



## **QUALIFICATION FILE**

### **Jr. Technician (Automobile Repair & Maintenance)**

☒ 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:**

**Karnataka Skill Development Corporation**

**3<sup>rd</sup> Floor, Kaushalya Bhawan**

**Dairy Circle, Bangalore - 560029**

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## Section 1: Basic Details

|    |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                         |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1. | Qualification Name                                                                                                                                                  | Jr. Technician (Automobile Repair & Maintenance)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                         |
| 2. | Sector/s                                                                                                                                                            | Automotive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                         |
| 3. | Type of Qualification: <input type="checkbox"/> New <input type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options<br><input type="checkbox"/> OEM | NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i><br>2022/AUT/KSDC/05923                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Qualification Name of existing/previous version:<br>Jr. Technician (Automobile Repair & Maintenance)-V1 |
| 4. | a. OEM Name<br>b. Qualification Name<br><i>(Wherever applicable)</i>                                                                                                | Jr. Technician (Automobile Repair & Maintenance)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                         |
| 5. | National Qualification Register (NQR) Code &Version<br><i>(Will be issued after NSQC approval)</i>                                                                  | QG-03-AU -05923-2025-V2-KSDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 6. NCrf/NSQF Level: 3                                                                                   |
| 7. | Award (Certificate/Diploma/Advance Diploma/ Any Other <i>(Wherever applicable specify multiple entry/exits also &amp; provide details in annexure)</i> )            | Certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                         |
| 8. | Brief Description of the Qualification                                                                                                                              | <p>This is a short-term course, which is aimed at making candidates to be proficient at vehicle servicing, maintenance of systems and sub systems of the vehicle. It provides hands on experience in trouble shooting, repair, servicing, preventive maintenance. It helps students to understand OEMs standard procedures for repair and maintenance of vehicles.</p> <p>It provides career opportunities in Automobile OEMs, Automobile Suppliers, Service Centers, Dealers, Spare Part dealer, automobile garages etc. This course also provides opportunities to start own garage.</p>                                                                                                                                  |                                                                                                         |
| 9. | Eligibility Criteria for Entry for Student/Trainee/Learner/Employee                                                                                                 | <p><b>a. Entry Qualification &amp; Relevant Experience:</b><br/>           Grade 10 pass<br/>           OR<br/>           Grade 8 pass with two years of (NTC/ NAC) after 8th<br/>           OR<br/>           9th Grade pass with 1.5 -year relevant experience<br/>           OR<br/>           8th Grade pass with 3 -year relevant experience<br/>           OR<br/>           5th grade pass with 7.5-year relevant experience<br/>           OR<br/>           Previous relevant Qualification of NSQF Level 2.5 with 1.5-year relevant experience<br/>           OR<br/>           Previous relevant Qualification of NSQF Level 2 with 1.5-year relevant experience</p> <p><b>b. Age:</b> Minimum Age: 15 Years</p> |                                                                                                         |

