

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Automotive Skills Development Council

153, Gr Floor, Okhla Industrial Area, Phase – III, Leela Building, New Delhi – 110020

Name and contact details of individual dealing with the submission

Name: Mr. Arindam Lahiri

Position in the organisation: CEO

Address if different from above: Same as above

Tel number(s): 011-42599800

E-mail address: ceo@asdc.org.in

List of documents submitted in support of the Qualifications File

- (i) RFP for QP Development
- (ii) Supporting Document from GC meetings
- (iii) Labour Market Survey
- (iv) About the sector
- (v) Occupational Map
- (vi) List of Companies participating in QP Development Process
- (vii) QRC Summary Sheet
- (viii) Model Curriculum

- SUMMARY

1	Qualification Title: Heavy Commercial Vehicle Service Technician
2	Qualification Code, if any: ASC/Q1432
3	NCO code and occupation: NCO-2015/3115.0602 Technical Service & Repair
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term): Assist four wheeler service lead technician in diagnosing the faults and perform routine service, maintenance, repair and replacement of faulty components along with record maintenance. Short term
5	Body/bodies which will award the qualification: Automotive Skills Development Council
6	Body which will accredit providers to offer courses leading to the qualification: Automotive Skills Development Council
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy) : Yes
8	Occupation(s) to which the qualification gives access: Technical Service & Repair
9	Job description of the occupation: Four Wheeler Service Technician is responsible for the repair and routine servicing & maintenance (including electrical and mechanical aggregates) of vehicles
10	Licensing requirements: Driving License
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided) : N/A
12	Level of the qualification in the NSQF: Level 4
13	Anticipated volume of training/learning required to complete the qualification: 420 Hours
14	Indicative list of training tools required to deliver this qualification: Diagnostic tools, equipment and other sources of information such as diagnostic displays, etc., computer, vehicle, job card Vehicle, various body parts, engine, tools and equipment, material, consumables, components / aggregates, lubricants, grease, oil, etc. Pressure indicators: fuel pressure testers, manifold gauge sets, oil pressure gauges, tire pressure gauges etc., pullers: ball joint separators, bearing pullers, gear puller tools, slide hammers etc., trim or moulding tools: carbon scrapers, gasket scrapers, scrapers, spoons etc., measuring equipment: vernier calipers, micrometre, feeler gauges,

	multi-metre, flow metre, temp gauge, dial gauge etc., other tools: hand tools, power tools, lifting/ jacking equipment, tensioning equipment, security activator etc., tools for other tasks such as cleaning of vehicles, brake bleeding, wheel alignment, AC gas charging etc. MS Office / Open office Laptop, white board marker, projector Protective Equipment: Safety shoes, safety gloves, safety helmet, safety jacket, safety mask Safety Equipment: Fire Drill Accessories, first aid kit, different types of fire extinguisher.		
15	Entry requirements and/or recommendations and minimum age: 10th Class with 2 Years of relevant experience OR 12th Class with 6 months of relevant experience OR Certificate-NSQF (Light Motor Vehicle Driver Level 3) with 2 Years of experience OR 8th Class + 1 year ITI with 3 Years of relevant experience OR 8th Class + 2 year ITI with 2 Years of relevant experience, 18 years		
16	Progression from the qualification (Please show Professional and academic progression) : Four Wheeler Service Lead Technician (Level 5)		
17	Arrangements for the Recognition of Prior learning (RPL) : RPL will be based on the same approved Qualification Pack and Assessment Criteria mentioned in the Qualification Pack by Automotive Skills Development Council		
18	International comparability where known (research evidence to be provided) : No		
19	Date of planned review of the qualification: 28th April 2025		
21	Formal structure of the qualification Mandatory components		
(i)	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level
1	Introduction to the role of a Heavy Commercial Vehicle (HCV) Service Technician	5	

2	Organize Work and Resources (Service)	45	4
3	Interact Effectively with Colleagues, Customers and Others (Service)	40	4
4	Carry out routine service or minor repairs a heavy commercial vehicle and assist in diagnosis	330	4
	Sub Total (A)	420	

