevant industry experience in Agriculture Farm Machinery</p> <p>OR</p> <p>ITI (Mechanical/ Agriculture engineering/Tractor Operator) with 3 years of relevant industry experience in Agriculture Farm Machinery</p> <p>OR</p> <p>Graduate (Agriculture) with 1 year of relevant industry experience in Agriculture Farm Machinery***</p> <p>***For school Program minimum qualification of Trainer should be Graduate (Agriculture/Physics). Their Teaching experience will be considered industry experience</p> <p>OR</p> <p>Certificate (CITS Pass- Tractor Mechanic Certificate) with 1 year of relevant industry experience in Agriculture Farm Machinery</p> <p>OR</p> <p>B.Tech (Mechanical / Civil) with no required industry experience</p>
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	<p>5 years of training experience in Agriculture Farm Machinery after Graduation (Agriculture) with 1 year of relevant industry experience in Agriculture Farm Machinery</p> <p>OR</p> <p>5 years of training experience in Agriculture Farm Machinery after B.Tech. (Mechanical/Civil)</p>
3.	Tools and Equipment Required for Training	<p><input checked="" type="checkbox"/>Yes <input type="checkbox"/>No (If "Yes", details to be provided in Annexure)</p>
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	<p>NA</p>

Section 4: Assessment Related

Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Graduation (Agriculture/ Agriculture Engineering Farm/ Mechanical engineering Machinery) with 5 years of relevant industry experience in Farm machinery repair and maintenance and related experience OR Post-Graduation (Agriculture/ Agriculture Engineering/ Mechanical Engineering/ Farm Machinery and related streams) with 2 years of relevant industry experience in Farm machinery repair and maintenance and related experience OR PhD (Agriculture / Agriculture Engineering/ Farm engineering and related streams) with 1 year of relevant industry experience in Farm machinery repair and maintenance and related experience
Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Diploma/Graduate (It is mandatory for a proctor to have technical knowledge/IT knowledge Once a proctor has been on-boarded by any AA, they are oriented about skill ecosystem along with do's and don'ts .)
Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Post-Graduation (Agriculture/ Agriculture Engineering/ Mechanical Engineering/ Farm Machinery and related streams) with 10 years of relevant industry experience in Farm machinery repair and maintenance and related experience
Assessment Mode <i>(Specify the assessment mode)</i>	Offline
Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input checked="" 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): Yes
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: 5
5.	Estimated nos. of persons to be trained and employed: 4000

6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Awaited from Department of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare
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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>Annexure-1</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Annexure-2</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Annexure-5</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Annexure-6</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>	
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Annexure-7</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	Tractor Operator (L4), Custom Hiring Service Provider (L5)
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Annexure-8</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	<i>Annexure-9</i>
12.	Any other document you wish to submit:	

Annexure 1: Evidence of Level

NSQF Domain	NSQF Domain	NSQF Domain	NCrF/NSQF Level
Process	<ul style="list-style-type: none"> ● Perform pre-start checks and ● Make the necessary adjustments ● Operate the tractor to carry out farm operations 	A Tractor Operator operates a tractor for various farm operations, uses additional machinery and implements according to the task, and performs basic repair and maintenance to keep the tractor operational.	4
Professional knowledge	<ul style="list-style-type: none"> ● Mentor apprentice ● Administer appropriate emergency procedures ● Maintain clean and safe workplace 	The user/individual on the job needs to know and understand the code of business conduct , job responsibilities and duties, standard training tools and procedures and organization methods for pre demonstration check-ups.	4
Professional skill	<ul style="list-style-type: none"> ● Carry out repair and maintenance ● Practice inclusion at the workplace ● Effective communication at the workplace 	The Job holder should have professional skills including: Decision making, Planning and Organising, Customer centricity, Problem solving, Analytical Thinking, Critical thinking.	4
Core Skills	<ul style="list-style-type: none"> ● Optimise resource utilisation ● Prepare to carry out repair and maintenance ● Perform waste management 	The job holder must have Core Skills which will include: Writing Skills, Reading Skills, Oral and Communication (Listening and Speaking).	4
Responsibility	<ul style="list-style-type: none"> ● The user/individual must know and understand how to identify and study the different parts of a tractor ● identify tools and measuring instruments required ● carry out routine maintenance of tractor, perform fluid and lubricant checks, check the 	A Tractor Operator operates a tractor for various farm operations, uses additional machinery and implements according to the task, and performs basic repair and maintenance to keep the tractor operational.	4