| 10.                     | Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))                                                      | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11. Common Cost Norm Category (I/II/III) (wherever applicable): |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------------|----------------------|--|--|--|-------------------------|----------------|-------------------|-----------------------|-------------------------|---------------|---------------------|----|-----|----|--|-----|--------|--|--|--|--|--|
| 12.                     | Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)                                                              | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 13.                     | Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification) | <input type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended<br><table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>70</td> <td>140</td> <td>90</td> <td></td> <td>300</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> (Refer Blended Learning Annexure for details) |                                                                 |                         |                      |  |  |  | Training Delivery Modes | Theory (Hours) | Practical (Hours) | OJT Mandatory (Hours) | OJT Recommended (Hours) | Total (Hours) | Classroom (offline) | 70 | 140 | 90 |  | 300 | Online |  |  |  |  |  |
| Training Delivery Modes | Theory (Hours)                                                                                                                                               | Practical (Hours)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OJT Mandatory (Hours)                                           | OJT Recommended (Hours) | Total (Hours)        |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| Classroom (offline)     | 70                                                                                                                                                           | 140                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 90                                                              |                         | 300                  |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| Online                  |                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 14.                     | Aligned to NCO/ISCO Code/s (if no code is available mention the same)                                                                                        | 7231.0100 - Mechanic, Automobile.<br>7231.0101 - Maintenance Technician – Service Workshop.<br>7231.0107 - Auto Service Technician – Mechanic.                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 15.                     | Progression path after attaining the qualification (Please show Professional and Academic progression)                                                       | <ul style="list-style-type: none"> <li>Jr. Technician (Automobile Repair &amp; Maintenance) → Technician (Automobile Repair &amp; Maintenance) → Sr. Technician (Automobile Repair &amp; Maintenance)</li> <li>Entrepreneurship</li> </ul>                                                                                                                                                                                                                                                                                                                                              |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 16.                     | Other Indian languages in which the Qualification & Model Curriculum are being submitted                                                                     | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 17.                     | Is similar Qualification(s) available on NQR-if yes, justification for this qualification                                                                    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 18.                     | Is the Job Role Amenable to Persons with Disability                                                                                                          | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>If “Yes”, specify applicable type of Disability:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 19.                     | How Participation of Women will be Encouraged                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 20.                     | Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)                                                            | <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 21.                     | Is Qualification Suitable to be Offered in Schools/Colleges                                                                                                  | Schools <input type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 22.                     | Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)                          | Name: Nagaraja NM, IAS<br>Managing Director,<br>Karnataka Skill Development Corporation<br>Email: md.ksdc@karnataka.gov.in<br>Website: <a href="https://kaushalkar.karnataka.gov.in/en">https://kaushalkar.karnataka.gov.in/en</a><br>Contact No.: 080 2952 2222                                                                                                                                                                                                                                                                                                                        |                                                                 |                         |                      |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |
| 23.                     | Final Approval Date by NSQC:                                                                                                                                 | 24. Validity Duration: 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                 |                         | 25. Next Review Date |  |  |  |                         |                |                   |                       |                         |               |                     |    |     |    |  |     |        |  |  |  |  |  |

## Section 2: Module Summary

### NOS/s of Qualifications

(In exceptional cases these could be described as components)

#### Mandatory NOS/s:

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

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

| S. No | NOS/Module Name                                                                                                                     | NOS/Module Code & Version (if applicable) | Core/Non-Core | NCrF/NS QF Level | Credits as per NCrF | Training Duration (Hours) |     |          |          |       | Assessment Marks |     |       |      |       |                               |
|-------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------|------------------|---------------------|---------------------------|-----|----------|----------|-------|------------------|-----|-------|------|-------|-------------------------------|
|       |                                                                                                                                     |                                           |               |                  |                     | Th.                       | Pr. | OJT-Man. | OJT-Rec. | Total | Th.              | Pr. | Proj. | Viva | Total | Weightage (%) (if applicable) |
| 1.    | Comply with workshop health and safety guidelines                                                                                   |                                           | Non-Core      | 3                | 1                   | 6                         | 14  |          |          | 20    | 1                | 4   |       | 4    | 9     | 9                             |
| 2.    | Assist to classification the Automobile, its classification, and Vehicle Architecture.                                              |                                           | Core          | 3                |                     | 6                         | 14  |          |          | 20    | 1                | 4   |       | 4    | 9     | 9                             |
| 3.    | Support in fault finding and diagnose vehicle system level problems.                                                                |                                           | Core          | 3                | 1                   | 6                         | 14  |          |          | 20    | 2                | 4   |       | 4    | 9     | 9                             |
| 4.    | Support in repairing faults, servicing vehicle components, creating preventative maintenance strategies, and updating user manuals. |                                           | Core          | 3                | 1                   | 6                         | 14  |          |          | 20    | 1                | 4   |       | 4    | 9     | 9                             |
| 5.    | Understanding On-Board Diagnostics kit                                                                                              |                                           | Core          | 3                |                     | 6                         | 14  |          |          | 20    | 1                | 4   |       | 4    | 9     | 9                             |
| 6.    | Monitoring inventory and reordering materials and hazardous parts recycling                                                         |                                           | Core          | 3                | 1                   | 5                         | 15  |          |          | 20    | 2                | 4   |       | 4    | 11    | 11                            |
| 7.    | Assignments                                                                                                                         |                                           | Core          | 3                | 2                   | 20                        | 40  |          |          | 60    | 4                | 6   |       | 6    | 16    | 16                            |
| 8.    | OJT (Mini Project (Based on Industrial application))                                                                                |                                           | Core          | 3                | 3                   |                           |     | 90       |          | 90    | 6                | 6   |       | 6    | 18    | 18                            |
| 9.    | Employability Skills                                                                                                                |                                           | Non-          | 3                | 1                   | 15                        | 15  |          |          | 30    | 2                | 4   |       | 4    | 10    | 10                            |

