QUALIFICATION FILE

Sericulturist

☒ 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:

Agriculture Skill Council of India

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

Table of Contents

Section 1: Basic Details

1.	**Qualification Name**	**Sericulturist**	
2.	**Sector/s**	**Agriculture**	
3.	**Type of Qualification:** ☐ **New** ☒ **Revised** ☐ **Has Electives/Options** ☐ **OEM**	**NQR Code & version of existing qualification:** 2022/AGR/ASCI/06524 & Version 1.0	**Qualification Name of existing/previous version:** Sericulturist
4.	**a. OEM Name** **b. Qualification Name** (*Wherever applicable*)	**NA**	
5.	**National Qualification Register (NQR) Code &Version** (*Will be issued after NSQC approval*)	QG-03-AG-03547-2025-V2-ASCI & 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)*	Certificate	
8.	**Brief Description of the Qualification**	A Sericulturist is responsible for rearing silkworms to obtain raw silk fibre from them. The individual procures silkworm eggs; arranges to hatch them; hatches and rears silkworms during their developmental stages; harvests and processes cocoon to extract raw silk fibre from them. The person also propagates and maintains mulberry trees for mulberry leaves to feed silkworms.	
9.	**Eligibility Criteria for Entry for Student/Trainee/Learner/Employee**	**a. Entry Qualification & Relevant Experience:**	

S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)
1	10th or Equivalent	
2	8th Class Pass	3 years of relevant experience in Agriculture and allied sectors
3	Previous NSQF Level 2.5	1.5 years of relevant experience in Agriculture and allied sectors
4	Previous NSQF Levels 2	3 Years of relevant experience in Agriculture and allied sectors

b. Age: NA

10.	**Credits Assigned to this Qualification, Subject to Assessment** *(as per National Credit Framework (NCrF))*	9	**11. Common Cost Norm Category (I/II/III)** *(wherever applicable)*: **III**
12.	**Any Licensing requirements for Undertaking Training on This Qualification** *(wherever applicable)*	NA	

<table>
<tr><td>13.</td><td>Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</td><td colspan="2">☒Offline ☐Online ☐Blended
<table>
<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>
<tr><td>Classroom (offline)</td><td>120</td><td>150</td><td></td><td></td><td>270</td></tr>
<tr><td>Online</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
(Refer Blended Learning Annexure for details)</td></tr>
<tr><td>14.</td><td>Aligned to NCO/ISCO Code/s (if no code is available mention the same)</td><td colspan="2">NCO-2015/6123.0201</td></tr>
<tr><td>15.</td><td>Progression path after attaining the qualification (Please show Professional and Academic progression)</td><td colspan="2">Sericulturist (L3), Seed Cocoon Producer (L4)</td></tr>
<tr><td>16.</td><td>Other Indian languages in which the Qualification & Model Curriculum are being submitted</td><td colspan="2">Hindi</td></tr>
<tr><td>17.</td><td>Is similar Qualification(s) available on NQR-if yes, justification for this qualification</td><td colspan="2">☐ Yes ☒ No URLs of similar Qualifications:</td></tr>
<tr><td>18.</td><td>Is the Job Role Amenable to Persons with Disability</td><td colspan="2">☒ Yes ☐ No
If “Yes”, specify applicable type of Disability: SHI</td></tr>
<tr><td>19.</td><td>How Participation of Women will be Encouraged</td><td colspan="2">Batches specific to women will be formed</td></tr>
<tr><td>20.</td><td>Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)</td><td colspan="2">☒ Yes ☐ No
DGT/VSQ/N0101 (v1.0)</td></tr>
<tr><td>21.</td><td>Is Qualification Suitable to be Offered in Schools/Colleges</td><td colspan="2">Schools ☒ Yes ☐ No Colleges ☒ Yes ☐ No</td></tr>
<tr><td>22.</td><td>Name and Contact Details of Submitting / Awarding Body SPOC
(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</td><td colspan="2">Name: Ms Purnambica.K
Email: standards@asci-india.com Contact No.: 0124-4670029
Website: www.asci-india.com</td></tr>
<tr><td>23.</td><td>Final Approval Date by NSQC: 18-02-2025</td><td>24. Validity Duration: 3 years post NSQC Approval</td><td>25. Next Review Date: 18-02-2028</td></tr>
</table>

