





### **QUALIFICATION FILE**

# SERVICE ASSISTANT (AGRICULTURE MACHINERIES)

$\checkmark$ Short Term Training (STT) $\ \square$ Long Term Training (LTT) $\ \square$ 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 (5<sup>th</sup> 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		ce Assistant (Agriculture Machineries) AGR/NSQF-2022/0232							
2.	Sector/s		ulture							
3.	Type of Qualification: ☐ New ☐√ Revised ☐ Has Electives/Options ☐ OEM	NQR (	Code & version of existing/previous ication: (change to previous, once approved)	Qualification Name of existing REPAIRING AND SERVICING OF A MACHINERIES INCLUDING DIESE	GRICULTURE					
4.	<ul><li>a. OEM Name</li><li>b. Qualification Name</li><li>(Wherever applicable)</li></ul>	NA								
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-03-AG-00364-2023-V2-WBSC  Version 2.0  6. NCrF/NSQF Level: 3								
7.	Award (Certificate/Diploma/Advance Diploma/Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certific	cate							
8.	Brief Description of the Qualification		rm repair and servicing of Agriculture machine ineries and Tiller, Plant Protection equipment al	<u> </u>	vesting, Threshing					
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	Entry	Qualification & Relevant Experience:							
		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	g 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 (as per National Credit Framework (NCrF))	20		11. Common Cost Norm Categ applicable): NA	gory (I/II/III) (wherever					

12	Any Licensing requirements for Undertaking	NA								
	Training on This Qualification (wherever applicable)									
13	Training Duration by Modes of Training	√□Offline <del>□Online</del>	⊟Blended							
	Delivery (Specify Total Duration as per selected	Training Delivery	Theory	Practical	OJT	OJT	Total			
	training delivery modes and as per requirement of the qualification)	Modes	(Hours)	(Hours)	Mandatory (Hours)	Recommende d (Hours)	(Hours)			
	and quamication,	Classroom (offline)	150	300	150		600			
		Online								
		(Refer Blended Learning Annexure for details)								
	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	7233.2800								
15	Progression path after attaining the	<b>Horizontal Progress</b>	ion:							
	qualification (Please show Professional and Academic progression)	N/A								
		Vertical Progression	<b>\:</b>							
		1. Service and Mai	intenance Te	chnician-Far	m Machinery	(L-4)				
		2. Agriculture Mad	chinery Dem	onstrator (L-	5)					
		3. Agricultural Mac	-	•	•	e Provider (L-5).				
		4. Farm /Worksho								
16	Other Indian languages in which the	NA .		<u> </u>						
	Qualification & Model Curriculum are being submitted									
17	Is similar Qualification(s) available on NQR-if	☐ Yes √☐ No URLs	of similar Q	ualifications	:					
	yes, justification for this qualification									
18	Is the Job Role Amenable to Persons with	□ Yes √□ No								
	Disability	If "Yes", specify appli								
	How Participation of Women will be Encouraged	Women can get traine	ed and get w	age employn	nent					
20	Are Greening/ Environment Sustainability	□ √ Yes No								
	Aspects Covered (Specify the NOS/Module which covers it)	Module Name: Apply S	afe Working	Practices ( Co	de: AGR/0232,	/OC1,V2.0)				
21	Is Qualification Suitable to be Offered in Schools/Colleges	Schools √ Yes □ No Colleges √ Yes □ No								

22.	Name and Contact Details of Submitting /	Name: Saequa Monazza, Chief Administrative Office	r				
	Awarding Body SPOC	Email: caowbsctvesd@gmail.com		Contact			
	(In case of CS or MS, provide details of both	<b>No.</b> : 033-2340-3717					
	Lead AB & Supporting ABs)	Website: sctvesd.wb.gov.in					
23.	Final Approval Date by NSQC: 3.5.2023	24. Validity Duration: 3 years	25. Next Review Date 3.5.2026				

# Section 2: Module Summary

### NOS/s of Qualifications

(In exceptional cases these could be described as components)

## Mandatory NOS/s:

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

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

S.	NOS/Module Name	NOS/Module	Core/	NCrF/	Credits	•	Trainin	g Durati	on (Hou	rs)			Asse	ssment	Marks	
No		Code & Version (if applicable)	Non- Core	NSQF Level	as per NCrF	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.	NOS/Module Name	NOS/Module	Core/	NCrF/	Credits		Trainin	g Durati	on (Hou	rs)			Asse	ssment	Marks	
No		Code & Version (if applicable)	Non- Core	NSQF Level	as per NCrF	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/0232/0C6, 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/0232/0C7, 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/0232/0C9, V2.0	Core	3	1	5	25			30	10	50			60	6%

