



QUALIFICATION FILE

SERVICE ASSISTANT (AGRICULTURE MACHINERIES)

- ✓ 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

Tel number(s): 033-2340-3717

E-mail address: caowbsctvesd@gmail.com

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Section 1: Basic Details

1.	Qualification Name	Service Assistant (Agriculture Machineries) STC - AGR/NSQF-2022/0232																	
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-2018/802	Qualification Name of existing/previous version: REPAIRING AND SERVICING OF AGRICULTURE MACHINERIES INCLUDING DIESEL PUMP SET																
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-AG-00364-2023-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	Perform repair and servicing of Agriculture machineries like Tillage, Seeding, Harvesting, Threshing machineries and Tiller, Plant Protection equipment along with Diesel pump set.																	
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>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 yrs 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 yrs 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 yrs experience	2 yrs																	
4	5th Grade Pass with 5 yrs experience	5 yrs																	
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	20	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable):</i> I																

12 Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																		
13 Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended <table border="1" data-bbox="779 280 1877 448"> <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>150</td> <td>300</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> (Refer Blended Learning Annexure for details)	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	150	300	150		600	Online					
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)														
Classroom (offline)	150	300	150		600														
Online																			
14 Aligned to NCO/ISCO Code/s (if no code is available mention the same)	7233.2800																		
15 Progression path after attaining the qualification (Please show Professional and Academic progression)	Horizontal Progression: N/A Vertical Progression: <ol style="list-style-type: none"> 1. Service and Maintenance Technician-Farm Machinery (L-4) 2. Agriculture Machinery Demonstrator (L-5) 3. Agricultural Machinery-Repair and Maintenance Service Provider (L-5). 4. Farm /Workshop Service Manager (L-6) 																		
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 can get trained and get 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 Module Name: Apply Safe Working Practices (Code: AGR/0232/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 No.: 033-2340-3717 Website: sctvesd.wb.gov.in		Contact
23 Final Approval Date by NSQC: 3.5.2023	24. Validity Duration: 3 years	25. Next Review Date 3.5.2026	

