



## **QUALIFICATION FILE**

### **Aircraft Airframe and Powerplant Junior Technician**

☒ 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: 4**

**Submitted By:**

**Aerospace and Aviation Sector Skill Council  
Plot No. V77 & 78, 1st Main Road,  
2nd stage Peenya Industrial Area, Bengaluru - 560058**

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## Section 1: Basic Details

| 1.     | Qualification Name                                                                                                                                                             | Aircraft Airframe and Powerplant Junior technician                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------|-----------------------------------------------------------|----|-------------------------------------------|------------------------------------------------------|----|-----------------------------|---------------------------------|----|--------------------------------------------------|--------------------------------|
| 2.     | Sector/s                                                                                                                                                                       | Maintenance Repair and Overhauling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 3.     | Type of Qualification: <input checked="" 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: QG-04-AA-04185-2025-V2-AASSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Qualification Name of existing/previous version: Aircraft Airframe and Powerplant Junior technician |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 4.     | a. OEM Name<br>b. Qualification Name<br>(Wherever applicable)                                                                                                                  | b. Aircraft Airframe and Powerplant Junior technician                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 5.     | National Qualification Register (NQR) Code &Version<br>(Will be issued after NSQC approval)                                                                                    | QG-04-AA-04185-2025-V2-AASSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6. NCrf/NSQF Level: 4                                                                               |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 7.     | Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)                                    | Certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 8.     | Brief Description of the Qualification                                                                                                                                         | Aircraft Powerplant Junior Technician is responsible for assembly of engine modules, complete engine, engine accessories and LRUs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 9.     | Eligibility Criteria for Entry for Student/Trainee/Learner/Employee                                                                                                            | <b>a. Entry Qualification &amp; Relevant Experience:</b> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>12<sup>th</sup> grade Pass or Equivalent</td> <td>In Science Stream with Maths and Phycis is Mandatory</td> </tr> <tr> <td>2.</td> <td>10<sup>th</sup> grade Pass</td> <td>2 Years of relevant Experience.</td> </tr> <tr> <td>3.</td> <td>Previous relevant Qualifications of NSQF level 3</td> <td>3 years of relevant Experience</td> </tr> </tbody> </table> <b>b. Age: 18</b> |                                                                                                     | S. No. | Academic/Skill Qualification (with Specialization - if applicable) | Required Experience (with Specialization - if applicable) | 1. | 12 <sup>th</sup> grade Pass or Equivalent | In Science Stream with Maths and Phycis is Mandatory | 2. | 10 <sup>th</sup> grade Pass | 2 Years of relevant Experience. | 3. | Previous relevant Qualifications of NSQF level 3 | 3 years of relevant Experience |
| S. No. | Academic/Skill Qualification (with Specialization - if applicable)                                                                                                             | Required Experience (with Specialization - if applicable)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 1.     | 12 <sup>th</sup> grade Pass or Equivalent                                                                                                                                      | In Science Stream with Maths and Phycis is Mandatory                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 2.     | 10 <sup>th</sup> grade Pass                                                                                                                                                    | 2 Years of relevant Experience.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 3.     | Previous relevant Qualifications of NSQF level 3                                                                                                                               | 3 years of relevant Experience                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 10.    | Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrf))                                                                        | 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 11. Common Cost Norm Category (I/II/III) (wherever applicable): I                                   |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |
| 12.    | Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)                                                                                | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |        |                                                                    |                                                           |    |                                           |                                                      |    |                             |                                 |    |                                                  |                                |

| 13.                     | Training Duration by Modes of Training Delivery ( <i>Specify Total Duration as per selected training delivery modes and as per requirement of the qualification</i> ) | <input checked="" 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>220:00</td><td>260:00</td><td>30:00</td><td>00:00</td><td>510:00</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) | 220:00 | 260:00 | 30:00 | 00:00 | 510:00 | Online | - | - | - | - | - |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|---------------|----------------------------------|--|-------------------------|----------------|-------------------|-----------------------|-------------------------|---------------|---------------------|--------|--------|-------|-------|--------|--------|---|---|---|---|---|
| Training Delivery Modes | Theory (Hours)                                                                                                                                                        | Practical (Hours)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OJT Mandatory (Hours) | OJT Recommended (Hours) | Total (Hours) |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| Classroom (offline)     | 220:00                                                                                                                                                                | 260:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 30:00                 | 00:00                   | 510:00        |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| Online                  | -                                                                                                                                                                     | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -                     | -                       | -             |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 14.                     | Aligned to NCO/ISCO Code/s ( <i>if no code is available mention the same</i> )                                                                                        | NCO-2015/7232.0400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 15.                     | Progression path after attaining the qualification ( <i>Please show Professional and Academic progression</i> )                                                       | Aircraft Airframe & Powerplant Junior Technician, Senior Aircraft Airframe & Powerplant Technician,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 16.                     | Other Indian languages in which the Qualification & Model Curriculum are being submitted                                                                              | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 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                                                                                                                         | Encouraging women's participation in aircraft airframe and powerplant technician roles can be achieved by providing targeted training programs, mentorship, and fostering an inclusive workplace culture.                                                                                                                                                                                                                                                                                                                                                                                               |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 20.                     | Are Greening/ Environment Sustainability Aspects Covered ( <i>Specify the NOS/Module which covers it</i> )                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 21.                     | Is Qualification Suitable to be Offered in Schools/Colleges                                                                                                           | Schools <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 22.                     | Name and Contact Details of Submitting / Awarding Body SPOC ( <i>In case of CS or MS, provide details of both Lead AB &amp; Supporting ABs</i> )                      | <b>Name:</b> Aerospace and Aviation Sector Skill Council<br><b>Email:</b> touchdown@aassc.in <b>Contact No.:</b> 080-28398506<br><b>Website:</b> https://www.aassc.in/                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                         |               |                                  |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |
| 23.                     | Final Approval Date by NSQC: 08/05/2025                                                                                                                               | 24. Validity Duration: 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                         |               | 25. Next Review Date: 08/05/2028 |  |                         |                |                   |                       |                         |               |                     |        |        |       |       |        |        |   |   |   |   |   |