SECTION 1

ASSESSMENT

1	Body/Bodies which will carry out assessment: Automotive Skills Development Council. Proposed Body/Bodies which will carry out assessment: <table border="1"> <thead> <tr> <th>S. No.</th><th>Assessment Agency Name</th></tr> </thead> <tbody> <tr><td>1</td><td>Eduvantage Pvt. Ltd.</td></tr> <tr><td>2</td><td>Prima Competencies Pvt. Ltd.</td></tr> <tr><td>3</td><td>Trendsetters Skill Assessors Pvt. Ltd.</td></tr> <tr><td>4</td><td>VR Skill & HR Solutions</td></tr> <tr><td>5</td><td>SP Institute of Workforce Development Private Limited</td></tr> <tr><td>6</td><td>Induslynk training services pvt ltd</td></tr> <tr><td>7</td><td>Kumar Agromeditech India Pvt. Ltd.</td></tr> <tr><td>8</td><td>Ace Assessments Pvt. Ltd.</td></tr> <tr><td>9</td><td>Greenarrows Safety Management (P) Ltd.</td></tr> <tr><td>10</td><td>TCS iON</td></tr> <tr><td>11</td><td>Educe Consulting OPC Pvt. Ltd</td></tr> </tbody> </table>	S. No.	Assessment Agency Name	1	Eduvantage Pvt. Ltd.	2	Prima Competencies Pvt. Ltd.	3	Trendsetters Skill Assessors Pvt. Ltd.	4	VR Skill & HR Solutions	5	SP Institute of Workforce Development Private Limited	6	Induslynk training services pvt ltd	7	Kumar Agromeditech India Pvt. Ltd.	8	Ace Assessments Pvt. Ltd.	9	Greenarrows Safety Management (P) Ltd.	10	TCS iON	11	Educe Consulting OPC Pvt. Ltd
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2	How will RPL assessment be managed and who will carry it out? The RPL assessment will be managed by selected assessment partners from the applications received																								
3	Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF. The emphasis is on practical demonstration of skills and knowledge based on the performance criteria. The assessment papers are developed by Subject Matter Experts (SME) available with the Assessment Agency as per the performance and assessment criteria mentioned in the Qualification Pack. The assessment papers are also checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc. The assessment results are backed by evidences collected by assessors. 1. The assessor needs to collect a copy of the attendance for the training done under the scheme. The attendance sheets are signed and stamped by the In-charge / Head of the Training Centre. 2. The assessor needs to verify the authenticity of the candidates by checking the photo ID card issued by the institute as well as any one																								

	Photo ID card issued by the Central/Government. The same needs to be mentioned in the attendance sheet. In case of suspicion, the assessor should authenticate and cross verify trainee's credentials in the enrolment form. 3. The assessor needs to punch the trainee's roll number on all the test pieces. 4. The assessor can take a photograph of all the students along with the assessor standing in the middle and with the center name/banner at the back as evidence. 5. The assessor also needs to carry a photo IDcard. The assessment agencies are instructed to hire assessors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit themselves to comply with the rules of confidentiality and conflict of interest, independence from commercial and other interests that would compromise impartiality of the assessments.
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Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

ASSESSMENT EVIDENCE

Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.

24. Assessment evidences

Title of Component: Four Wheeler Service Technician

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Heavy Commercial Vehicle Service Technician

Qualification Pack ASC/Q1430

Sector Skill Council Automotive Skills Development Council

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Recommended Pass % : 70

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
ASC/N9801: Organize work and resources (Service)				
<i>Maintain safe and secure working environment</i>	8	4	-	3
PC1. organise work as per organisation's current health, safety and security policies and procedures	-	2	-	1

PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person	3	1	-	-
PC3. identify the risks and hazards associated with work activities, their causes and prevention	5	1	-	2
<i>Perform work as per quality standards</i>	12	8	-	6
PC4. ensure work area is clean and tidy	4	2	-	-
PC5. ensure that work is accomplished as per the requirements within the specified timeline	6	4	-	2
PC6. ensure team goals are given preference over individual goals	2	2	-	4
<i>Health and hygiene</i>	12	8	-	5
PC7. sanitize workstation and equipment regularly	2	2	-	2
PC8. clean hands with soap, alcohol-based sanitizer regularly	2	1	-	-
PC9. avoid contact with ill people and self-isolate in a similar situation	2	1	-	-
PC10. wear and dispose PPEs regularly and appropriately	2	2	-	1
PC11. report advanced hygiene and sanitation issues to appropriate authority	2	2	-	2
PC12. follow stress and anxiety management techniques	2	-	-	-
<i>Material/energy conservation practices</i>	10	4	-	3
PC13. identify ways to optimise usage of material in various tasks/activities/processes	2	-	-	1
PC14. use resources, including water, in a responsible manner	2	-	-	-
PC15. check for spills/leakages in various tasks/activities/processes	-	1	-	-
PC16. plug spills/leakages and escalate to appropriate authority if unable to rectify	-	1	-	1