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	Cultivate mulberry trees for feeding silkworms	AGR/N5201 (v3.0)	Core	3	1	15	15			30	30	40		30	100	20
2	Prepare for rearing silkworms	AGR/N5202 (v2.0)	Core	3	1	10	20			30	30	40		30	100	20
3	Incubate silkworm eggs and rear larvae	AGR/N5203 (v2.0)	Core	3	2	20	40			60	30	40		30	100	20
4	Perform pest and disease management during sericulture	AGR/N5205 (v3.0)	Core	3	1	10	20			30	30	40		30	100	15
5	Maintain pupae, harvest and process cocoons, and carry out marketing activities	AGR/N5204 (v4.0)	Core	3	2	20	40			60	30	40		30	100	15
6	Maintain health and safety at the workplace	AGR/N9903 (v4.0)	Non-Core	4	1	15	15			30	40	25		35	100	5
7	Employability Skills (30 Hours)	DGT/VSQ/N0101 (v1.0)	Non-Core	3	1	30				30	20	30			50	5
Duration (in Hours) / Total Marks					9	120	150			270	210	255		185	650	100

Assessment - Minimum Qualifying Percentage

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

Minimum Pass Percentage – Aggregate at qualification level: 50 % *(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)*	12th Class (Science) with 6 years of relevant industry experience in Sericulture* *Ex-Service-Man including Ex-Paramilitary personnel: Minimum Qualification is 10+2 with an Honorable Discharge/Pension. SSC would consider a relaxation/waiver of sector specific experience on case to case basis. OR Diploma (Sericulture/Agriculture/Horticulture) with 3 years of relevant industry experience in Sericulture OR Graduate (any stream except Agriculture/ Horticulture/ Botany/ Forestry/ Agriculture/ Sericulture/ Entomology and related streams) with 2 years of relevant industry experience** **For the school Program minimum qualification of the Trainer should be Graduate in Botany/Zoology with Teaching experience of minimum 2 years (will be considered industry experience) OR Graduate (Agriculture/ Horticulture/ Botany/ Forestry/ Agriculture/ Sericulture/ Entomology and related streams) with 0.5 years of relevant industry experience in Sericulture
2.	**Master Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	5 years of training experience in Sericulture after Graduation (any stream except Agriculture/ Horticulture/ Botany/ Forestry/ Agriculture/ Sericulture/ Entomology and related streams) with 3 years of relevant industry experience in Sericulture OR 5 years of training experience in Sericulture after Graduation (Agriculture/ Horticulture/ Botany/ Forestry/ Agriculture/ Sericulture/ Entomology and related streams) with 0.5 years of relevant industry experience in Sericulture
3.	**Tools and Equipment Required for Training**	☒Yes ☐No (*If "Yes", details to be provided in Annexure)*
4.	**In Case of Revised Qualification, Details of Any Upskilling Required for Trainer**	NA

Section 4: Assessment Related

1.	**Assessor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	Graduation (Agriculture/ Sericulture/ Entomology and related experiences) with 5 years of relevant industry experience in Agriculture/ Sericulture/ Silk Tech & Management and related experience OR Post-Graduation (Agriculture/ Sericulture/ Entomology and related experiences) with 2 years of relevant industry experience in Agriculture/ Sericulture/ Silk Tech & Management and related experience OR PhD (Agriculture/ Sericulture/ Entomology and related experiences) with 1 year of relevant industry experience in Agriculture/ Sericulture/ Silk Tech & Management and related experience
2.	**Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	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 .)
3.	**Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	Post-Graduation (Agriculture/ Sericulture/ Entomology and related experiences) with 10 years of relevant industry experience in Agriculture/ Sericulture/ Silk Tech & Management and related 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):** 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):** Government Initiative, part of PMKVY 4.0
4.	**Number of Industry validation provided:** 9
5.	**Estimated nos. of persons to be trained and employed:** 2000
6.	**Evidence of Concurrence/Consultation with Line Ministry/State Departments:** concurrence awaited from Ministry of Agriculture & Farmers Welfare, Department. of Agriculture, Coop. and Farmers Welfare