| S. No                             | NOS/Module Name | NOS/Module Code & Version (if applicable) | Core/Non-Core | NCrF/NS QF Level | Credits as per NCrF | Training Duration (Hours) |     |          |          |       | Assessment Marks |     |       |      |       |                               |
|-----------------------------------|-----------------|-------------------------------------------|---------------|------------------|---------------------|---------------------------|-----|----------|----------|-------|------------------|-----|-------|------|-------|-------------------------------|
|                                   |                 |                                           |               |                  |                     | Th.                       | Pr. | OJT-Man. | OJT-Rec. | Total | Th.              | Pr. | Proj. | Viva | Total | Weightage (%) (if applicable) |
|                                   |                 |                                           | Core          |                  |                     |                           |     |          |          |       |                  |     |       |      |       |                               |
| Duration (in Hours) / Total Marks |                 |                                           |               | 3                | 10                  | 70                        | 140 | 90       |          | 300   | 20               | 40  |       | 40   | 100   | 100                           |

## Elective NOS/s:

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

## Optional NOS/s:

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

## Assessment - Minimum Qualifying Percentage

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

**Minimum Pass Percentage – Aggregate at qualification level: 70 %** (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

**Minimum Pass Percentage – NOS/Module-wise: \_\_\_\_ %** (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

### Section 3: Training Related

|    |                                                                                                                  |                                                                                                                    |
|----|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Trainer's Qualification and experience in the relevant sector (in years)</b> (as per NCVET guidelines)        | Graduate in Engineering with 2-year experience in relevant field and domain certification.                         |
| 2. | <b>Master Trainer's Qualification and experience in the relevant sector (in years)</b> (as per NCVET guidelines) | Graduate in Engineering with 4-year experience in relevant field and domain certification.                         |
| 3. | <b>Tools and Equipment Required for Training</b>                                                                 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes", details to be provided in Annexure) |
| 4. | <b>In Case of Revised Qualification, Details of Any Upskilling Required for Trainer</b>                          |                                                                                                                    |

### Section 4: Assessment Related

|    |                                                                                                                       |                                                                                                                                                                                          |
|----|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Assessor's Qualification and experience in relevant sector (in years)</b> (as per NCVET guidelines)                | Graduate in Engineering with 4-year experience in relevant field.                                                                                                                        |
| 2. | <b>Proctor's Qualification and experience in relevant sector (in years)</b> (as per NCVET guidelines)                 | Graduate in Engineering with 2-year experience in relevant field.                                                                                                                        |
| 3. | <b>Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)</b> (as per NCVET guidelines) | Graduate in Engineering with 6-year experience in industry or training experience.                                                                                                       |
| 4. | <b>Assessment Mode</b> (Specify the assessment mode)                                                                  | Offline                                                                                                                                                                                  |
| 5. | <b>Tools and Equipment Required for Assessment</b>                                                                    | <input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment) |

## Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

|    |                                                                                                       |
|----|-------------------------------------------------------------------------------------------------------|
| 1. | <b>Latest Skill Gap Study (not older than 2 years) (Yes/No):</b> Yes                                  |
| 2. | <b>Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):</b> Yes      |
| 3. | <b>Government /Industry initiatives/ requirement (Yes/No):</b> Yes                                    |
| 4. | <b>Number of Industry validation provided:</b>                                                        |
| 5. | <b>Estimated nos. of persons to be trained and employed:</b>                                          |
| 6. | <b>Evidence of Concurrence/Consultation with Line Ministry/State Departments:</b> NA<br>If "No", why: |

## Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

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



## 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 |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Professional Theoretical Knowledge/Process</b>                                           | <ul style="list-style-type: none"> <li>Automobile Repair and Maintenance Technician is expected to assist the service Engineer in service and maintenance of the vehicle.</li> <li>Assist in production and inspection related activities</li> <li>Assist the Engineer in vehicle performance testing.</li> </ul>                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Automobile Repair and Maintenance Technician will be understanding components and subcomponents of Automobiles &amp; its functionality and its assembly.</li> <li>Ability to rectify and diagnoses automotive systems as per customer requirements.</li> </ul>                                                                                                                                                                                                                                                                                                                                                            | NSQF Level 3    |
| <b>Professional and Technical Skills/ Expertise/ Professional Knowledge</b>                 | <ul style="list-style-type: none"> <li>Automobile Repair and Maintenance Technician is expected to have Basic knowledge of various the systems and subsystems in an automobile.</li> <li>Basic understanding of Engine and powertrain, ECU's sensors and wiring harness.</li> <li>Knowledge of commonly used materials and manufacturing processes used in Automobile manufacturing. Knowledge OBD diagnostic procedure.</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>Automobile Repair and Maintenance Technician understands the Automotive systems, such as engine wiring harness, Engine control unit, Vehicle control its assembly, working and their specification. Along with knowledge fault finding and diagnostics with OBD device.</li> </ul>                                                                                                                                                                                                                                                                                                                                        | NSQF Level 3    |
| <b>Employment Readiness &amp; Entrepreneurship Skills &amp; Mind-set/Professional Skill</b> | <ul style="list-style-type: none"> <li>Working as a member of a team/ within a team. Display Personal Motivation. Positive Attitude &amp; Passion for Work</li> <li>Good skills in written and oral communication with some clarity, basic knowledge of Language to support such communication.</li> <li>Intermediate literacy and Numeracy skills</li> <li>Skills for workshop calculations and basic of arithmetic and algebraic principles.</li> <li>Good logical and analytical reasoning skills.</li> </ul> | <ul style="list-style-type: none"> <li>Automobile Repair and Maintenance Technician is expected to have the</li> <li>Ability to understand functioning of vehicle from user manual and cut sections.</li> <li>Ability to do support engineer in repair and maintenance activities. Able to support production and inspection related activities under supervision.</li> <li>Automobile Repair and Maintenance Technician will be able to do assembly of automotive systems after reading the automotive systems user manual, such as body parts, Rear axle, steering system, Engine etc. Assist Engineers for repair and maintenance of the vehicles.</li> </ul> | NSQF Level 3    |
| <b>Broad Learning Outcomes/Core Skill</b>                                                   | <ul style="list-style-type: none"> <li>Automobile Assistant Technician is expected to able to flexible enough to perform various Automotive related tasks depending on the role assigned.</li> <li>Automobile Repair and Maintenance Technician</li> </ul>                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Automobile Assistant Technician is expected to able to flexible enough to perform various Automotive related tasks depending on the role assigned.</li> <li>Automobile Repair and Maintenance Technician</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                       | NSQF Level 3    |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|                       | <p>must be in Constant communication with his supervisor, so it is essential to have good communication skills.</p> <ul style="list-style-type: none"> <li>• The person should be able to use information technology for communication and reporting.</li> <li>• Job holder is expected to conduct. Themselves in ways, which show a basic understanding of the social and professional environment of working.</li> </ul>                                             | <p>must be in Constant communication with his supervisor, so it is essential to have good communication skills.</p> <ul style="list-style-type: none"> <li>• The technician Should be able to use information technology for communication and reporting. Job holder is expected to conduct. Themselves in ways, which show a basic understanding of the social and professional environment of working.</li> </ul> |              |
| <b>Responsibility</b> | <p>Automobile Repair and Maintenance Technician is responsible to:</p> <ul style="list-style-type: none"> <li>• Assist in service and maintenance related activities.</li> <li>• Support in overhaul and maintenance of vehicle.</li> <li>• Understanding On-Board Diagnostics kit</li> <li>• He has the limited, responsibility for own work and majorly function in close supervision.</li> </ul> <p>In his routine activity he is responsible for his own work.</p> | <ul style="list-style-type: none"> <li>• To identify and rectify the issues observed in automotive systems and sub systems.</li> <li>• Automobile Mechanic is responsible for overhaul and maintenance of vehicle. Understanding On-Board Diagnostics kit.</li> </ul>                                                                                                                                               | NSQF Level 3 |