## 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/N SQF 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.                                | Module 1: Introduction to Airframe and Powerplant System                                                                      | AAS/N2021- & 1.0                          | Core           | 4                | 2                   | 30:00                     | 25:00  | 05:00    | 00:00    | 60:00  | 40               | 60  | -     | -    | 100   | 10                            |
| 2.                                | Module2: Understand the process, procedures and precautions of Airframe & power plant systems components removal/installation | AAS/N2001-& 3.0                           | Core           | 4                | 3                   | 35:00                     | 50:00  | 05:00    | 00:00    | 90:00  | 40               | 60  | -     | -    | 100   | 20                            |
| 3.                                | Module 3: Airframe & power plant system components removal/installation                                                       | AAS/N2002- &3.0                           | Core           | 4                | 3                   | 35:00                     | 50:00  | 05:00    | 00:00    | 90:00  | 42               | 58  | -     | -    | 100   | 20                            |
| 4.                                | Module 4: Prevention of FOD during aircraft operations                                                                        | AAS/N2004 & 3.0                           | Core           | 4                | 3                   | 35:00                     | 50:00  | 05:00    | 00:00    | 90:00  | 40               | 60  | -     | -    | 100   | 15                            |
| 5.                                | Module 5: Perform Aircraft & power plant inspections & servicing                                                              | AAS/N2017 & 2.0                           | Core           | 4                | 3                   | 35:00                     | 50:00  | 05:00    | 00:00    | 90:00  | 40               | 60  | -     | -    | 100   | 20                            |
| 6.                                | Module 6: Safety and Compliance in Airframe and Powerplant System                                                             | AAS/N2022 – & 1.0                         | Core           | 4                | 2                   | 35:00                     | 20:00  | 05:00    | 00:00    | 60:00  | 48               | 52  | -     | -    | 100   | 10                            |
| 7.                                | Module 7: Employability skills                                                                                                | DGT/VSQ/N0 101 & 1.0                      | Noncore        | 4                | 1                   | 15:00                     | 15:00  | 00:00    | 00:00    | 30:00  | 20               | 30  | -     | -    | 50    | 05                            |
| Duration (in Hours) / Total Marks |                                                                                                                               |                                           |                |                  | 17                  | 220:00                    | 260:00 | 30:00    | 00:00    | 510:00 | 270              | 380 | -     | -    | 650   | 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.                                | NIL             |                                           |               |                  |                     |                           |     |          |          |       |                  |     |       |      |       |                               |
| 2.                                | NIL             |                                           |               |                  |                     |                           |     |          |          |       |                  |     |       |      |       |                               |
| 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.                                | NIL             |                                           |               |                  |                     |                           |     |          |          |       |                  |     |       |      |       |                               |
| 2.                                | NIL             |                                           |               |                  |                     |                           |     |          |          |       |                  |     |       |      |       |                               |
| 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.)

## Section 3: Training Related

|    |                                                                                                                  |                                                                                                                                                                                                                                              |
|----|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b>        | Educational Qualification: Graduation in Instrumentation/ Electrical/ Mechanical<br>Industry experience: Minimum 2-3 years' experience in Aircraft Maintenance/Power Plant Technician                                                        |
| 2. | <b>Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b> | Educational Qualification: Graduation in Instrumentation/ Electrical/ Mechanical<br>Industry experience: Minimum 5-10 years' experience in Aircraft Maintenance/Power Plant Technician<br>Training experience: Minimum 5-10 -year experience |

|    |                                                                                         |                                                                                                                    |
|----|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 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> | NA                                                                                                                 |

### Section 4: Assessment Related

|    |                                                                                                                       |                                                                                                                                                                                                                                              |
|----|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>                | Educational Qualification: Graduation in Instrumentation/ Electrical/ Mechanical<br>Industry experience: Minimum 2-3 years' experience in Aircraft Maintenance/Power Plant Technician<br>Training experience: Nil                            |
| 2. | <b>Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>                 | Educational Qualification: Diploma in Instrumentation/ Electrical/ Mechanical<br>Industry experience: Minimum 2-3 years' experience in Aircraft Maintenance/Power Plant Technician<br>Training experience: Nil                               |
| 3. | <b>Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b> | Educational Qualification: Graduation in Instrumentation/ Electrical/ Mechanical<br>Industry experience: Minimum 5-10 years' experience in Aircraft Maintenance/Power Plant Technician<br>Training experience: Minimum 5-10 -year experience |
| 4. | <b>Assessment Mode (Specify the assessment mode)</b>                                                                  | 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> No                              |
| 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> 3                                                 |
| 5. | <b>Estimated nos. of persons to be trained and employed:</b> 1050                                |
| 6. | <b>Evidence of Concurrence/Consultation with Line Ministry/State Departments:</b> Yes            |