PC17. carry out routine cleaning of tools, machines and equipment	2	-	-	-
PC18. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	-	1	-	1
PC19. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	-
PC20. ensure electrical equipment and appliances are properly connected and turned off when not in use	2	-	-	-
<i>Effective waste management practices</i>	8	6	-	3
PC21. identify recyclable and non-recyclable, and hazardous waste generated	2	-	-	1
PC22. segregate waste into different categories	-	2	-	-
PC23. dispose non-recyclable waste appropriately	2	2	-	1
PC24. deposit recyclable and reusable material at identified location	2	1	-	-
PC25. follow processes specified for disposal of hazardous waste	2	1	-	1
NOS Total	50	30	-	20
ASC/N9802: Interact effectively with colleagues, customers and others				
<i>Communicate effectively with colleagues, customers and others</i>	36	11	-	14
PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written	8	-	-	4
PC2. adjust communication styles to reflect gender and persons with disability (PWD) sensitivity	8	-	-	-
PC3. work in a way that shows respect for colleagues and others	7	4	-	3
PC4. follow the organisation's policies and procedures while working in a team	7	4	-	3

NSQF Qualification File

Approved in 18th NSQC Meeting – NCVET – Dated 28/04/2022

PC5. respect personal space of colleagues and customers	6	3	-	4
<i>Interact with supervisor or superior</i>	14	19	-	6
PC6. identify work requirements by receiving instructions from reporting supervisor	7	4	-	-
PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine	-	5	-	3
PC8. report the completed work	7	5	-	-
PC9. rectify errors as per feedback	-	5	-	3
NOS Total	50	30	-	20

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare to carry out routine service or minor repair on Heavy Commercial Vehicle (HCV)</i>	4	10	-	5
PC1. review the job card and understand work to be carried out on Heavy Commercial Vehicle (HCV)	-	1	-	1
PC2. identify the auto components related to the various aggregates in the Heavy Commercial Vehicle (HCV)	1	2	-	1
PC3. place the Heavy Commercial Vehicle (HCV) on suitable platform according to nature of job to be performed	-	1	-	-
PC4. conduct visual inspection on Heavy Commercial Vehicle (HCV) to lead technician to assess defects, such as: any external impact/bend/leak/incorrect level/wear & tear etc.	-	2	-	1
PC5. collect workshop tools/measuring devices/equipment required to carry out job on Heavy Commercial Vehicle (HCV) and check their condition/calibration	1	2	-	1
PC6. wear PPE according to nature of job to be performed on the Heavy Commercial Vehicle (HCV)	1	1	-	1
PC7. report the malfunctions/repairs in Heavy Commercial Vehicle (HCV) beyond own scope to the concerned person	1	1	-	-
<i>Assist lead technician in diagnosis or troubleshooting the faults on HCV</i>	9	16	-	6
PC8. take precautions to avoid damage to the Heavy Commercial Vehicle (HCV) and its components while working on various aggregates	1	2	-	1
PC9. conduct test drive of the Heavy Commercial Vehicle (HCV) to assist the lead technician in assessing the service/repair requirement or calibration/adjustments, if any	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. follow lead technician instructions to choose and use the appropriate device/equipment to inspect/test the Heavy Commercial Vehicle's (HCV) system/component performance to diagnose or defect faults	1	1	-	1
PC11. carry out inspection or test on mechanical and electrical systems of Heavy Commercial Vehicle's (HCV) according to lead technician instructions	2	3	-	1
PC12. interpret and compare results of diagnostic inspections/tests with Heavy Commercial Vehicle (HCV) specifications or regulatory requirements	2	3	-	1
PC13. maintain the documentation related to inspections and troubleshooting performed on the Heavy Commercial Vehicle (HCV)	1	2	-	1
PC14. report the results to lead technician and seek assistance if further tests or inspections are required to conclude the diagnosis	1	2	-	1
<i>Perform routine service and minor repairs on HCV</i>	12	16	-	6
PC15. use appropriate tools, equipment, and consumables as per nature of job and Standard Operating Procedure (SOP) recommended by the organisation	1	1	-	1
PC16. test the Heavy Commercial Vehicle's (HCV) electrical/electronic components performance wherever applicable as per OEM SOP	2	2	-	1
PC17. remove parts relevant to various mechanical aggregates of Heavy Commercial Vehicle (HCV) and place them securely as specified by OEM	1	2	-	1
PC18. clean and condition dismantled mechanical and electrical components of Heavy Commercial Vehicle (HCV) prior to assembly	2	3	-	1
PC19. perform minor repair/replacement/calibration on Heavy Commercial Vehicle (HCV) systems such as: engine, multi-axle, differential, propeller shaft, mechanical/air suspension systems, air brakes & steering systems etc. including HVAC wherever applicable	3	4	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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PC20. refill/replace, as required quantity and appropriate grade of coolant engine oil, brake/steering fluid and lubricant in the Heavy Commercial Vehicle (HCV) as per OEM guidelines	2	3	-	1
PC21. maintain the documentation related to servicing and minor repair performed on the Heavy Commercial Vehicle (HCV)	1	1	-	-
<i>Perform post service/repair/diagnostic activities</i>	5	8	-	3
PC22. check the performance of Heavy Commercial Vehicle (HCV)/aggregate post repair and report to lead technician/supervisor if further inspection is required by another specialist	2	3	-	1
PC23. ensure completeness of tasks assigned before releasing the Heavy Commercial Vehicle's (HCV) for the next procedure	1	2	-	1
PC24. dispose of materials such as used oils, coolant, old batteries, scrap of failed parts/aggregates as per organization's policies	1	2	-	1
PC25. return leftover consumable/parts, tools/equipment, and report if any malfunctions are observed to the person concerned	1	1	-	-
NOS Total	30	50	-	20