	working of all gauges <ul style="list-style-type: none"> ● dismantle engine parts and check their working, assess the wear and tear of engine components ● check the working and performance of transmission system, check the working and performance of hydraulics system ● check the working and performance of auto-electrical system, clean and lubricate the parts, assemble parts ● perform prestart checks, maintain a clean and efficient workplace ● render appropriate emergency procedures. 		
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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	Video Recording Equipment	Nos	1
2	Taps and Dies complete set in a box (metric) with handle.	set	1
3	Ring spanner	Set	1
4	Spanner adjustable (pipe wrench)	Nos	1
5	Hydrometer	Nos	1
6	Torque wrench	Set	1
7	Tractor	No	1
8	Steel Rule	No	1
9	Feeler gauge	set	1
10	Hand files	Set	1
11	Engineer"s square	Nos	1
12	Set of Screw driver	No	1

13	Divider spring joint	Nos	1
14	Scriber	Nos	1
15	Drift punch copper	Nos	1
16	Hacksaw frame adjustable	Nos	1
17	Allen Key set of 12 pieces	set	1
18	Pick punch	Nos	1
19	Hand vice	Nos	1
20	Drill electric hand	Nos	1
21	Air Compressor	Nos	1
22	Centre punch	Nos	1
23	Chisels Cross cut	Nos	1
24	Chisel cold	Nos	1
25	Hand reamer adjustable	Nos	1
26	Tachometer	Nos	1
27	Cross peen Hammer	Nos	1
28	Spanner D E	Set	1
29	Mallets (Wooden/plastic)	Nos	1
30	Ball peen Hammer	Nos	1
31	Electric arc welding set portable	Nos	1
32	Spanner (adjustable)	Nos	1
33	Horses and wheel choke	Nos	1
34	Hydraulic jack	Nos	1
35	Oil can	Nos	1
36	Grease Gun Hand/Pneumatic	Nos	1
37	Spanners socket of 8 with handles, T bar and ratchet	Nos	1
38	Chain and Pulley block	Nos	1
39	Work bench with 4 bench vices 12 cm jaw	Nos	1
40	Any one- Tractor Trailer/ Attachment based on the geography (Ex; Attachment such as Plough, Seed Drill, Land Leveller etc)	Nos	1
41	Harrow	Nos	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard

2. Markers

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	Mahindra and Mahindra Ltd Farm division	Soumitra Choudhury	Head- Training	Nagpur	9766699020	Choudhury.soumitra@mahindra.com	
2	Farm Implements India Pvt Ltd	D S Balachandra Babu	Managing Director	Chennai	4428261676	Balachandra.babu@gmail.com	
3	Varsha Agri Business Centre for Development Ltd	Mallamma	Business Development	Chitradurga	9448396283	Info.abc4d.in	
4	K.K. Wagh College of Agricultural Engineering & Technology	Prof. Anil Nivruthi Shinde	Assistant Professor	Nashik	8975388803	anilg.shinde5@gmail.com	
5	Directorate of Agriculture Engineering, Bhopal	Dr Rajeev Chaudhary	Director Agricultural Engineering	Bhopal	7552583313	dagebho@mp.gov.in	

Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training PC.	Estimated Employment Opportunities	Estimated Training PC.	Estimated Employment Opportunities	Estimated Training PC.	Estimated Employment Opportunities
2025-26	1300	100	100	10		
2026-27	1350	100	100	10		

2027-28	1350	100	100	10		
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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
3.0	2024-25	0	0	0	0	0	0	0	0	0	0	0	0
3.0	2023-24	90	90	90	73	40	40	40	32	0	0	0	0
3.0	2022-23	145	92	86	80	32	32	30	29	0	0	0	0

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. CSR
2. PMKVY
3. FEE BASED

Content availability for previous versions of qualifications:

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: Hindi and English

Annexure 5: 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/N1101: Operate tractor for farm operations	<i>Perform pre-start checks and maintenance</i>	10	15		10
	PC1. inspect the tractor for any signs of cracks/ damages				
	PC2. check the engine oil, hydraulic oil, transmission oil, steering box oil, coolant and fuel levels				
	PC3. inspect for any kind of fluid and oil leakage				
	PC4. examine the tyres for prescribed air pressure and any cuts or breaks in the tread or sidewalls				
	PC5. check the tie rod ends, steering spindles, front axle pivot pins, clutch linkages, throttle linkage hand, foot linkage and all hinges for adequate lubrication				
	PC6. examine the battery has clean connections, is firmly placed and sufficiently charged for field operations				
	PC7. check the fan's drive belt for the recommended level of tension				
	PC8. test the tractor head and tail lights for functioning as expected				
	PC9. check nuts, bolts and other parts for the prescribed torque and locking				
	PC10. test all gauges and controls for correct functioning				
	PC11. measure wheel toe-in using a wheel toe gauge				
	PC12. carry out repair and maintenance for any issues identified during checks				
	PC13. maintain the record of pre-start checks and maintenance				
	PC14. Familiarize different make & models of tractors				
	<i>Make the necessary adjustments</i>	10	10		10
	PC15. adjust brake and clutch free play as per the requirement				
	PC16. adjust wheel toe alignment as per the operator's manual				
	PC17. select appropriate tractor implements according to the task and field conditions				
PC 18. Familiarize with reading the digital analogue to make informed decisions					
PC19. attach implements to tractor to utilise its Power Take-Off					