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

### Annexure: 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> | Aircraft Powerplant Technician is responsible for assembly of engine modules, complete engine, engine accessories & LRU's. He also carries out various welding activities/ repair of engine hot/cold sections, structural /Mechanical components for all types of aircrafts. | The job holder is responsible for carrying out activities such as assembly/disassembly of engine modules, complete engine, engine accessories & LRU's. He also carries out various welding activities/ repair of engine hot/cold sections, structural /mechanical components for all types of aircrafts. This involves working in some familiar, predictable, and routine situations. He will be responsible for carrying out a range of jobs where some of them will require them to make choices about the approaches that must be |                 |

|                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |
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|                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>adopted.</p> <p>Hence, it qualifies as a Level 4 Role.</p> <p>For ex: install the modules on the disassembly rig and perform disassembly of the aircraft engine modules into piece parts, tag the piece parts with the appropriate tags and ensure all relevant information is filled as per regulatory/organisation policy and procedures, weld the structure as per the requirements, standards, engineering drawings etc.,</p> <p>However, the job holder does not perform problem solving or supervisory role. Therefore, it does not qualify for Level 5 role.</p> <p>At the same time, the job holder is not required to work in a limited to range of jobs under close supervision. He is also not a 'partly skilled' worker, the job role cannot be pegged at level 3.</p> <p>for ex: perform visual inspection of the bare assembled engine and record the visual findings on the engine, perform fuel and oil draining procedure on the engine prior to disassembly as per the procedures detailed in the job cards/manufacturer manuals/organisation maintenance manuals etc as mentioned in the adjacent cell. Hence NSQF level should be 4.</p> | 4 |
| <b>Professional and Technical Skills/ Expertise/ Professional Knowledge</b> | <p>The user/individual on the job needs to know and understand how to:</p> <p>comprehend the organisation's safety and security policies and procedures, comprehend the regulatory guidelines on safe conduct of operations and maintenance of conditions to thwart any acts of unlawful interference, report any identified breaches of safety, and security policies and procedures to the designated person, coordinate with other resources at the workplace (within and outside the organisation) to achieve safe and secure environment, identify and mitigate any safety and security hazards like illness, accidents, fires or acts of unlawful interference if it falls</p> | <p>The job holder is expected to have factual knowledge of the field of Aircraft powerplant and welding of Aerospace engine and structural components.</p> <p>For Ex: Knowledge about different types of Aero Engines, Different types of manuals containing work related information, Relevant Standards &amp; procedures followed in the organisation, 5S &amp; safety norms practiced in the organisation etc.,</p> <p>Since all the above-mentioned areas are commensurate to the level 4 professional knowledge, the role qualifies for Level 4.</p> <p>As the job holder requires professional knowledge higher than basic facts, processes in the field etc., therefore it cannot be pegged at level 3.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4 |

|                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |
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|                                                                                                    | <p>within the limits of individual's authority, report any hazards outside the individual's authority to the relevant person in line with organisational procedures and regulatory guidelines, Understand the various materials, parts and consumables used during assembly/disassembly process, understand the criticality of sub-assemblies of an aero engine, understand the right assembly/disassembly methodology and various process parameters like torque application, fitting tolerances, bolting and fastening as mentioned in the work instruction/organisation maintenance manuals, understand 5 S related to the work area, while understanding the drawings and sketches, he/she must ensure that the observed problems are highlighted to concerned supervisor, understand the changes which may happen from time-to-time in assembly/disassembly process based on the approved engine configuration, arranging welding material and the welding setup, performing welding operations on test coupon and on the weld piece etc.,</p> | <p>For ex: Knowledge about reading engineering drawings, process sheets, sketches etc, knowledge about Geometric Dimensioning &amp; tolerancing etc., use of standard tools like torque wrenches, spanners, sockets etc, use of standard measuring instruments like dial gauges, comparators, bore gauges, passometers, Vernier callipers, slip gauges, different equipment to be used in welding the components, setting up the welding equipment before welding, operating the welding equipment, different aerospace welding standards like EN, BS and DIN Standards, different type of weld joints, different protective equipment to be used while welding, skill in knowhow of various physical parameters like temperature, pressure, electrode distance, electric current, voltage on the properties of final output product like durability, strength etc., Therefore it cannot be pegged at level 3 and ideally fit as a level 4 Job Role.</p> |   |
| <p><b>Employment Readiness &amp; Entrepreneurship Skills &amp; Mind-set/Professional Skill</b></p> | <p>The user/individual on the job needs to know and understand how to: make decisions on a suitable course of action or response if permitted by the authority matrix, monitor efficient functioning of all activities, plan and organize work to achieve targets and deadlines, communicate with customers and other stakeholders in a courteous manner, maintain cordial work relationship, identify trends/common causes for errors and suggest possible solutions to the supervisor / management, identify and correct errors, analyse best possible solutions (cost, time, effort, etc.) suited for operations, concentrate on task at hand and complete it</p>                                                                                                                                                                                                                                                                                                                                                                                | <p>The job holder is expected to recall and demonstrate practical skill in carrying out routine and repetitive activities in a narrow range of application, using appropriate rule and tool. For instance, validate all the process/equipment manuals so that the final process selection is correct, effectively discuss and communicate regarding targets, activities, processes etc with supervisor and co-workers, question supervisor in order to understand the nature of problem etc., As the job does not require to recall and demonstrate practical skill, routine and repetitive in narrow range application. For ex: Organise &amp; prioritise the job received</p>                                                                                                                                                                                                                                                                          | 4 |