NSQC Approved

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/0232/OC1, V2.0	Core	3	1	10	20			30	14	30			44	4.4%
2.	Identify and select various agricultural machineries and describe the uses of each.	AGR/0232/OC2, V2.0	Core	3	1	10	20			30	14	30			44	4.4%
3.	Describe the operations of Tillage implements, demonstrate its working, identify the faults and repair.	AGR/0232/OC3, V2.0	Core	3	1	10	20			30	14	30			44	4.4%
4.	Describe the operations of seeding machinery, its working, identify the faults and repair.	AGR/0232/OC4, V2.0	Core	3	1	10	20			30	14	30			44	4.4%
5.	Recognize different components, different faults, their cause & repair minor faults	AGR/0232/OC5, V2.0	Core	3	1	5	25			30	10	50			60	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)
	concern with Harvesting machineries and Threshing machineries															
6.	Classify IC engines used in agriculture, explain the working of engine system, fuel system, cooling system, lubricating system, inlet & exhaust system with the help of flow charts	AGR/0232/OC6, V2.0	Core	3	1	5	25			30	10	50			60	6%
7.	Identify and describe different component and systems of Tractor and repair minor faults	AGR/0232/OC7, V2.0	Core	3	1	5	25			30	10	50			60	6%
8.	Identify and recognize different component and systems of Power Tiller and rectify minor faults	AGR/0232/OC8, V2.0	Core	3	1	5	25			30	10	50			60	6%
9.	Demonstrate different component and systems of Plant Protection Equipment and rectify minor faults	AGR/0232/OC9, V2.0	Core	3	1	5	25			30	10	50			60	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)
10.	Exhibit different component and systems of Irrigation Equipment and rectify minor faults	AGR/0232/OC10 ,V2.0	Core	3	1	5	25			30	10	50			60	6%
11.	Demonstrate different component and systems of electric motor used in Pump Set for Agricultural use and rectify minor faults	AGR/0232/OC11 ,V2.0	Core	3	1	5	25			30	10	50			60	6%
12.	Understand principles of pump set, their components, common faults and dismantling different parts.	AGR/0232/OC12, V2.0	Core	3	1	5	25			30	10	50			60	6%
13.	Calculate rough estimation and costing of repair work for each machinery	AGR/0232/OC13, V2.0	Core	3	1	10	20			30	14	30			44	4.4%
14.	Work in real job situation with special emphasis on basic safety and hazards in this domain.	AGR/0232/OC14, V2.0	Core	3	5	0	0	150		150	0	0	250		250	25%
15.	Employability Skills 60 Hrs	DGT/VSQ/N0102	Core	3	2	60	0			60	50	0			50	5%
Duration (in Hours) / Total Marks						150	300	150		600	200	550	250		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: NA % (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>CTS/ATS (Mechanic agricultural machinery) 3 years' experience OR Diploma (Agricultural/Mechanical engineering) 2 years' experience OR B.Tech / B.E ((Agricultural/Mechanical engineering) 1 year experience And Certified for Job Role: "Service Assistant (Agriculture Machineries) (QPCode: "STC - AGR/NSQF-2018/802) OR "Repair of Agriculture machineries including Diesel Pump Set (STC - AGR/NSQF-2022/0232)". Minimum accepted score is 80%.</p> <p>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%</p>
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	<p>CTS/ATS (Mechanic agricultural machinery) 3 years' experience OR Diploma (Agricultural/Mechanical engineering) 2 years' experience OR B.Tech / B.E ((Agricultural/Mechanical engineering) 1 year experience And Certified for Job Role: "Service Assistant (Agriculture Machineries) (QPCode: STC - AGR/NSQF-2022/0232) And Certified on any domain skill of NSQF Level 5 with experience in training activities in similar field.</p>
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 (Mechanic agricultural machinery) 3 years' experience OR Diploma (Agricultural/Mechanical engineering) 2 years' experience OR B.Tech / B.E ((Agricultural/Mechanical engineering) 1 year experience And Certified for Job Role: "Service Assistant (Agriculture Machineries) " mapped to QP: STC - AGR/NSQF-2022/0232". 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 (Mechanic agricultural machinery) 3 years' experience OR Diploma (Agricultural/Mechanical engineering) 2 years' experience OR B.Tech / B.E ((Agricultural/Mechanical engineering) 1 year' experience
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	CTS/ATS (Mechanic agricultural machinery) 3 years' experience OR Diploma (Agricultural/Mechanical engineering) 2 years' experience OR B.Tech / B.E ((Agricultural/Mechanical engineering) 1 year experience
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): Yes
4.	Number of Industry validation provided: 4
5.	Estimated nos. of persons to be trained and employed: 1500
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>)	Annexure 1
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	Annexure 2
3.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	Annexure 6
4.	Annexure: Assessment Strategy (<i>Mandatory</i>)	Annexure 7
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>)	Annexure 8
8.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	Yes
9.	Supporting Document: Career Progression (<i>Mandatory - Public view</i>)	Yes in Q file
10.	Supporting Document: Occupational Map (<i>Mandatory</i>)	Yes in Q File
11.	Supporting Document: Assessment SOP (<i>Mandatory</i>)	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	Job holder will be able to repair or maintain different components of agricultural machinery such as crop production machinery, engine tractor and power tiller, plant protection and irrigation equipment along with electric motor.	Job holder will understand and comply with safety practices while undertaking works in minor repairing. The nature of work involved is repetitive and routine.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	Job holder will be able to <ul style="list-style-type: none"> Understand fundamental crop production machinery, engine tractor and power tiller, plant protection and irrigation equipment along with electric motor related theories, Identify different components of crop production machinery, engine tractor and power tiller, plant protection and irrigation equipment along with electric motor. Identify different components of IC engine and electric motor. 	Job holder will understand the basic concepts, facts, principles and processes in relation with working of machineries involved in activities of Agriculture. It is also expected that the job holder will be able to comprehend repairing practice.	3

	<ul style="list-style-type: none"> • Use different tools & equipment • Understand basic principles for IC engine & electric motor 		
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<p>The user/individual will know and understand how to:</p> <ul style="list-style-type: none"> • assess trouble shooting related IC engine and Electric motor • dismantling/overhauling engine or motor • decide whether worn out parts may be repaired • lubricating movable parts • Replace un-repairable parts • Reassembling all components of IC engine and electric motors 	The job holder will demonstrate use of various tools and materials used to repair or maintain machine parts. He/ she will be also able to demonstrate proper process for replacement of parts of machineries. The range of application of practical skill is narrow and repetitive.	3
Broad Learning Outcomes/Core Skill	<p>The job holder will be able to</p> <ul style="list-style-type: none"> • read at least two languages, preferably in the local language of the site and basic English • read and interpret safety sign boards, signage, tags etc. provided at work place • speak in at least one language, preferably in one of the local languages of the site • listen and interpret instructions / communication by co-workers • listen and follow instructions given by supervisor • orally and effectively communicate with team members • engage in basic financial and banking transactions • Understand principles of time management and entrepreneurship 	The job holder will be able to communicate clearly, both in writing and orally, with co-workers, supervisors and customers. He will be able to use basic arithmetic calculations for his work and use basic banking services both on professional and personal level.	3
Responsibility	<p>The job holder will work under the close supervision of supervisor and he will be responsible for</p> <ul style="list-style-type: none"> • Understanding safety compliance while working at soft floor • Preventing loss of human life by use of appropriate safety rules. • Distinguishing between petrol and diesel engines • Identify hand tools • Identifying different types of agri -machines and single handled make servicing of them. 	The job holder will demonstrate use of various tools and materials, repairing of different types of Agri equipment's and machineries including Diesel pump set. The range of application of practical skill is narrow and repetitive.	3