	(PTO)				
	PC20. adjust the tractor's 3-point linkage				
	<i>Operate the tractor to carry out farm operations</i>	7	10		5
	PC21. familiarize Implement adjustment in Tractor driving PC22. operate PC and DC levers as per the need and in combination for mixed control / blending				
	PC23. use ballasting and isolator valve as per the requirements				
	PC24. engage differential lock to regulate the movement of wheels				
	PC25. select appropriate gear and engine speed according to the field conditions				
	PC26. ensure appropriate field conditions for operating the tractor				
	PC27. perform primary and secondary tillage				
	PC28. level the farmland using tractor				
	PC29. perform intercultural operations				
	PC30. carry out fertilizer side-dressing of crop				
	PC31. haul the harvested crop using the tractor				
	PC32. operate tractor with or without trailer according to the task				
	PC33. maintain the prescribed Power Take-Off (PTO) speed PC34. Calculate the hiring charges based on the duration of use, work type, and any additional costs (e.g., fuel, driver charges, and maintenance)				
	<i>Optimise resource utilisation</i>	3	5		5
	PC35. optimise usage of material including water in various tasks/ activities/ processes				
	PC36. optimise usage of water/ electricity/energy in various tasks/ activities/ processes				
	PC37. plug spills/ leakages and escalate to the appropriate authority if unable to rectify				
	NOS Total	30	40		30
AGR/N1102: Perform regular maintenance and	<i>Prepare to carry out repair and maintenance</i>	15	20		10
	PC1. identify the repair and maintenance needs of the tractor such as broken nut/bolts, damaged hoses etc.				
	PC2. organise manufacturer-approved spare parts,				

basic repair of tractor	tools and equipment to carry out repair and maintenance				
	PC3. follow the instructions given in the operator's manual to carry out repair and maintenance				
	<i>Carry out repair and maintenance</i>	5	10		10
	PC4. check the engine temperature and oil pressure for the prescribed levels				
	PC5. check headlights, brake lights, plough lamp, horns and hour meter for correct functioning				
	PC6. clean or replace the air cleaner filter/ diesel filter/ transmission filter/ hydraulic filter/ power steering filter/ fuel filter as per the maintenance schedule				
	PC7. refill the engine, transmission, hydraulic, air cleaner and steering oil of the correct grade if these are below the recommended level				
	PC8. apply the recommended grade of grease/ lubricant on clutch shaft, clutch release bearing, clutch pedal, brake pedal, king pin, tie rod, drag link, pivot pin, bell crank, levelling rod, front- wheel etc. using a grease nipple				
	PC9. refill distilled water in the battery to maintain the electrolyte level				
	PC10. remove carbon from the smoke-tube				
	PC11. replace the worn-out/ damaged electrical fuses				
	PC12. adjust the brakes and clutch free play as per the requirement				
	PC13. apply new seals to fix any leakages				
	PC14. install new fan belt and tyres if these are worn- out/ damaged				
	PC15. maintain the record of repair and maintenance				
	<i>Perform waste management</i>	10	10		10
	PC16. segregate waste into different categories				
	PC17. dispose non-recyclable waste appropriately				
PC18. deposit recyclable and reusable material at the identified location					
NOS Total	30	40		30	
AGR/N9903: Maintain health	<i>Maintain personal hygiene</i>	10	5		10
	PC1. wash hands, legs and face with soap/alcohol- based sanitizer at reasonable intervals		-		-