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
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|                                           | without errors, apply balanced judgments to different situations etc.,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | from the production manager, support the supervisor in scheduling tasks for timely completion of the job, recognise a workplace problem or a potential problem and act etc., Here the job holder has to use appropriate rules and tools to perform his role, this role does not fit at level 3 but at level 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |
| <b>Broad Learning Outcomes/Core Skill</b> | The individual on the job needs to know and understand how to:<br>complete accurately well written report in English language detailing the situations of emergency with attention to detail, read instructions/ guidelines/ procedures/rules, listen to and orally communicate information with all concerned, document the available information, note down observations in the given format, write information documents to concerned departments/teams under guidance of supervisor, enter the information in Inspection record sheets, relevant registers etc., read and interpret engineering drawings, sketches and symbols used, read the organisation/manufacturer manuals and process documents, effectively discuss and communicate regarding targets, activities, processes etc with supervisor and co-workers, question supervisor in order to understand the nature of problem. | The job holder is expected to complete accurate, complete accurately well written report in English language detailing the situations of emergency with attention to detail, read instructions/ guidelines/ procedures/rules, listen to and orally communicate information with all concerned, document the available information, note down observations in the given format, write information documents to concerned departments/teams under guidance of supervisor, enter the information in online ERP systems under guidance of the supervisor etc., read and interpret engineering drawings, sketches and symbols used, read the organisation/manufacturer manuals and process documents. Hence, this role qualifies for Level 4. As the job holder requires core skills of language, written and oral to communicate with required clarity, read instructions/guidelines and communicate higher than requiring core skills of language, written and oral to communicate with minimum clarity, therefore, it cannot be pegged at level 3. | 4 |
| <b>Responsibility</b>                     | The Aircraft Powerplant Junior Technician (Options:<br>Aerospace Welder) is responsible for <ul style="list-style-type: none"> <li>• introduction to aircraft powerplant system</li> <li>• Understand the process, procedures and precautions of Airframe &amp; power plant systems components removal/installation</li> <li>• Airframe &amp; power plant systems components removal/installation</li> <li>• Prevention of FOD during aircraft operations</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                          | The job holder is responsible for only own work and learning. S/he is a skilled worker who carries out work activities of follows safety and security procedures, understanding the process of aero engine assembly, Aero-engine assembly/disassembly, perform aeroengine module disassembly/assembly and maintain 5S at the work premises. He also carries out various welding activities/ repair of engine hot/cold sections, structural /mechanical components for all types of aircrafts. Hence, this role qualifies for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |

|  |                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <ul style="list-style-type: none"> <li>• Perform Aircraft &amp; power plant inspections &amp; servicing <ul style="list-style-type: none"> <li>• Safety and Compliance in Airframe and Powerplant Systems</li> </ul> </li> <li>• Employability Skills</li> </ul> | <p>Level 4. It does not comprise of any supervisory activities.</p> <p>As this job is about having responsibility for own working and learning and is not working under close supervision within defined limits. Therefore, it cannot be pegged at level 3.</p> <p>For ex: Receive engine accessories and LRU's from the component shops and inspect and verify that the accessories and LRU's are airworthy to be installed on the engine, install the accessories and LRU's in sequence as detailed in the job card/manufacturer manuals/organisation maintenance manuals, visually inspect the installed accessories and LRU's to, inspect and verify if any damage found is acceptable within the airworthiness limits for engine operations ensure no damage has occurred during installation, dispatch the assembled engine to the engine test cell, welding different engine components.</p> |  |
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### Annexure: 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      | Black/White Board & Markers                                                                                         |               | 1                                 |
| 2      | PC based projection system                                                                                          |               | 1                                 |
| 3      | Computer aided instructional packages (video films/software)                                                        |               | 1                                 |
| 4      | Concerned wall charts                                                                                               |               | 1                                 |
| 5      | Personal protective equipment (PPE) (consisting of safety jacket, safety goggles, ear plugs, gloves & safety shoes) |               | 10                                |
| 6      | First aid kit                                                                                                       |               | 3                                 |
| 7      | Aircraft handling manual (AHM) of widely used aircraft                                                              |               | 1                                 |
| 8      | Basic fire safety aids                                                                                              |               | 1                                 |
| 9      | Aero engine hoist                                                                                                   |               | 2                                 |
| 10     | Slings                                                                                                              |               | 3                                 |

|    |                                        |  |   |
|----|----------------------------------------|--|---|
| 11 | Mechanical toolbox                     |  | 5 |
| 12 | Special Tool Kit                       |  | 5 |
| 13 | Ground Power Unit (GPU)                |  | 1 |
| 14 | Cut-out model of a typical aero engine |  | 1 |
| 15 | Fork lifter                            |  | 1 |

#### Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Projector & Screen, Whiteboard & Markers, Interactive Software (e.g., Aircraft System Simulation Tools).

### Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

| S. No | Organization Name                 | Representative Name | Designation                       | Contact Address                                            | Contact Phone No | E-mail ID                           | LinkedIn Profile (if available) |
|-------|-----------------------------------|---------------------|-----------------------------------|------------------------------------------------------------|------------------|-------------------------------------|---------------------------------|
| 1.    | Air Works                         | Vinod Kumar Shukla  | Associate Vice President– Quality | Air Works Commercial Aviation MRO                          | +91-9004113851   | vinodkumar.shukla@AIRWORKS.IN>      |                                 |
| 2.    | MaxAerospace and Aviation pvt.ltd | Venkatesh Maligi    | Quality Manager                   | Hangar No. C1, Juhu Aerodrome, Juhu, Mumbai-400 056. INDIA | +91-08779159751  | <venkatesh.maligi@maxaerospace.com> |                                 |
| 3     | Vikram Aviation Pvt Ltd           | <b>Aditya Kumar</b> | Manger                            | Vikram Aviation Pvt Ltd                                    | 7531929493       | accounts@vikramaviation.com         |                                 |

### Annexure: Training & Employment Details

#### Training and Employment Projections:

| Year | Total Candidates     |                                    | Women                |                                    | People with Disability |                                    |
|------|----------------------|------------------------------------|----------------------|------------------------------------|------------------------|------------------------------------|
|      | Estimated Training # | Estimated Employment Opportunities | Estimated Training # | Estimated Employment Opportunities | Estimated Training #   | Estimated Employment Opportunities |
| 2025 | 250                  | 70                                 |                      |                                    |                        |                                    |
| 2026 | 300                  | 70                                 |                      |                                    |                        |                                    |
| 2027 | 500                  | 70                                 |                      |                                    |                        |                                    |

Data to be provided year-wise for the 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. NAPS
2. STT

Content availability for previous versions of qualifications:

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

Languages in which Content is available:

## Annexure: 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: 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 |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------|---------------|------------|
| Introduction to Airframe and Powerplant System                         | <i>Identify Major Components of Airframe Systems</i>                                                                                                                          | 20           | 20              | -             | -          |
|                                                                        | PC1. Understand the structural components of the airframe, including fuselage, wings, empennage, and landing gear                                                             | 5            | 5               | -             | -          |
|                                                                        | PC2. Identify the primary and secondary flight control surfaces                                                                                                               | 5            | 5               | -             | -          |
|                                                                        | PC3. Understand the function of hydraulic, pneumatic, and electrical systems within the airframe.                                                                             | 5            | 5               | -             | -          |
|                                                                        | PC4. Interpret basic schematic diagrams of airframe systems.                                                                                                                  | 5            | 5               | -             | -          |
|                                                                        | <i>Understand Aircraft Powerplant Systems</i>                                                                                                                                 | 10           | 20              | -             | -          |
|                                                                        | PC5. Identify different types of aircraft engines (e.g., piston, turbojet, turboprop, turbofan).                                                                              | 3            | 5               | -             | -          |
|                                                                        | PC6. Explain the function of key powerplant systems including fuel, lubrication, cooling, and exhaust.                                                                        | 3            | 5               | -             | -          |
|                                                                        | PC7. Describe the basic operating principles of gas turbine and reciprocating engines.                                                                                        | 2            | 5               | -             | -          |
|                                                                        | PC8. Interpret engine layout and performance parameters from technical documents                                                                                              | 2            | 5               | -             | -          |
|                                                                        | <i>Apply Safety and Compliance Procedures</i>                                                                                                                                 | 10           | 20              | -             | -          |
|                                                                        | PC9. Follow standard operating procedures while handling aircraft systems.                                                                                                    | 3            | 5               | -             | -          |
|                                                                        | PC10. Demonstrate awareness of aviation safety protocols and PPE usage.                                                                                                       | 3            | 5               | -             | -          |
|                                                                        | PC11. Adhere to regulatory compliance as per DGCA/EASA/FAA guidelines.                                                                                                        | 2            | 5               | -             | -          |
|                                                                        | PC12. Identify and report defects or hazards in airframe and powerplant systems.                                                                                              | 2            | 5               | -             | -          |
|                                                                        | <b>Total Marks</b>                                                                                                                                                            | <b>40</b>    | <b>60</b>       | <b>-</b>      | <b>-</b>   |
| Understand the process, procedures and precautions of Airframe & power | <i>Understanding the removal / installation process, procedures &amp; precautions and tools/ instruments/ equipment requirement for the same</i>                              | <b>40</b>    | <b>60</b>       | -             | -          |
|                                                                        | PC1. understand all types of drawings, system schematics sketches, and work instructions as per AMM / Procedure sheets at the beginning of the component removal/installation | 4            | 6               | -             | -          |
|                                                                        | PC2. understand of limits, tolerances & geometric dimensions                                                                                                                  | 4            | 6               | -             | -          |
|                                                                        | PC3. understand the usage of gauges, standard tools, torque wrenches, instruments and equipment etc.                                                                          | 4            | 6               | -             | -          |