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

Batch Size: 30

LIST OF GENERAL TOOLS & EQUIPMENTS: (For Batch of 30 Candidates)			
S No.	Name of the Tool & Equipment	Specification	Quantity
1.	Laptop & LCD Projector,	Standard & available size	1 no each
2.	White board, Marker,	Minimum 5'X4'	2 no each
3.	Record book, Balanced Feed Chart,	Standard & available size	2 no each
4.	Public address system	-Do-	1 no

N.B.: To conduct Practical for trainees on related trade/discipline, a farm machinery shed with the following machines and implements are prerequisite for hands-on skill development in training.

S No.	Name of the Farm Equipment's	Specification	Quantity
1.	Farm Machinery shed	Space: 25'X40'.	1000 Sqft.
2.	Tractor	35-50 HP	1 no
3.	Power tiller	12-16 HP	1 no
4.	Mould Board plough	2-bottom	1 no
5.	Disc plough	2-bottom	1 no
6.	Rotavator	1.8 m width	1 no
7.	Disc Harrow	2-gang; 11-13 disc	1 no
8.	Cultivator	9-11 tines	1 no

9	Multi crop seed drill	9-11 rows	1 no
10	Paddy Transplanter	6-8 row	1 no
11	Power Reaper	Self-propelled	1 no
	Knapsack sprayer	14 litre,	2 nos
	Power sprayer	Battery operated	2 nos
12	Mini Combine harvester	1.2-1.5 m width	1 no
13	Paddle thresher	Standard	1 no
14	Power thresher	Standard	1 no
15	Engine cut models	Laboratory standard	4 nos
16	Diesel Engine	5 hp	1 no
17	Motor	1-2 hp	1 no
18	Pump set	Centrifugal	1 no
19	Air-compressor	portable	1 no
20	Hand tools/ Kit box	Standard	4 nos

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	dipan Chatterjee@cookme.com	
3.	M/s Foodies Agro	Mr. Monoj Mishra	Proprietor	Beharampur, Murshidabad	97751 86565	foodiesagro@rediffmail.com	
4	Mahindra & Mahindra Ltd	Soumitra Choudhury	Head – Training & Skill Development	Midc area, Hingna Road, Nagpur 440016	97666 99020	Choudhury.soumitra@mahindra.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
2023-24	1500	100% self employed	591	100% self employed	----	----

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
1.0	2020-21	1200	1110	1110	100% (self employed)			104	100% (self employed)	----	-----	----	----
	2021-22	1100	1030	1030	100% (self employed)			40	100% (self employed)				

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

1. State Level Short Term Program under “Utkarsh Bangla” Scheme.

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"/> Industry Exposure/ 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/0232/OC1,V2.0	Apply Safe Working Practices	14	30		
	(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) like: safety helmet, safety glove, safety shoe (1.5) Demonstrate basic first aid & CPR and use them under different circumstances.				
	Total Marks	14	30		
AGR/0232/OC2,V2.0	Identify and select various agricultural machineries and describe the uses of each.	14	30		
	(2.1) Identify different agricultural machineries. (2.2) Illustrate the application of each (2.3) Locate and identify the different accessories as per applications				
	Total Marks	14	30		
AGR/0232/OC3,V2.0	Describe the operations of Tillage implements, demonstrate its working, identify the faults and repair.	14	30		
	(3.1) State the types and necessity of Tillage. (3.2) Demonstrate functions and types of implements for primary and secondary tillage operations. (3.3) Demonstrate Constructional parts and working of Mouldboard plough, Disk Plough, Cultivators, Disk Harrow, Bund former. (3.4) Adjust the alignment, take care and safety precautions (3.5) Demonstrate common faults and remedies regarding tillage implement.				
	Total Marks	14	30		