S.	NOS/Module Name	NOS/Module	Core/	NCrF/	Credits		Training	g Durati	on (Hou	rs)			Asses	ssment	Marks	
No		Code & Version (if applicable)	Non- Core	NSQF Level	as per NCrF	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.		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.	Hrs	DGT/VSQ/N0102	Core	3	2	60	0			60	50	0			50	5%
	Duration (in Hours) / To	otal Marks				150	300	150		600	200	550	250		1000	

#### Elective NOS/s:

NA

S. No	NOS/Module Name	NOS/Module	Core/	NCrF/NSQF	Credits	Training Duration (Hours)				Assessment Marks						
		Code &	Non-	Level	as per	Th.	Pr.	OJT-	OJT-	Total	Th.	Pr.	Proj.	Viva	Total	Weightage
		Version (if	Core		NCrF			Man.	Rec.							<b>(%)</b> (if
		applicable)														applicable)
1.																
2.																
Duratio	on (in Hours) / Total Marks															

### Optional NOS/s:

NA

S. No	NOS/Module Name	NOS/Module	Core/	NCrF/NSQF	Credits	T	Training Duration (Hours)				Assessment Marks						
		Code &	Non-	Level	as per	Th.	Pr.	OJT-	OJT-	Total	Th.	Pr.	Proj.	Viva	Total	Weightage	
		Version (if	Core		NCrF			Man.	Rec.							<b>(%)</b> (if	
		applicable)														applicable)	
1.																	
2.																	
Duratio	on (in Hours) / Total Marks																

# Assessment - Minimum Qualifying Percentage

Please specify any one of the following:

Minimum Pass Percentage – Aggregate at qualification level: <u>Th. 60% & Pr70</u>% (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	CTS/ATS (Mechanic agricultural machinery) 5 years' experience
	relevant sector (in years) (as per NCVET	OR
	guidelines)	Diploma (Agricultural/Mechanical engineering) 3 years' experience
	,	OR
		B.Tech / B.E ((Agricultural/Mechanical engineering) 2 years' 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%.
		Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the
	11 1 7 1 1 0 100 11	Qualification Pack: "MEP/Q2601, v2.0". Minimum accepted score is 80%
2.	Master Trainer's Qualification and experience	CTS/ATS (Mechanic agricultural machinery) 5 years' experience
	in the relevant sector (in years) (as per NCVET	OR .
	guidelines)	Diploma (Agricultural/Mechanical engineering) 3 years' experience
		OR
		B.Tech / B.E ((Agricultural/Mechanical engineering) 2 years' 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.
3.	Tools and Equipment Required for Training	√□Yes <del>□No</del> (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any	No
	Upskilling Required for Trainer	

## Section 4: Assessment Related

1.	Assessor's Qualification and experience in	CTS/ATS (Mechanic agricultural machinery) 5 years' experience
	relevant sector (in years) (as per NCVET	OR
	guidelines)	Diploma (Agricultural/Mechanical engineering) 3 years' experience
		OR
		B.Tech / B.E ((Agricultural/Mechanical engineering) 2 years' 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	CTS/ATS (Mechanic agricultural machinery) 5 years' experience
	relevant sector (in years) (as per NCVET	OR
	guidelines)	Diploma (Agricultural/Mechanical engineering) 3 years' experience
		OR
		B.Tech / B.E ((Agricultural/Mechanical engineering) 2 years' experience
3.	Lead Assessor's/Proctor's Qualification and	CTS/ATS (Mechanic agricultural machinery) 5 years' experience
	experience in relevant sector (in years) (as per	OR .
	NCVET guidelines)	Diploma (Agricultural/Mechanical engineering) 3 years' experience
	The second secon	OR
		B.Tech / B.E ((Agricultural/Mechanical engineering) 2 years' experience
4.	Assessment Mode (Specify the assessment mode)	Offline
5.	Tools and Equipment Required for Assessment	Same as for training □√ Yes □ 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	Annexure 1
	descriptors (Mandatory)	
2.	Annexure: List of tools and equipment relevant for qualification	Annexure 2
	(Mandatory, except in case of online course)	
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Annexure 6
4.	Annexure: Assessment Strategy (Mandatory)	Annexure 7
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of	NA
	delivery is "Blended Learning")	
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification	NA
	has multiple Entry-Exit)	
7.	Annexure: Acronym and Glossary (Optional)	Annexure 8
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Yes
9.	Supporting Document: Career Progression (Mandatory - Public view)	Yes in Q file
10.	Supporting Document: Occupational Map (Mandatory)	Yes in Q File
11.	Supporting Document: Assessment SOP (Mandatory)	Yes in Model Curriculum
12.	Any other document you wish to submit:	NO