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	**Annexure:** NCrF/NSQF level justification based on NCrF level/NSQF descriptors *(Mandatory)*	*Annexure-1*
2.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory, except in case of online course)*	*Annexure-2*
3.	**Annexure:** Detailed Assessment Criteria *(Mandatory)*	*Annexure-5*
4.	**Annexure:** Assessment Strategy *(Mandatory)*	*Annexure-6*
5.	**Annexure:** Blended Learning *(Mandatory, in case selected Mode of delivery is "Blended Learning")*	*NA*
6.	**Annexure:** Multiple Entry-Exit Details *(Mandatory, in case qualification has multiple Entry-Exit)*	*NA*
7.	**Annexure:** Acronym and Glossary *(Optional)*	
8.	**Supporting Document:** Model Curriculum *(Mandatory – Public view)*	*Annexure-7*
9.	**Supporting Document:** Career Progression *(Mandatory - Public view)*	*Sericulturist (L3), Seed Cocoon Producer Level (L4)*
10.	**Supporting Document:** Occupational Map *(Mandatory)*	*Annexure-8*
11.	**Supporting Document:** Assessment SOP *(Mandatory)*	*Annexure-9*
12.	**Any other document you wish to submit:**	

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	• Select the site for mulberry cultivation • Transplant the saplings	A Sericulturist is responsible for rearing silkworms to obtain raw silk fibre from them. The individual procures silkworm eggs; arranges to hatch them; hatches and rears silkworms during their developmental stages; harvests and processes cocoon to extract raw silk fibre from them. The person also propagates and maintains mulberry trees for mulberry leaves to feed silkworms.	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	• Perform pest and disease management • Monitor the cocoon spinning process • Ensure smooth moulting • Maintain the rearing bed	The job holder is expected to have knowledge to follow the recommended practices to prevent infestation by silkworm pests, monitor the silkworms regularly to identify the signs of pests and disease infestation, quarantine the unhealthy	3

	• Optimise resource utilization • Perform waste management • Administer appropriate emergency procedures	silkworms to treat them, treat the unhealthy silkworms with the treatment prescribed by the laboratory, identify, segregate and dispose the moribund and dead silkworms, maintain the recommended temperature, humidity and light exposure during the spinning process, follow the recommended practices to prevent attacks from predatory ants during the spinning process, identify the onset of moulting, remove the silkworm excreta and leftover leaves from the rearing bed, follow the recommended practices to prevent insects from coming to the rearing bed, aerate the rearing bed appropriately, maintain larvae in the rearing bed for the recommended duration, maintain the recommended temperature and humidity, optimise the usage of water and other resources in various tasks and , plug water leakages to prevent its wastage, segregate waste into appropriate categories, dispose the non-recyclable waste in an environment-friendly manner, follow procedures for dealing with accidents, fires and emergencies, use emergency equipment in accordance with the manufacturer's specifications and workplace requirements, report details of first aid administered in accordance with workplace procedures.	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	• Maintain the mulberry trees • Arrange the required resources • Construct the rearing house • Prepare mulberry leaves for feeding • Carry out brushing and feed the larvae • Stock and prepare pupae for cocoon spinning • Practice inclusion at work • Maintain a clean and safe workplace	The job holder is expected to select an approved silkworm egg production unit and vendor based on the quality and price, procure silkworm eggs, tools, implements, equipment, rearing house construction material as per the requirement, arrange for safe and hygienic transportation and storage of silkworm eggs, apply the recommended organic and inorganic fertilisers to the field in the recommended required quantity, irrigate the mulberry trees with the recommended quantity of water as per irrigation schedule, follow the recommended preventive measures to protect the saplings from pests and disease, drain out excess water from the field, carry out weeding and hoeing at appropriate intervals, select a site with the recommended temperature and humidity for the construction of rearing house, ensure the rearing house has temperature control equipment to be used	3