|                                                                           |                                                                                                                                                                                                                                               |           |           |          |          |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|----------|----------|
| <b>plant systems components removal/installation</b>                      | PC4. understand the basics of Airframe & Power plant systems and its components                                                                                                                                                               | 4         | 6         | -        | -        |
|                                                                           | PC5. understand the various materials, parts, and consumables used during the component's removal/installation process                                                                                                                        | 4         | 6         | -        | -        |
|                                                                           | PC6. understand the criticality of sub-assemblies of an airframe, power plant systems                                                                                                                                                         | 4         | 6         | -        | -        |
|                                                                           | PC7. understand the right removal/installation methodology and various process parameters like torque application, fitting tolerances, bolting, and fastening as mentioned in the work instruction/organization /aircraft maintenance manuals | 4         | 6         | -        | -        |
|                                                                           | PC8. understand safety related to the work area                                                                                                                                                                                               | 2         | 3         | -        | -        |
|                                                                           | PC9. while understanding the technical literature, drawings, and sketches, he/she must ensure that the observed problems are highlighted to concerned supervisor                                                                              | 2         | 3         | -        | -        |
|                                                                           | PC10. understand the changes which may happen from time to time in the removal/installation process based on the aircraft configuration                                                                                                       | 4         | 6         | -        | -        |
|                                                                           | PC11. red flagging of the deviations during the removal/installation process of Aircraft and power plant system components and raising it to the concerned supervisor/Quality inspectors                                                      | 4         | 6         | -        | -        |
|                                                                           | <b>Total Marks</b>                                                                                                                                                                                                                            | <b>40</b> | <b>60</b> | <b>-</b> | <b>-</b> |
|                                                                           | <b>Perform Avionics Systems components removal/installation</b>                                                                                                                                                                               | <b>42</b> | <b>58</b> | <b>-</b> | <b>-</b> |
| <b>Airframe &amp; power plant systems components removal/installation</b> | PC1. receive the components on the aircraft and perform a visual inspection of the components to identify defects                                                                                                                             | 6         | 10        | -        | -        |
|                                                                           | PC2. receive the documentation received with the components to ensure that all relevant details are filled in the documents as per regulatory/organizational policies and procedures                                                          | 7         | 10        | -        | -        |
|                                                                           | PC3. install the components on the aircraft and perform applicable operational/functional/BITE of the aircraft systems                                                                                                                        | 7         | 10        | -        | -        |
|                                                                           | PC4. visually inspect the airframe, power plant, aircraft systems and record the defects observed & to ascertain if the defects are within acceptable limits to certify the airworthiness of the aircraft                                     | 7         | 10        | -        | -        |
|                                                                           | PC5. tag the parts with the appropriate tags and ensure all relevant information is filled as per regulatory/organization policy and procedures                                                                                               | 6         | 10        |          |          |
|                                                                           | PC6. dispatch the aircraft after performing applicable scheduled line maintenance inspections as per the approved maintenance program & snag rectifications                                                                                   | 9         | 8         | -        | -        |

|                                                                       |                                                                                                                                                   |           |           |   |   |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|---|---|
|                                                                       | <b>Total Marks</b>                                                                                                                                | <b>42</b> | <b>58</b> | - | - |
| <b>Prevention of FOD during aircraft operations</b>                   | <i>Prevent FOD during assembly/disassembly</i>                                                                                                    | 40        | 60        | - | - |
|                                                                       | PC1. ensure the availability of blanking, cover etc. at the workplace                                                                             | 8         | 12        | - | - |
|                                                                       | PC2. ensure that no FOD is available near the aircraft                                                                                            | 8         | 12        | - | - |
|                                                                       | PC3. ensure proper availability of tools, GSE and parts                                                                                           | 8         | 12        | - | - |
|                                                                       | PC4. ensure proper accounting of tools used during aircraft maintenance & clearing of work area                                                   | 8         | 12        | - | - |
|                                                                       | PC5. ensure all the open cavities are properly blanked/ covered after the completion of work                                                      | 8         | 12        | - | - |
|                                                                       | <b>Total Marks</b>                                                                                                                                | <b>40</b> | <b>60</b> | - | - |
| <b>Perform Aircraft &amp; power plant inspections &amp; servicing</b> | <i>Safety to be considered before aircraft inspections</i>                                                                                        | <b>20</b> | <b>29</b> | - | - |
|                                                                       | PC1. comply with organizations Occupational Health & Safety (OHS) standards                                                                       | 5         | 8         | - | - |
|                                                                       | PC2. ensure that work area around the aircraft are clean as mentioned in the work instruction/ Standard Operating Procedure (SOP) of organization | 5         | 8         | - | - |
|                                                                       | PC3. check for correctness of Ground support equipment                                                                                            | 5         | 7         | - | - |
|                                                                       | PC4. escalate any queries to the supervisor                                                                                                       | 5         | 6         | - | - |
|                                                                       | <i>Performing aircraft inspections/operational test/BITE etc</i>                                                                                  | <b>20</b> | <b>31</b> | - | - |
|                                                                       | PC5. select appropriate AMM/TSM task, inspection schedule applicable                                                                              | 5         | 8         | - | - |
|                                                                       | PC6. select appropriate component part number from IPC                                                                                            | 5         | 8         | - | - |
|                                                                       | PC7. perform the required maintenance task, inspection schedule as per AMM & standard maintenance practices.                                      | 5         | 8         | - | - |
|                                                                       | PC8. assist supervisor in closure of maintenance task & normalizing the aircraft.                                                                 | 5         | 7         | - | - |
|                                                                       | <b>Total Marks</b>                                                                                                                                | <b>40</b> | <b>60</b> | - | - |
|                                                                       | <i>Introduction to Safety and Compliance in Airframe and Powerplant Systems</i>                                                                   | <b>6</b>  | <b>8</b>  | - | - |
|                                                                       | PC1: Identify key safety principles in aviation systems, particularly focusing on airframe and powerplant.                                        | 3         | 4         | - | - |
|                                                                       | PC2: Explore relevant safety regulations and compliance standards for aviation maintenance and repair.                                            | 3         | 4         | - | - |
|                                                                       | <i>Regulatory and Safety Standards in Aviation</i>                                                                                                | <b>6</b>  | <b>6</b>  | - | - |