### Annexure 1: Evidence of Level

NCrF/NSQF Level	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the	NCrF/NSQF
Descriptors		NCrF/NSQF level descriptor	Level
Professional Theoretical	Job holder will be able to repair or maintain different components of	Job holder will understand and comply with	3
Knowledge/Process	agricultural machinery such as crop production machinery, engine tractor and	safety practices while undertaking works in	
	power tiller, plant protection and irrigation equipment along with electric	minor repairing. The nature of work involved	
	motor.	is repetitive and routine.	
Professional and	Job holder will be able to	Job holder will understand the basic concepts,	3
Technical Skills/ Expertise/ Professional Knowledge	<ul> <li>Understand fundamental crop production machinery, engine tractor and power tiller, plant protection and irrigation equipment along with electric motor related theories,</li> <li>Identify different components of crop production machinery, engine tractor and power tiller, plant protection and irrigation equipment along with electric motor.</li> </ul>	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.	
	<ul> <li>Identify different components of IC engine and electric motor.</li> </ul>		

	Use different tools & equipment		
	Understand basic principles for IC engine & electric motor		
Employment Readiness & Entrepreneurship	The user/individual will know and understand how to:  assess trouble shooting related IC engine and Electric motor	The job holder will demonstrate use of various tools and materials used to repair or maintain	3
Skills & Mind- set/Professional Skill	dismantling/overhauling engine or motor	machine parts. He/ she will be also able to demonstrate proper process for replacement	
	decide whether worn out parts may be repaired	of parts of machineries. The range of	
	lubricating movable parts	application of practical skill is narrow and	
	Replace un-repairable parts	repetitive.	
	Reassembling all components of IC engine and electric motors		
Broad Learning	The job holder will be able to	,	3
Outcomes/Core Skill	<ul> <li>read at least two languages, preferably in the local language of the site and basic English</li> </ul>	clearly, both in writing and orally, with co- workers, supervisors and customers. He will	
	<ul> <li>read and interpret safety sign boards, signage, tags etc. provided at work place</li> </ul>	be able to use basic arithmetic calculations for his work and use basic banking services both on professional and personal level.	
	• 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		
Responsibility	The job holder will work under the close supervision of supervisor and he will be responsible for	The job holder will demonstrate use of various tools and materials, repairing of different	3
	Understanding safety compliance while working at soft floor	types of Agri equipment's and machineries	
	Preventing loss of human life by use of appropriate safety rules.	including Diesel pump set. The range of application of practical skill is narrow and	
	Distinguishing between petrol and diesel engines	repetitive.	
	Identify hand tools		
	• Identifying different types of agri -machines and single handled make servicing of them.		

# 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.	Organization Name	Representativ	Designatio	Contact	Conta	E-mail	LinkedIn
0		e Name	n	Address	ct Phon e No	ID	Profile (if available)
1.	Red Cow Dairy Pvt. Ltd	Bijan Bishnu	Asst. Manager	Nandan Housing Complex, Station Road, Hooghly	90730 22965	Bishnubij anfp700 7@gmail .com	
2.	Krishna Chandra Dutta (Spice) Pvt Ltd	Dr.Dipan Chatterjee	Food technology & quality control manager		98305 65872	dipanch atterjee @cook me.com	
3.	M/s Foodies Agro	Mr. Monoj Mishra	Proprictor	Beharampur, Murshidabad	97751 86565	foodiesa gro@re diffmail. com	
4	Mahindra & Mahindra Ltd	Soumitra Choudhury	Head – Training & Skill Developme nt	Midc area, Hingna Road, Nagpur 440016	97666 99020	Choudh ury.sou mitra@ mahindr a.com	

# Annexure 4: Training & Employment Details

# **Training and Employment Projections:**

Year	Total	Candidates		Women	People with Disability		
			Estimated	Estimated	Estimated	Estimated	
			Training #	Employment	Training #	Employment	
		Opportunities		Opportunities		Opportunities	
2023-	1500	100% self	591	100% self			
24		employed		employed			

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

Qualification	Year				Total Candidates Women			People with Disability					
Version		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
1.0	2020-21	1200	1110	1110	100%			104	100%				
					(self				(self				
					employed)				employed				
	2021-22	1100	1030	1030	100%			40	100%				
					(self				(self				
					employed)				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
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□ Participant Handbook □ Facilitator Guide □ Digital Content √□ Qualification Handbook □ Any Other	ner:
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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	☐Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	NA
2	□Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	NA
3	☐Showing Practical Demonstrations to the learners	NA	NA
4	□Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	□Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	□Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	□On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	NA