		during unfavourable weather along with provision for making it air-tight for the purpose of being disinfected, chop the mulberry leaves uniformly for feeding larvae, spray the chopped mulberry leaves with water at regular intervals to preserve their freshness, carry out brushing to separate the hatched larvae from their eggshells, feed the larvae with the recommended quantity of tender and uniformly-chopped mulberry leaves, follow the recommended practices to maintain the feed moisturised, prepare trays of appropriate materials such as bamboo and paper for stocking pupae, apply the recommended chemicals on mulberry leaves in the prescribed quantity for healthy growth of pupae, adopt gender-neutral behaviour at work, empathise with Persons with Disabilities (PwD), carry out basic safety checks before operation of all tools, implements, and machinery and report identified hazards, assess risks prior to performing manual handling jobs, work in a manner that minimises environmental damage, follow government / workplace advisories in case of outbreak of any disease/disaster.	
Broad Learning Outcomes/Core Skill	• Prepare the field for mulberry cultivation • Propagate mulberry saplings • Harvest mulberry leaves • Disinfect and precondition the rearing house, tools, implements and equipment • Preserve and incubate the silkworm eggs • Transfer pupae to mountage for cocoon spinning	The job holder is expected to carry out tilling to the recommended depth and level the field using the appropriate machinery and implements, carry out soil fumigation and apply the recommended chemical treatment to the soil, apply the organic and/or inorganic treatment recommended by the lab in an appropriate Quantity, install an appropriate irrigation or fertigation system in the field, procure seeds and cuttings of the select mulberry varieties to be grown in the required quantity, sort out the damaged and unsuitable seeds and cuttings, plant the treated seeds and cuttings in the nursery bed, follow the recommended practices to prevent root and collar rot in saplings, follow the recommended preventive and remedial practices to protect the saplings, carry out hoeing and weeding in the nursery bed at appropriate intervals, check the saplings for maturity and harvest the mature saplings, check the mulberry leaves for signs of maturity and adequate growth for harvesting, arrange the appropriate tools and implements for harvesting	3

		mulberry leaves, harvest tender mulberry leaves manually or mechanically, clean and disinfect the rearing house, tools, implements and equipment using the recommended disinfectant, precondition the rearing house, tools, implements and equipment within the recommended period prior to starting the rearing activities, preserve the silkworm eggs in an earthen pot for the recommended duration prior to incubation, incubate the silkworm eggs in the incubator at the recommended temperature, collect pupae from the tray after they achieve the required growth, ensure adequate space on mountage to allow pupae spin cocoon, position the mountage appropriately to prevent staining of cocoons, identify and remove the unhealthy and dead pupae from the mountage.	
Responsibility	• Rearing silkworms to obtain raw silk fibre • Procuring silkworm eggs • Harvesting and processing cocoon	A Sericulturist is responsible for rearing silkworms to obtain raw silk fibre from them. The individual procures silkworm eggs; arranges to hatch them; hatches and rears silkworms during their developmental stages; harvests and processes cocoon to extract raw silk fibre from them. The person also propagates and maintains mulberry trees for mulberry leaves to feed silkworms.	3

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	Plastic mountage pressing tool	Nos	1
2	Humidifier cum heater	Nos	1
3	Rubber gloves	Nos	30
4	PVC stands for late age rearing 100 dfls 1000 sqft bed area	Nos	5
5	Gumboots	Nos	5
6	Flame gun	Nos	1

7	PVC stands for CRCs 100 trays	Nos	5
8	Video Recording Equipment	Nos	1
9	Power sprayer	Nos	1
10	Worm separator - manual	Nos	1
11	Tray washing machine	Nos	1
12	Leaf chopper	Nos	1
13	Worm separator - motorised	Nos	1
14	Coccon deflosser- manual	Nos	1
15	Dusting matchine for silkworms	Nos	1
16	Cocoon harvestor for plastic mountage	Nos	1
17	hand cum motorised deflosser	Nos	1
18	Seri heater	Nos	1
19	Incubation frame for loose eggs	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	CAAFE	Sumit Srivastava	General Manager	New Delhi	9889990102	info@caafe.in	
2	Centre for Microfinance	Amit Kumar	Head	Jaipur		amit.kumar@cmfraj.org	
3	Post-Graduation Department of Agriculture	Dr. Randeep Kaur and Dr. Lavleen Kaur	Associate Professor and Assistant Professor	Amritsar	9915305271	lavleenkaur@khalsacollege.edu.in	
4	Cropicon Exim Private Limited	Jonna Gunadeep	Founder	Kurnool	6381498558	info@cropicon.co.in	
5	Indian Institute of Plantation Management	Dr. KC Prakash	Assistant Professor	Bengaluru	7619367720	kcp.iipmb@gmail.com	