|                                                                |                                                                                                                       |           |           |   |   |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|-----------|---|---|
| <b>Safety and Compliance in Airframe and Powerplant System</b> | PC3: Recognize the significance of aviation safety standards, including ICAO, FAA, EASA, and other regulatory bodies. | 3         | 4         | - | - |
|                                                                | PC4: Comply with national and international aviation safety regulations.                                              | 3         | 4         | - | - |
|                                                                | <b>Hazard Identification and Risk Management</b>                                                                      | <b>6</b>  | <b>6</b>  | - | - |
|                                                                | PC5: Identify common hazards in airframe and powerplant systems.                                                      | 3         | 3         | - | - |
|                                                                | PC6: Apply risk management techniques to mitigate potential hazards during maintenance and operational procedures.    | 3         | 3         | - | - |
|                                                                | <b>Safety Protocols for Airframe Maintenance</b>                                                                      | <b>12</b> | <b>12</b> | - | - |
|                                                                | PC7: Follow safety protocols during routine and non-routine airframe maintenance tasks.                               | 3         | 3         | - | - |
|                                                                | PC8: Implement lockout/tagout (LOTO) procedures to ensure safety during maintenance.                                  | 3         | 3         | - | - |
|                                                                | PC9: Ensure powerplant systems are maintained in compliance with safety standards.                                    | 3         | 3         | - | - |
|                                                                | PC10: Apply safety measures during powerplant diagnostics, repairs, and inspections.                                  | 3         | 3         | - | - |
|                                                                | <b>Emergency Response and Incident Handling</b>                                                                       | <b>18</b> | <b>18</b> |   |   |
|                                                                | PC11: React promptly and appropriately to emergency situations related to airframe and powerplant systems.            | 3         | 3         |   |   |
|                                                                | PC12: Report incidents and accidents in line with regulatory requirements.                                            | 3         | 3         |   |   |
|                                                                | PC13: Understand the roles of aviation regulatory bodies such as ICAO, FAA, and EASA in ensuring                      | 3         | 3         |   |   |
|                                                                | PC14: Maintain up-to-date knowledge of compliance requirements and industry standards.                                | 3         | 3         |   |   |
|                                                                | PC15: Identify and apply environmentally sustainable practices in the maintenance of airframe and powerplant systems. | 3         | 3         |   |   |
|                                                                | PC16: Ensure compliance with environmental regulations in the handling of hazardous materials and waste.              | 3         | 3         |   |   |
|                                                                | <b>Total Marks</b>                                                                                                    | <b>48</b> | <b>52</b> | - | - |
| <b>Employability skills</b>                                    | <b>Introduction to Employability Skills</b>                                                                           | <b>1</b>  | <b>1</b>  | - | - |
|                                                                | PC1. identify employability skills required for jobs in various industries                                            | -         | -         | - | - |
|                                                                | PC2. identify and explore learning and employability portals                                                          | -         | -         | - | - |

|                                                                                                                                                                                                                                                                                                           |   |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| Constitutional values – Citizenship                                                                                                                                                                                                                                                                       | 1 | 1 | - | - |
| PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.                                                               | - | - | - | - |
| PC4. follow environmentally sustainable practices                                                                                                                                                                                                                                                         | - | - | - | - |
| Becoming a Professional in the 21st Century                                                                                                                                                                                                                                                               | 2 | 4 | - | - |
| PC5. recognize the significance of 21st Century Skills for employment                                                                                                                                                                                                                                     | - | - | - | - |
| PC6. practice the 21st Century Skills such as Self Awareness, Behaviors Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life | - | - | - | - |
| Basic English Skills                                                                                                                                                                                                                                                                                      | 2 | 4 | - | - |
| PC7. use basic English for everyday conversation in different contexts, in person and over the telephone                                                                                                                                                                                                  | - | - | - | - |
| PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English                                                                                                                                                                                                 | - | - | - | - |
| PC9. write short messages, notes, letters, e-mails etc. in English                                                                                                                                                                                                                                        | - | - | - | - |
| Career Development & Goal Setting                                                                                                                                                                                                                                                                         | 1 | 2 | - | - |
| PC10. understand the difference between job and career                                                                                                                                                                                                                                                    | - | - | - | - |
| PC11. prepare a career development plan with short- and long-term goals, based on aptitude                                                                                                                                                                                                                | - | - | - | - |
| Communication Skills                                                                                                                                                                                                                                                                                      | 2 | 2 | - | - |
| PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings                                                                                                                                                                                            | - | - | - | - |
| PC13. work collaboratively with others in a team                                                                                                                                                                                                                                                          | - | - | - | - |
| Diversity & Inclusion                                                                                                                                                                                                                                                                                     | 1 | 2 | - | - |
| PC14. communicate and behave appropriately with all genders and PwD                                                                                                                                                                                                                                       | - | - | - | - |
| PC15. escalate any issues related to sexual harassment at workplace according to POSH Act                                                                                                                                                                                                                 | - | - | - | - |
| Financial and Legal Literacy                                                                                                                                                                                                                                                                              | 2 | 3 | - | - |
| PC16. select financial institutions, products and services as per requirement                                                                                                                                                                                                                             | - | - | - | - |