Annexure 6: Detailed Assessment Criteria

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

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	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				
ACD (0222 (OC1 V2 0	report accordingly.				
AGR/0232/OC1,V2.0	(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		
	Identify and select various agricultural machineries and describe the	14	30		
	uses of each.				
AGR/0232/OC2,V2.0	(2.1) Identify different agricultural machineries.				
11d1() 0232/ 0d2, V2.0	(2.2) Illustrate the application of each				
	(2.3) Locate and identify the different accessories as per applications				
	Total Marks	14	30		
AGR/0232/0C3,V2.0	Describe the operations of Tillage implements, demonstrate its	14	30		
	working, identify the faults and repair.				
	(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		

	Describe the operations of seeding machinery, its working, identify	14	30	
	the faults and repair.			
	(4.1) Demonstrate different methods of sowing such as drilling, dibbling,			
	planting etc.			
	(4.2) Recognize different implements used for sowing /planting and			
AGR/0232/0C4,V2.0	transplanting			
Aut, 0232, 0G4, V2.0	(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	
	Recognize different components, different faults, their cause & repair	10	50	
	minor faults concern with Harvesting machineries and Threshing			
	machineries			
	(5.1) Demonstrate different types of Threshing Machinery such as manual and			
	power operated.			
AGR/0232/OC5,V2.0	(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.	40	50	
	Total Marks	10 10	50 50	
	Classify IC engines used in agriculture, explain the working of engine	10		
	system, fuel system, cooling system, lubricating system, inlet & exhaust			
	system with the help of flow charts			
AGR/0232/0C6,V2.0	(6.1) Demonstrate different types of IC engine.			
AUN/ 0232/ 0C0, V2.0	(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,			

	inlet & exhaust system with the help of flow chart.			
	(6.5) Dismantle the engine, clean different parts, detect the fault, rectify and			
	refit.			
	(6.6) Identify different parts such as couplings, pipes, glands, gaskets etc.			
	(6.7) Identify the defects and perform repairing of the same.			
	(6.8) Perform alignment test for engine and its adjustment			
	Total Marks	10	50	
	Identify and Describe different component and systems of Tractor and repair minor faults	10	50	
AGR/0232/OC7,V2.0	(7.1) State different makes and models of Tractor			
	(7.2) Describe different components and systems of Tractor (7.3) State tractor controls and matching implements			
	Total Marks	10	50	
	Identify and Recognize different component and systems of Power Tiller and rectify minor faults	10	50	
ACD (0222 (000 tro o	(8.1) State Different makes and models of Power Tiller.			
AGR/0232/0C8,V2.0	(8.2) Trainee will be asked to demonstrate different components and systems			
	of Power Tiller			
	(8.3) State power tiller controls and matching implements			
	Total Marks	10	50	
	Demonstrate different component and systems of Plant Protection	10	50	
	Equipment and rectify minor faults			
AGR/0232/0C9,V2.0	( 9.1)Demonstrate Plant Protection Equipment			
	(9.2)Describe use and application of Agricultural Chemicals			
	(9.3)Demonstrate types of sprayers & their uses, construction and function			
	Total Marks	10	50	
	Exhibit different component and systems of Irrigation Equipment and rectify minor faults	10	50	
	(10.1)State Importance of irrigation and methods of Irrigation.			
ACD /0222 /0C10 v2 o	(10.2) Describe types of pumps, principles of operation, their constructional			
AGR/0232/OC10,V2.0	details and application.			
	(10.3) Demonstrate estimation of head, discharge and power requirement.			
	(10.4) Demonstrate Sprinkler irrigation system and equipment, importance and			
	utility			

	(10.5)Demonstrate drip irrigation system and equipment, importance and				
	utility				
	(10.6) Demonstrate pipe fitting techniques and field layouts				
	Total Marks	10	50		
	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.				
AGR/0232/OC11,V2.0	(11.3) Demonstrate about care, maintenance and installation of electric				
AGR/0232/0C11, V2.0	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		
	Understand principles of pump set, their components, common faults	10	50		
	and dismantling different parts.				
	(12.1) Trainee will be asked to demonstrate general ideas on pumps along with				
AGR/0232/OC12,V2.0	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		
	Calculate rough estimation and costing of repair work for each	14	30		
	machinery				
	(13.1) Calculate the costing for different parts, their costs, brand names of				
AGR/0232/OC13,V2.0	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				
ı	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		
DG1/V3Q/N0102	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	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual
Standards (NOS)	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