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

List of Tools and Equipment

**Batch Size:**

| S. No. | Tool / Equipment Name                                                   | Specification | Quantity for specified Batch size |
|--------|-------------------------------------------------------------------------|---------------|-----------------------------------|
| 1      | Safety Kit                                                              | --            | 10 Nos                            |
| 2      | Car lift -4Ton                                                          | --            | 1 No                              |
| 3      | TATA ACE – Chassis                                                      | --            | 1 No                              |
| 4      | Transmission / Gearbox Demo Kit                                         | --            | 1 No                              |
| 5      | Cooling System                                                          | --            | 1 No                              |
| 6      | Fuel System & Urea Handling (Petrol)                                    | --            | 1 No                              |
| 7      | Exhaust System                                                          | --            | 1 No                              |
| 8      | Commercial Vehicle Chassis Structure                                    | --            | 1 No                              |
| 9      | Rear Axel                                                               | --            | 1 No                              |
| 10     | Suspension System-Leaf Spring                                           | --            | 1 No                              |
| 11     | Steering Wheel and Tyre Systems                                         | --            | 1 No                              |
| 12     | Brakes & Controls                                                       | --            | 1 No                              |
| 13     | Engine and Transmission Mounts                                          | --            | 1 No                              |
| 14     | HVAC Demo Kit                                                           | --            | 1 No                              |
| 15     | Electronic Ignition System of An Automobile 4-Wheeler                   | --            | 1 No                              |
| 16     | Demonstration Board of Working Model MPFI System with Motorized control | --            | 1 No                              |
| 17     | Instruction Kit for Charging System                                     | --            | 1 No                              |
| 18     | Instruction Kit for Starting System                                     | --            | 1 No                              |
| 19     | Lighting and Wiring System                                              | --            | 1 No                              |

**Classroom Aids**

The aids required to conduct sessions in the classroom are:

1. Laptop
2. Whiteboard and Markers
3. Projector
4. Screen
5. Stationary

### 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) |
|-------|-------------------|---------------------|-------------|-----------------|------------------|-----------|---------------------------------|
|       |                   |                     |             |                 |                  |           |                                 |
|       |                   |                     |             |                 |                  |           |                                 |

### 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 |
|      |                      |                                    |                      |                                    |                        |                                    |
|      |                      |                                    |                      |                                    |                        |                                    |

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 |
|                       |      |                  |          |           |        |         |          |           |        |                        |          |           |        |
|                       |      |                  |          |           |        |         |          |           |        |                        |          |           |        |

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.
- 2.

Content availability for previous versions of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available:

## Annexure 5: Blended Learning

**Blended Learning Estimated Ratio & Recommended Tools:**

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

| S. No. | Select the Components of the Qualification                                                                    | List Recommended Tools – for all Selected Components | Offline : Online Ratio |
|--------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------|
| 1      | <input type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge                    |                                                      |                        |
| 2      | <input type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners |                                                      |                        |
| 3      | <input type="checkbox"/> Showing Practical Demonstrations to the learners                                     |                                                      |                        |
| 4      | <input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training         |                                                      |                        |
| 5      | <input type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice                                              |                                                      |                        |
| 6      | <input type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations                           |                                                      |                        |
| 7      | <input type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training          |                                                      |                        |