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
Provided in the above section	
Means of assessment 1 - Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC. - The assessment for the theory part will be based on knowledge bank of questions created by the SSC.	

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below.)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.

Means of assessment 2

Add boxes as required.

Pass/Fail

1. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.
2. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

NSQC Approved

SECTION 2

EVIDENCE OF LEVEL

Title/Name of qualification/component: Four Wheeler Service Technician Level: 4			
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process	Assist the service technician in diagnosing the faults and carry out routine service / minor repairs of mechanical / electrical aggregates of the vehicle	Theoretical & Practical skill required for assisting in repairing/servicing 4-wheeler vehicles or performing the task individually. Since the individual is required to take instructions from supervisors, hence this is level 4.	4
Professional knowledge	Knowledge related to conducting test drive to identify, diagnose and repair the vehicle in a scheduled manner	Factual and theoretical knowledge in the field of repairing/servicing of 4-wheeler vehicles. No deeper knowledge or skills are required for this individual, hence this is level 4.	4
Professional skill	• Identify the work requirement to schedule timely completion accordingly • Demonstrate conducting the test drive to identify the fault • Apply the knowledge about the various systems / components / aggregates in diagnosing and repairing the faults • Follow the steps of inspection, diagnosis and repair as per standard operating procedures	Range of cognitive and practical skill required for the repairing/servicing of 4-wheeler vehicles. Hence this is level 4.	4

NSQF Qualification File

Approved in 18th NSQC Meeting – NCVET – Dated 28/04/2022

	• Demonstrate the process of performing routine service of the vehicle		
Core skill	Effective skill in writing, reading and oral communication (listening and speaking skills) with required clarity	Skill to communicate written or oral with required clarity, but not to manage/supervise others. Hence this is level 4.	4
Responsibility	Responsible for completing the assigned task, effective team working, safety of self and in workplace	Accountable for own work and learning in the domain of repairing/servicing of 4-wheeler vehicles and hence this is level 4.	4

SECTION 3

EVIDENCE OF NEED

1	What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate? Feedback from industry was collected with respect to roles for which qualification pack development was to be prioritized.
2	What is the estimated uptake of this qualification and what is the basis of this estimate? Skills Gap analysis reports for industry demand Training duration w.r.t current and potential capacity envisaged for potential supply
	Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences Yes
3	What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification NSDC list of Approved and Under-Development QPs was checked prior to commencement of work.
4	What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here • Monitoring of results of assessments • Employer feedback will be sought

SECTION 4

EVIDENCE OF PROGRESSION

1	What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector? 1. Endorsed and accepted by the Industry players 2. Formal recognition from the Industry players 3. Horizontal and vertical mobility options are available
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Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

1. QP ASC/Q1432
2. MC ASC/Q1432