and safety at the workplace	PC2. wash the worn clothes with soap and sun-dry before use next time	-	-	-	-
	PC3. ensure the face is covered with mask or three layers of cloth-piece	-	-	-	-
	PC4. follow the workplace sanitisation norms including distancing from sick people	-	-	-	-
	<i>Maintain clean and safe workplace</i>	15	15		15
	PC5. carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards to the supervisor		-		-
	PC6. wear appropriate Personal Protective Equipment (PPE) while performing work in accordance with the workplace policy		-		-
	PC7. follow the instructions mentioned on the labels of chemicals/pesticides/fumigants etc. to avoid hazards		-		-
	PC8. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practices		-		-
	PC9. sanitize equipment, tools and machinery before and after use	-	-	-	-
	PC10. use equipment and materials safely and correctly and return the same to designated storage after use		-		-
	PC11. dispose waste safely and correctly in the designated area	-	-	-	-
	PC12. recognize risks to bystanders and take required action to reduce the risks	-	-	-	-
	PC13. work in a manner which minimizes environmental damage, ensuring all procedures and instructions for controlling risks are followed		-		-
	PC14. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger		-		-
	PC15. follow government / workplace advisories in case of outbreak of any disease/disaster		-		-
	<i>Administer appropriate emergency procedures</i>	15	5		10
PC16. follow procedures for dealing with accidents, fires and					

	emergencies, including communicating location and directions to the location of emergency, as per the workplace requirements		-		-
	PC17. use emergency equipment in accordance with manufacturer's specifications and workplace requirements		-		-
	PC18. report provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		-		-
	PC19. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	-	-	-
	PC20. report details of first aid administered in accordance with workplace procedures				
	NOS Total	40	25		35
DGT/VSQ/N0102: Employability Skills (60 Hours)	<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, Behaviour 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				
Total Marks	20	30	-	

Annexure 6: Assessment Strategy

es involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

em Overview

ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake assessment Criteria, SSC in association with empanelled AAs, define the test structure for the given job roles to cover the required skills and strategy consists of the following:

1. Multiple Choice Questions : To assess basic knowledge (Objective/Subjective)
2. Viva : To assess awareness on processes (Oral and/or written questioning)
3. Practical : To evaluate skills and identify competencies.(Observation)

Assessments for knowledge and awareness on processes may be conducted through 'real time' internet based evaluation or by conducting the same 'offline' through TABs. Skills and competencies are to be assessed by conducting 'practical' on ground through qualified and ToA certified assessors.

While it is important that an individual has adequate knowledge and skills to perform a specific task, weight age for different aspects for assessment are given as follows:

Multiple Choice Questions: 20%-30%, depending on the specific QP

Viva: 20%

Practical: 50% - 60% (Involves demonstrations of applications and presentations of procedures/tasks and other components)

Assessment will be carried out by certified assessors through empanelled assessment partners. Based on the results of assessment; ASCI will certify the learners/candidates

2. Testing Environment

Assessments are conducted on laptops, Mobiles and android tablets via both offline and online mode depending on the internet connectivity at assessment location.

In remote locations/villages, assessments get delivered through tablets without the requirement of Internet.

- Multilingual assessments (ASCI is conducting assessments in 13 + languages pan India)
- Rubric driven assessments in Practical/Viva sections and responses recorded accordingly
- All responses, data, records and feedback stored digitally on cloud
- Advanced auto-proctoring features – photographs, time-stamp, geographic-tagging, toggle-screen/copy-paste disabled, etc.
- Android based monitoring system
- End to end process from allocation of a batch to final result upload, there is no manual intervention
- Assessment will normally be fixed for a day after the end date of training / within 7 days of completion of training.
- Assessment will be conducted at the training venue

- Room where assessment is conducted will be set with proper seating arrangements with enough space to curb copying or other unethical activities
- Question bank of theory and practical will be prepared by ASCI /assessment agency and approved ASCI. Only from approved Question Bank assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on his theoretical knowledge of the subject.
- The theory, practical and viva assessments will be carried out on same day. In case of more number of candidates, number of assessors and venue facilitation be increased and facilitated

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
Theory	Summative	MCQ/Written exam	Knowledge of facts related to the job role and functions. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks/Demonstration	Practical application /Demonstration /Application tasks
Viva	Summative	Questioning and Probing	Mock interviews on usability of job roles/advantages /importance of adherence to procedures. Viva will be used to gauge trainee's confidence and correct knowledge in handling job situation

The question paper pre-loaded in the computer /Tablet and it will be in the language as requested by the training partner.

3. Assessment Quality Assurance framework

Assessment Framework and Design:

Based on the Assessment Criteria, SSC in association with AAs will define the test structure for the given roles to cover the required skills and competencies. ASCI offer a bouquet of tools for multi- dimensional evaluation of candidates covering language, cognitive skills, behavioral traits and domain knowledge.

Theoretical Knowledge - Item constructs and types are determined by theoretical understanding of the testing objectives and published research about the item-types and constructs that have shown statistical validity towards measuring the construct. Test item types which have been reported to be coachable are not included. Based on these, items are developed by domain experts. They are provided with comprehensive guidelines of testing objectives of each question and other quality measures.