## 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 |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| <b>Comply with workshop health and safety guidelines</b>                                     | <ul style="list-style-type: none"> <li>PC 1. Comply with safety, health, security, and environment related regulations/ guidelines as per organizational/ manufacturer's policy.</li> </ul>         |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. Carry out maintenance operations as per the manufacturers and workshop related health and safety guidelines/ standard operating procedures.</li> </ul> |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 3. Follow safety regulations and procedures regarding service workshop hazards and risks.</li> </ul>                                                      |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 4. Use appropriate protective clothing/ equipment for specific tasks and work conditions as per service manual.</li> </ul>                                |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 5. Record and report details related to operations, incidents, or accidents, as applicable.</li> </ul>                                                    |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>1</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Assist to classification the Automobile, its classification and Vehicle Architecture.</b> | <ul style="list-style-type: none"> <li>PC 1. Identify the systems &amp; sub systems of Automobile &amp; its classification.</li> </ul>                                                              |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. Automotive Cut Sections demonstrate the learning by applying knowledge.</li> </ul>                                                                     |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 3. Internal and external body components, Observe the defects in vehicle for irregularity in gaps &amp; flushness &amp; painting.</li> </ul>              |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>1</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Support in fault finding and diagnose vehicle system level problems.</b>                  | <ul style="list-style-type: none"> <li>PC 1. Identify the root cause of problems in various vehicle level system and components.</li> </ul>                                                         |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. Develop standard operating procedure for assembly and Disassembly of vehicle sub systems.</li> </ul>                                                   |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 3. Vehicle prognostics, HMI, Telematics, Connected Cars technology fault finding and diagnostics.</li> </ul>                                              |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>2</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Support in overhaul and maintenance of vehicle.</b>                                       | <ul style="list-style-type: none"> <li>PC 1. To open vehicle level system as per standard operating procedure.</li> </ul>                                                                           |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. To repair and maintain faulty parts and its assembly on vehicle.</li> </ul>                                                                            |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 3. Identify areas of Noise &amp; Vibration &amp; it diagnose methods.</li> </ul>                                                                          |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>1</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Understanding On-Board Diagnostics kit</b>                                                | <ul style="list-style-type: none"> <li>PC 1. Reading data from OBD scanner.</li> </ul>                                                                                                              |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. Understand the error code and take corrective action accordingly.</li> </ul>                                                                           |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>1</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Monitoring inventory and reordering materials and hazardous parts recycling</b>           | <ul style="list-style-type: none"> <li>PC 1. Understanding how to raise indent to order required parts for vehicle maintenance.</li> </ul>                                                          |              |                 |               |            |
|                                                                                              | <ul style="list-style-type: none"> <li>PC 2. Understanding the norms and procedure for hazardous parts recycling/discarding.</li> </ul>                                                             |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>2</b>     | <b>4</b>        |               | <b>4</b>   |
| <b>Assignments</b>                                                                           | <ul style="list-style-type: none"> <li>PC1 Based on case studies and Industrial application</li> </ul>                                                                                              |              |                 |               |            |
|                                                                                              | <b>Total Marks</b>                                                                                                                                                                                  | <b>4</b>     | <b>6</b>        |               | <b>6</b>   |
| <b>OJT (Mini Projects (Based on</b>                                                          | <ul style="list-style-type: none"> <li>PC1 Conducting Market survey / Market Research</li> </ul>                                                                                                    |              |                 |               |            |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |    |  |    |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|----|
| <b>case studies and Industrial application))</b> | <ul style="list-style-type: none"> <li>• PC2 Addressing basic problems in society / industry by using empathize tool.</li> <li>• PC3 Concept Design a specific product in line with current customer needs</li> <li>• PC4 Brainstorming sessions with industry experts to design specific product</li> <li>• PC5 3D Printing for Prototyping of Mechanical Component</li> <li>• PC6 Exposure to Product Innovation</li> </ul>                                                                                                          |    |    |  |    |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6  | 6  |  | 6  |
| <b>Employability Skills</b>                      | <ul style="list-style-type: none"> <li>• PC1 Understanding the Significance of Employability skills</li> <li>• PC2 Identification the Constitutional values</li> <li>• PC3 Explaining Becoming a professional in the 21st century</li> <li>• PC4 Speak with Others in Basic English skills</li> <li>• PC5 Significance of Career development and goal setting</li> <li>• PC6 Etiquette of Communication skills</li> <li>• PC7 Use Various Financial and legal literacy</li> <li>• PC8 Awareness to Essential Digital Skills</li> </ul> |    |    |  |    |
|                                                  | <b>Total Marks</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2  | 4  |  | 4  |
| <b>Grand Total</b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20 | 40 |  | 40 |

## 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 the assessment agencies for conducting the assessment on SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

### 2. Testing Environment:

- Check the Assessment location, date and time
- If the batch size is more than 30, then there should be 2 Assessors.
- 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 & trainer must be ToT Certified

### 4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged 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 (which covers the job profile of Automotive Service Assistant Technician) will be assessed separately.
2. The candidate must score 60% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
  - Videos of Trainees during OJT
  -
4. Assessment of each Module will ensure that the candidate is able to:
  - Effective engagement with the customers
  - Understand the working of various tools and equipment
  - .....>



## 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                                                                                                                                                                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Occupational Standards (NOS)</b> | 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.                                               |
| <b>Qualification</b>                         | 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                                                       |
| <b>Qualification File</b>                    | 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. |
| <b>Sector</b>                                | A grouping of professional activities on the basis of their main economic function, product, service or technology.                                                                                                                    |
| <b>Long Term Training</b>                    | Long-term skilling means any vocational training program undertaken for a year and above. <a href="https://ncvet.gov.in/sites/default/files/NCVET.pdf">https://ncvet.gov.in/sites/default/files/NCVET.pdf</a>                          |