6	Jagtap Horticulture Pvt Ltd	Shrinkhala Mahobla	HR Manager	Pune	9011032314	hr@jagtaphorticulture.com	
7	Pathik Agrihorti Solutions pvt. Ltd	Dr Nirmal Kant Sharma	Director	Karnal	7018436769	pagrihortisolutions@gmail.com	
8	Sam Higginbottim University of Agriculture Technology & Sciences	Dr. Neelam Khore	Professor & Head	Prayagraj	9839588504	neelam.khare@shuats.edu.in	
9	Synergy Tecnofin Private Limited	Abhinav Sharma	HR	Delhi	9870568976	abhinav@synergytech.in	

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
2025-26	500	10	100	10		
2026-27	500	10	100	10		
2027-28	1000	10	100	10		

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	23	0	0	0	16	0	0	0	0	0	0	0
3.0	2023-24	4664	3381	3359	100	3248	2443	2427	45	1	1	1	0
3.0	2022-23	0	0	0	0	0	0	0	0	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. PMKVY
2. Agriculture Human Resource Development (AHRD)- Haryana
3. ASDM PLSD, BSDM RPL
4. Rastriya Krishi Vikas Yojana (RKVY)
5. SANKALP – Yuva and AVSAR
6. SEEDAP Funded Project - Tribal Community of Andhra Pradesh
7. WSC RPL

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/N5201: Cultivate mulberry trees for feeding silkworms	*Select the site for mulberry cultivation*	*3*	*4*		*3*
	PC1. select high-yielding and disease-resistant mulberry varieties suitable for local conditions to be grown for silkworm feed				
	PC2. select the site for mulberry cultivation, ensuring it has the recommended temperature, Relative Humidity (RH), sunlight exposure and rainfall required for the cultivation of selected mulberry varieties				
	PC3. check that the site is situated away from any factories, highways, and any sources of effluents				
	PC4. ensure the availability of a reliable source of clean water, labour and other required inputs at the site				
	Prepare the field for mulberry cultivation	*8*	*10*		*8*
	PC5. remove tree stumps, roots, weeds, debris and waste materials from the site				
	PC6. carry out tilling to the recommended depth and level the field using the appropriate machinery and implements				
	PC7. carry out soil fumigation and apply the recommended chemical treatment to the soil to eliminate any harmful organisms such as nematodes				
	PC8. water the soil with the recommended quantity after the prescribed period to wash away the chemicals applied to it				
	PC9. sample the soil from the site and coordinate with an approved laboratory to test its macro and micronutrients levels				
	PC10. apply the organic and/or inorganic treatment recommended by the lab in an appropriate quantity to improve the fertility of the soil and adjust its pH level				
	PC11. mulch the soil with compost to loosen it				
	PC12. create drains in the field for effective drainage and harvesting of water				
	PC13. install an appropriate irrigation or fertigation system in the field such as flat bed, and ridges and furrow				
	PC14. erect fences around the field to protect it from external threats				
	Propagate mulberry saplings	*10*	*12*		*10*

	PC15. procure seeds and cuttings of the select mulberry varieties to be grown in the required quantity from an approved vendor or extract cuttings from the wild, ensuring the cuttings have the recommended dimensions				
	PC16. sort out the damaged and unsuitable seeds and cuttings				
	PC17. treat the seeds and cuttings using the recommended insecticide, pesticide or fungicide as per the prescription				
	PC18. prepare the raised, level or sunken nursery bed as appropriate				
	PC19. plant the treated seeds and cuttings in the nursery bed, maintaining the recommended planting depth and density				
	PC20. maintain the recommended temperature to induce the germination of seeds				
	PC21. irrigate the nursery bed with the recommended quantity of water as per the irrigation schedule				
	PC22. follow the recommended practices to prevent root and collar rot in saplings				
	PC23. apply the recommended organic and inorganic fertilisers in an appropriate quantity for the healthy growth of saplings				
	PC24. follow the recommended preventive and remedial practices to protect the saplings from relevant pests and disease				
	PC25. carry out hoeing and weeding in the nursery bed at appropriate intervals				
	PC26. check the saplings for maturity and harvest the mature saplings using the appropriate tools and implements				
	PC27. store the harvested saplings at the recommended temperature and humidity, ensuring hygienic conditions				
	Transplant the saplings	*2*	*4*		*2*
	PC28. transplant seedlings in the field, maintaining the recommended planting depth and density				
	PC29. water the saplings with the recommended quantity and apply the recommended organic or inorganic fertiliser immediately after transplanting				
	PC30. protect the saplings from direct sunlight and strong winds during the early stages of their growth				
	Maintain the mulberry trees	*4*	*6*		*4*
	PC31. apply the recommended organic and inorganic fertilisers to the field in the recommended required quantity at appropriate intervals				