AGR/0232/OC4,V2.0	Describe the operations of seeding machinery, its working, identify the faults and repair.	14	30		
	(4.1) Demonstrate different methods of sowing such as drilling, dibbling, planting etc. (4.2) Recognize different implements used for sowing /planting and transplanting (4.3) Demonstrate constructions and working principle of seed-drill, planters and seed cum fertilizer drill. (4.4) Identify common faults and remedies regarding seeding machineries. (4.5) Adjust the alignment, take care and safety precautions regarding seeding machineries.				
	Total Marks	14	30		
AGR/0232/OC5,V2.0	Recognize different components, different faults, their cause & repair minor faults concern with Harvesting machineries and Threshing machineries	10	50		
	(5.1) Demonstrate different types of Threshing Machinery such as manual and power operated. (5.2) Describe construction and working principle of hand and paddle threshers, power threshers as well as Combine Harvester. (5.3) Identify common faults and remedies regarding manually operated and machine operated threshing machineries. (5.4) Adjust the alignment, test and safety precautions regarding threshing machineries.				
	Total Marks	10	50		
AGR/0232/OC6,V2.0	Classify IC engines used in agriculture, explain the working of engine system, fuel system, cooling system, lubricating system, inlet & exhaust system with the help of flow charts	10	50		
	(6.1) Demonstrate different types of IC engine. (6.2) Describe the characteristics, application of two stroke and four stroke engine. (6.3) Recognize different parts of an IC engine and the function of each. (6.4) Describe components and function of different systems concerned with engine such as engine system, fuel system, cooling system, lubricating system,				

	<p>inlet & exhaust system with the help of flow chart.</p> <p>(6.5) Dismantle the engine, clean different parts, detect the fault, rectify and refit.</p> <p>(6.6) Identify different parts such as couplings, pipes, glands, gaskets etc.</p> <p>(6.7) Identify the defects and perform repairing of the same.</p> <p>(6.8) Perform alignment test for engine and its adjustment</p>				
	Total Marks	10	50		
AGR/0232/OC7,V2.0	Identify and Describe different component and systems of Tractor and repair minor faults	10	50		
	<p>(7.1) State different makes and models of Tractor</p> <p>(7.2) Describe different components and systems of Tractor</p> <p>(7.3) State tractor controls and matching implements</p>				
	Total Marks	10	50		
AGR/0232/OC8,V2.0	Identify and Recognize different component and systems of Power Tiller and rectify minor faults	10	50		
	<p>(8.1) State Different makes and models of Power Tiller.</p> <p>(8.2) Trainee will be asked to demonstrate different components and systems of Power Tiller</p> <p>(8.3) State power tiller controls and matching implements</p>				
	Total Marks	10	50		
AGR/0232/OC9,V2.0	Demonstrate different component and systems of Plant Protection Equipment and rectify minor faults	10	50		
	<p>(9.1) Demonstrate Plant Protection Equipment</p> <p>(9.2) Describe use and application of Agricultural Chemicals</p> <p>(9.3) Demonstrate types of sprayers & their uses, construction and function</p>				
	Total Marks	10	50		
AGR/0232/OC10,V2.0	Exhibit different component and systems of Irrigation Equipment and rectify minor faults	10	50		
	<p>(10.1) State Importance of irrigation and methods of Irrigation.</p> <p>(10.2) Describe types of pumps, principles of operation, their constructional details and application.</p> <p>(10.3) Demonstrate estimation of head, discharge and power requirement.</p> <p>(10.4) Demonstrate Sprinkler irrigation system and equipment, importance and utility</p>				

	(10.5) Demonstrate drip irrigation system and equipment, importance and utility (10.6) Demonstrate pipe fitting techniques and field layouts				
	Total Marks	10	50		
AGR/0232/OC11,V2.0	Demonstrate different component and systems of electric motor used in Pump Set for Agricultural use and rectify minor faults	10	50		
	(11.1) Demonstrate types of electric motors used in pump sets, tube wells, threshers etc. (11.2) Identify the selection method of electric motors. (11.3) Demonstrate about care, maintenance and installation of electric motors. (11.4) Demonstrate electric motor trouble shooting, periodic servicing and off-season storage (11.5) Install electric motor; check the circuit, starter fitting and setting. (11.6) Demonstrate safety, precautions in handling electrical appliances & motors.				
	Total Marks	10	50		
AGR/0232/OC12,V2.0	Understand principles of pump set, their components, common faults and dismantling different parts.	10	50		
	(12.1) Trainee will be asked to demonstrate general ideas on pumps along with common faults concerned with pumps. (12.2) Assessor will rate the trainee on his ability to dismantling and reassembly of the parts to make a complete pump set. (12.3) Trainee will be asked to perform Alignment test for and its adjustment.				
	Total Marks	10	50		
AGR/0232/OC13,V2.0	Calculate rough estimation and costing of repair work for each machinery	14	30		
	(13.1) Calculate the costing for different parts, their costs, brand names of parts, costs etc., (13.2) Make the report on Market survey. (13.3) Prepare of an estimate for a repair work-overhauling of an engine etc				
	Total Marks	14	30		
AGR/0232/OC14,V2.0	Work in real job situation with special emphasis on basic safety and hazards in this domain.	0	0	250	

	(14.1) 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	0	0	250	
DGT/VSQ/N0102	Employability Skills- 60 hrs.	50	0		
	As per NCVET approved course module for 60 Hrs				
Grand Total		200	550	250	

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