|                                                                                                                                                                           |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|
| PC17. carry out offline and online financial transactions, safely and securely                                                                                            | - | - | - | - |
| PC18. identify common components of salary and compute income, expenses, taxes, investments etc                                                                           | - | - | - | - |
| PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation                                                                            | - | - | - | - |
| Essential Digital Skills                                                                                                                                                  | 3 | 4 | - | - |
| PC20. operate digital devices and carry out basic internet operations securely and safely                                                                                 | - | - | - | - |
| PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively                                                                          | - | - | - | - |
| PC22. use basic features of word processor, spreadsheets, and presentations                                                                                               | - | - | - | - |
| Entrepreneurship                                                                                                                                                          | 2 | 3 | - | - |
| PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research                                       | - | - | - | - |
| PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion                                                      | - | - | - | - |
| PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity                                           | - | - | - | - |
| Customer Service                                                                                                                                                          | 1 | 2 | - | - |
| PC26. identify different types of customers                                                                                                                               | - | - | - | - |
| PC27. identify and respond to customer requests and needs in a professional manner.                                                                                       | - | - | - | - |
| PC28. follow appropriate hygiene and grooming standards                                                                                                                   | - | - | - | - |
| Getting ready for apprenticeship & Jobs                                                                                                                                   | 2 | 3 | - | - |
| PC29. create a professional Curriculum vitae (Résumé)                                                                                                                     | - | - | - | - |
| PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively | - | - | - | - |
| PC31. apply to identified job openings using offline /online methods as per requirement                                                                                   | - | - | - | - |
| PC32. answer questions politely, with clarity and confidence, during recruitment and selection                                                                            | - | - | - | - |
| PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements                                                                        | - | - | - | - |

|                    |                    |            |            |          |          |
|--------------------|--------------------|------------|------------|----------|----------|
|                    | <b>Total Marks</b> | <b>20</b>  | <b>30</b>  | <b>-</b> | <b>-</b> |
| <b>Grand Total</b> |                    | <b>270</b> | <b>380</b> |          |          |

### Annexure: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the learner on the required competencies of the program. All QP/NOS go through a rigorous review and approval process before they are finally ready to be utilized for skill training and assessment. The QP is assigned for assessment criteria to the various performance outcomes expected from the candidate. The assessment criteria is thoroughly examined and approved by independent industry experts, academic SMEs and regulatory bodies during the QP/NOS creation and approval. 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. Under the Assessment Criteria in a QP/NOS, PCs are allotted against the following four methodologies:

- a. Theory: A theory assessment is a written/digital question paper that aims at assessing the knowledge of the candidate. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
- b. Practical: A practical assessment assesses the practical application/hands-on ability demonstrated by the candidate
- c. Viva: A viva voce is an oral questioning method where the assessor and candidate usually sit one on-one. In addition to evaluating theoretical knowledge, this method also allows for assessment of soft skills, body language, etc
- d. Project: A project could include a variety of methods to assess the candidate such as an evaluation of the candidate's portfolio, inclusion of formative assessment marks, evaluations from OJT logs, or any other initiatives undertaken
  1. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
  2. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
  3. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion
  4. The assessment is done through the SSC accredited Assessment Agency platform.
  5. To pass the Qualification Pack, every trainee should score a minimum of 60% in aggregate
  6. The marks are allocated PC wise, however, every NOS will carry a weightage in the total marks allocated to the specific QP

The SSC uses the devised 'Assessment Blueprint' which is a detailed outline of the plan of action of assessment and as a document. It aims to enable stakeholders implementing skill assessments, like Sector Skill Councils, Assessment Agencies and other assessment regulation bodies to define the complex relationship between performance outcomes/assessment criteria, theory and practical items, difficulty levels, time and marks allocated to each question, assessment methodology and the

evaluation thereof. The blueprints are used to design the assessment to measure the mastery of the standard(s), improve consistency across test forms, set goals and monitoring matrices for test forms, and more.

#### Aircraft Airframe & Power plant Technician

##### 1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/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:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- 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.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessments monthly.
- Check the availability of the Lab Equipment for the particular Job Role.

##### 3. Assessment Quality Assurance levels / Framework:

- Question bank and question paper created by the Subject Matter Experts (SME) from SSC certified Assessment Agency and the other In-house team of SSC
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 is for the unskilled & semiskilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified & trainer must be ToT Certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

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

- Time-stamped & geo tagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period

- Time-stamped & geo tagged assessment (Theory + Viva + Practical) photographs & videos

5. Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch
- Random audit of any candidate

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
- Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

## Annexure: Acronym and Glossary

### Acronym

| Term | Description                                     |
|------|-------------------------------------------------|
| QP   | Qualification Pack                              |
| NSQF | National Skills Qualification Framework         |
| NOS  | National Occupational Standards                 |
| TVET | Technical and Vocational Education and Training |
| PPE  | Personnel Protective Equipment.                 |
| OHS  | Occupational Health and Safety                  |
| SOP  | Standard Operating Procedure.                   |
| AMM  | Aircraft Maintenance Manual                     |
| OEM  | Original Equipment Manufacturer                 |
| ESD  | Electrostatic discharge                         |
| DGCA | Directorate General of Civil Aviation           |
| EASA | European Union Aviation Safety Agency           |
| FAA  | Federal Aviation Administration                 |
| GPU  | Ground Power Unit                               |

|             |                                           |
|-------------|-------------------------------------------|
| <b>AHM</b>  | Aircraft Handling Manual                  |
| <b>NDT</b>  | Non-Destructive Testing                   |
| <b>FOD</b>  | Foreign Object Damage.                    |
| <b>BITE</b> | Built In Test Equipment                   |
| <b>SMS</b>  | Safety Management system                  |
| <b>ICAO</b> | International Civil Aviation Organization |

## 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.<br><a href="https://ncvet.gov.in/sites/default/files/NCVET.pdf">https://ncvet.gov.in/sites/default/files/NCVET.pdf</a>                       |