	PC32. irrigate the mulberry trees with the recommended quantity of water as per the irrigation schedule				
	PC33. follow the recommended preventive measures to protect the saplings from pests and disease				
	PC34. identify the signs of pest and disease infestation in mulberry trees and apply the recommended treatment as per the prescription				
	PC35. drain out excess water from the field				
	PC36. prune the mulberry trees, as required				
	PC37. mulch the field to prevent the growth of weeds				
	PC38. carry out weeding and hoeing at appropriate intervals				
	Harvest mulberry leaves	*3*	*4*		*3*
	PC39. check the mulberry leaves for signs of maturity and adequate growth for harvesting				
	PC40. arrange the appropriate tools and implements for harvesting mulberry leaves				
	PC41. harvest tender mulberry leaves manually or mechanically, along with branches or shoots, as appropriate at the recommended time of the day				
	PC42. collect the harvested leaves in appropriate bags or baskets				
	PC43. store the harvested leaves in the leaf preservation chamber or a dark storage area, ensuring hygiene along with the recommended temperature and humidity				
	Total Marks	**30**	**40**	**-**	**30**
AGR/N5202: Prepare for rearing silkworms	*Arrange the required resources*	*10*	*12*		*10*
	PC1. select an approved silkworm egg production unit and vendor based on the quality and price of silkworm eggs, tools, implements, equipment and other resources				
	PC2. procure silkworm eggs, tools, implements, equipment, rearing house construction material as per the requirement				
	PC3. arrange for safe and hygienic transportation of silkworm eggs under the recommended temperature and humidity				
	PC4. spread the silkworm loose eggs uniformly over appropriate material such as paraffin papers or wet foam pads and cover them to maintain them under the recommended temperature in the storage area				
	PC5. maintain the record of purchase				
	Set up the rearing house	*11*	*14*		*11*

	PC6. select a site with the recommended temperature and humidity for the construction of rearing house for rearing silkworms, ensuring it is not damp and protected from direct sunlight and radiation				
	PC7. check the site does not experience storms and heavy rainfall				
	PC8. coordinate with an expert for the construction of the rearing house, ensuring adequate space and number of windows for ventilation depending on the brushing capacity and the method of rearing				
	PC9. ensure the rearing house has temperature control equipment to be used during unfavourable weather along with provision for making it air-tight for the purpose of being disinfected, whenever required				
	PC10. arrange for effective drainage of water from the rearing house to avoid dampness				
	Disinfect and precondition the rearing house, tools, implements and equipment	*6*	*9*		*6*
	PC11. clean and disinfect the rearing house, tools, implements and equipment using the recommended disinfectant such as chlorine dioxide, bleach, slaked lime, using the appropriate Personal Protective Equipment (PPE)				
	PC12. maintain the floor in the rearing house dry				
	PC13. ensure disinfection and preconditioning of the rearing house, tools, implements and equipment is carried out within the recommended period prior to starting the rearing activities				
	Prepare mulberry leaves for feeding	*3*	*5*		*3*
	PC14. chop the mulberry leaves uniformly for feeding larvae				
	PC15. spray water on the chopped mulberry leaves at regular intervals or cover them with paraffin paper or wet foam pads to preserve their freshness				
	Total Marks	**30**	**40**		**30**
AGR/N5203: Incubate silkworm eggs and rear larvae	*Preserve and incubate the silkworm eggs*	*6*	*8*		*6*
	PC1. preserve the silkworm eggs in an earthen pot for the recommended duration prior to incubation				
	PC2. maintain the silkworm eggs in a dark storage area at the head pigmentation stage and expose them to light, when hatching is expected				
	PC3. incubate the silkworm eggs in the incubator at the recommended temperature, to hatch them into larvae				
	Carry out brushing and feed the larvae	*9*	*12*		*9*