Type – Questions based on Knowledge Required, Case-based practical scenario questions and automated simulation based questions.

Practical Skills - The practical assessments are developed taking into consideration two aspects: what practical tasks is the candidate expected to perform on the job and what aspects of the job cannot be judged through theoretical assessments. The candidates shall be asked to perform either an entire task or a set of subtasks depending on the nature of the job role

Type – Standardized rubrics for evaluation against set of tasks in a demo/practical task

Viva Voce - Those practical tasks which cannot be performed due to time or resource constraints are evaluated through the viva mode. Practical tasks are backed up with Viva for thorough assessment and complete evaluation

Type – Procedural questions, do's and don'ts, subjective questions to check understanding of practical tasks.

Assessor has to go through orientation program organized by Assessment Agency. The training would give an overview to the assessors on the overall framework of QP evaluation. Assessor shall be given a NOS and PC level overview of each QP as applicable. Overall structure of assessment and objectivity of the marking scheme will be explained to them. The giving of marks will be driven by an objective framework which will maintain standardization of marking scheme.

4. Type of Evidence and Evidence Gathering Protocol:

During the assessment the evidences collected by AAs and ASCI are:

- Geo Tagging to track ongoing assessment
- AA's coordinator emails the list of documents and evidences (photos and videos) to the assessor one day prior to the assessment. List is mentioned below:
 - Signed Attendance sheet
 - Assessor feedback sheet
 - Candidate feedback sheet
 - Assessment checklist for assessor
 - Candidate Aadhar/ID card verification
 - Pictures of classroom, labs to check the availability of adequate equipment's and tool to conduct the training and assessment
 - Pictures and videos of Assessment, training feedback and infrastructure.
- Apart from the Assessor, Technical assistant popularly known as Proctor also ensures the proper documentation and they verify each other's tasks.
- To validate their work on the day of assessment, regular calls and video calls are done.
- On-boarding and training of assessor and proctor is done on timely basis to ensure that quality of the assessment should be maintained.
- Training covers the understanding of QP, NSQF level, NOS and assessment structure

5. Methods of Validation

- Morning Check (Pre-Assessment): Backend team of AA calls and confirms assessor/technical spoc event status. Assessor/Technical spoc are instructed to reach the centre on time by 9:30 AM / as decided with TC and delay should be highlighted to the Training Partner in advance.
- Video Calls: Random video calls are made to the technical spoc/assessor so as to keep check on assessment quality and ensure assessment is carried out in fair and transparent manner
- Aadhar verification of candidates
- Evening Check (Post Assessment): Calls are made to the ground team to ensure event is over by what time and the documentation is done in proper manner or not.
- TP Calling: To keep check on malpractice activity, independent audit team calls to TP on recorded line to take confirmation if there was any malpractice activity observed in assessment on part of AA/SSC team. If calls are not connected, email is send to TP Spoc for taking their confirmation
- Video and Picture Evidence: Backend team collects video and pictures for assessment on real time basis and highlights any issue like, Students sitting idle/trainer allowed for helping out candidates during assessment.
- Surprise Visit: Time to time SSC/AA Audit team can visit the assessment location and do surprise audit for assessment process carried out by ground team.
- Geo Tagging: On day of assessment, each technical spoc is required to login in our internal app which is Geo tagged. Any deviation with centre address needs to be highlighted to assessment team on real-time basis.

Method for assessment documentation, archiving, and Access:

- ASCI has fully automated result generation process in association with multiple AAs
- Theory, Practical and Viva marks forms the basis of the results and encrypted files generated to avoid data manipulation. All responses captured and stored in System with Time-Stamps at the end of AAs and SSC. NOS-wise and PC-wise scores can be generated.
- Maker Checker concept: 1 person prepares results and other audit result which is internally approved by AA at first and then gets vetted at the end of SSC
- All soft copy of documents is received from the on-ground tech team over mail. The same are downloaded by our internal backend team and saved in Repository. The repository consists of scheme wise folders. These scheme wise folders have job role specific folders. These specific folders have Year wise and Month wise folders where all documents are saved in Batch specific folders. All Hard copies are filed and stored in storeroom.
- **Result Review & Recheck Mechanism –**
- Time stamped assessment logs
- Answer/Endorsement sheets for each candidate
- Attendance Sheet
- Feedback Forms: Assessor feedback form, Candidate feedback form, TP feedback form
- The results for each of the candidate shall be stored and available for review (retained for 5 years/ till conclusion of project or scheme)

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