	PC4. carry out brushing to separate the hatched larvae from their eggshells, using the relevant implement and transfer them to rearing trays covered with paraffin paper				
	PC5. feed the larvae with the recommended quantity of tender and uniformly-chopped mulberry leaves, ensuring the leaves are rich in nutrients and moisture				
	PC6. follow the recommended practices to maintain the feed moisturised				
	PC7. follow the recommended feeding schedule for the optimum growth of larvae				
	Maintain the rearing bed	*11*	*15*		*11*
	PC8. remove the silkworm excreta and leftover leaves from the rearing bed and dispose them safely				
	PC9. follow the recommended practices to prevent insects from coming to the rearing bed				
	PC10. aerate the rearing bed appropriately				
	PC11. maintain the recommended temperature and humidity, along with adequate space on the rearing bed for easy movement of larvae and their healthy growth				
	PC12. maintain dryness in the rearing bed by applying lime during the moulting of larvae				
	PC13. maintain larvae in the rearing bed for the recommended duration until their development into pupae				
	Ensure smooth moulting	*4*	*5*		*4*
	PC14. identify the onset of moulting and regulate the larvae feed accordingly				
	PC15. ensure the larvae are not disturbed during the process				
	Total Marks	**30**	**40**	**-**	**30**
AGR/N5205: Perform pest and disease management during sericulture	*Maintain hygiene in the rearing house*	*10*	*14*		*10*
	PC 1 clean and disinfect rearing trays, equipment, and the rearing area regularly to prevent diseases				
	PC 2. maintain the recommended temperature and humidity in the rearing house to prevent pest and disease outbreak				
	PC3. apply the recommended chemical or solution in the rearing house to prevent pests and disease, using the appropriate PPE				
	PC 4. ensure recommended space among the stocked silkworms for their healthy growth				

	Perform pest and disease management	*20*	*26*		*20*
	PC 5. follow the recommended practices to prevent infestation by silkworm pests such as beetles, ants, straw mites, vertebrate predators, etc.				
	PC 6 .use biological or eco-friendly pest control methods for mulberry plants and silkworms				
	PC 7. check the mulberry leaves for pest infestation before feeding the silkworms, and replace the infested and dry leaves				
	PC 8. monitor the silkworms regularly to identify the signs of pests and disease infestation				
	PC 9. sample the silkworms and coordinate with an approved laboratory to determine diseases and disorders in silkworms				
	PC 10 quarantine the unhealthy silkworms to treat them, and prevent them from infecting healthy silkworms				
	PC 11. treat the unhealthy silkworms with the treatment prescribed by the laboratory				
	PC12. monitor the silkworms being treated and stock them with healthy silkworms on full recovery				
	PC13. maintain the record of treatment used to treat silkworms				
	PC14. identify, segregate and dispose the moribund and dead silkworms				
	Total Marks	30	40	-	30
AGR/N5204: Maintain pupae, harvest and process cocoons, and carry out marketing activities	*Stock and prepare pupae for cocoon spinning*	*7*	*7*		*7*
	PC1. prepare trays of appropriate materials such as bamboo and paper for stocking pupae, ensuring easy absorption of excess moisture				
	PC2. feed pupae with fresh mulberry leaves at regular intervals, ensuring the right quantity and quality for each stage of growth				
	PC3. apply the recommended chemicals on mulberry leaves in the prescribed quantity for healthy growth of pupae along with uniform spinning of cocoons				
	PC4. remove faeces and leftover mulberry leaves, and disinfect the trays using the approved disinfectant				
	Transfer pupae to mountage for cocoon spinning	*5*	*6*		*5*
	PC5. collect pupae from the tray after they achieve the required growth, using a net and transfer them to the mountage for spinning cocoons				
	PC 6. Identify and use improved mountages for silkworm spinning				

	PC7. ensure adequate space on mountage to allow pupae spin cocoon				
	PC8. position the mountage appropriately to prevent staining of cocoons by pupae's urine				
	PC9. identify and remove the unhealthy and dead pupae from the mountage				
	Monitor the cocoon spinning process	*3*	*4*		*3*
	PC10. maintain the recommended temperature, humidity and light exposure during the spinning process				
	PC11. follow the recommended practices to prevent attacks from predatory ants during the spinning process				
	PC 12 observe silkworm development through instars (growth stages) and take measures to ensure healthy progress				
	PC13. maintain detailed logs of silkworm growth cycles, feed schedules, and environmental conditions				
	Harvest cocoons and obtain silk threads	*4*	*8*		*4*
	PC14. check the pupae for the signs of maturity such as colour and hardness				
	PC15. harvest the cocoons containing appropriate quantity with mature pupae in them				
	PC16. sort cocoons based on size, shape, and quality for better market value				
	PC17. dry cocoons (e.g., using solar, hot-air, or steam methods) to prevent damage to the silk fibers				
	PC 18 extract silk threads from cocoons through reeling processes, ensuring minimal breakage				
	PC 19. use silkworm pupae, rejected cocoons, or other by-products for animal feed, fertilizers, or oil extraction				
	Pc 20. track cocoon yield and quality, identifying trends for improvement				
	Market the raw silk and cocoons	*7*	*9*		*7*
	PC21 . identify the potential buyers/ markets such as e-trading platforms, cooperatives, processing units ,local traders, exporters for marketing the harvested raw silk fibre, and cocoons				
	PC 22. build relationships with buyers, cooperatives, or sericulture organizations				

	PC23 . coordinate and negotiate with the buyers to secure a profitable price for raw silk fibre and cocoons				
	PC24 arrange an appropriate mode of transport for safe and hygienic delivery of raw silk fibre and cocoons to the buyers, under the recommended temperature and humidity				
	PC25. process the payments using the buyerpreferred e-payment method				
	PC26. maintain the manual and/ or electronic record of sales and payments using the physical registers and/ or the relevant computer application				
	Optimise resource utilisation	*2*	*3*		*2*
	PC27. optimise the usage of water and other resources in various tasks and processes				
	PC28. plug water leakages to prevent its wastage				
	Perform waste management	*2*	*3*		*2*
	PC29. segregate waste into appropriate categories				
	PC30. dispose the non-recyclable waste in an environment-friendly manner and recycle the recyclable waste appropriately				
	PC31. compost mulberry and silkworm waste to use as organic fertilizer				
	Total Marks	30	40		30
AGR/N9903: Maintain health and safety at the workplace	*Maintain personal hygiene*	*10*	*5*		*10*
	PC1. wash hands, legs and face with soap/alcohol- based sanitizer at reasonable intervals				
	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				
	Maintain clean and safe workplace	*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				
	Administer appropriate emergency procedures	*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				
	Total Marks	40	25	-	35
DGT/VSQ/N0101: Employability Skills (30 Hours)	*Introduction to Employability Skills*	*1*	*1*		
	PC1. understand the significance of employability skills in meeting the job requirements				
	Constitutional values – Citizenship	*1*	*1*		
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices				
	Becoming a Professional in the 21st Century	*2*	*4*		

	PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.				
	Basic English Skills	*2*	*3*		
	PC4. speak with others using some basic English phrases or sentences				
	Communication Skills	*1*	*1*		
	PC5. follow good manners while communicating with others				
	PC6. work with others in a team				
	Diversity & Inclusion	*1*	*1*		
	PC7. communicate and behave appropriately with all genders and PwD				
	PC8. report any issues related to sexual harassment				
	Financial and Legal Literacy	*3*	*4*		
	PC9. use various financial products and services safely and securely				
	PC10. calculate income, expenses, savings etc.				
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws				
	Essential Digital Skills	*4*	*6*		
	PC12. operate digital devices and use its features and applications securely and safely				
	PC13. use internet and social media platforms securely and safely				
	Entrepreneurship	*3*	*5*		
	PC14. identify and assess opportunities for potential business				
	PC15. identify sources for arranging money and associated financial and legal challenges				
	Customer Service	*2*	*2*		
	PC16. identify different types of customers				
	PC17. identify customer needs and address them appropriately				
	PC18. follow appropriate hygiene and grooming standards				
	Getting ready for apprenticeship & Jobs	*1*	*3*		
	PC19. create a basic biodata				
	PC20. search for suitable jobs and apply				
	PC21. identify and register apprenticeship opportunities as per requirement				
	Total Marks	20	30	-	
Grand Total		210	255		185

Annexure 6: 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.

1. Assessment System Overview

In Agriculture Sector it is of ultimate importance that individuals dealing with crop production or livestock have the requisite knowledge and competencies to undertake the task. Based on the Assessment Criteria, SSC in association with empanelled AAs, define the test structure for the given job roles to cover the required skills and competencies. Assessment 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 jobrole

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