# Knowledge Assessment

**Event 1 of 2**

# Trainer & Assessor Marking Guide

## Criteria

### Unit code, name and release number

MEM15024A - Apply quality procedures (1)

\*\*\*This unit sits in the qualifications below – This assessment is not to be amended\*\*

### Qualification/Course code, name and release number

MEM30205 - Certificate III in Engineering – Mechanical Trade (3)

MEM30305 – Certificate III in Engineering – Fabrication trade (4)

\*\*\* Amend the qualification box before distributing to the student. The information here should only contain the qualification the student is enrolled in\*\*

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For queries, please contact:

IMRS SkillsPoint

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Instructions for the trainer and assessor** | This is a written assessment and will be assessing the student on their knowledge of the unit MEM15024A Apply quality procedures  This assessment is in 4 parts:   1. Multiple choice questions 2. True or False questions 3. Short answer questions 4. Assessment feedback   Model answers, sample responses or a criteria for each question are provided below.  Use these to support your judgement when determining a satisfactory result.  The student’s response to each question must contain the information indicated in this marking guide in order for their response to be correct.  However, if a student provides information other than indicated below, and in the professional opinion of the assessor it is appropriate and meets the intent of the question, it may be considered correct.  The assessment feedback page must be signed by both the student and the assessor so the student displays that they have received, understood and accepted the feedback.  Complete the assessment feedback to the student and ensure you have taken a copy of the assessment prior to it being returned to the student.  Ensure the students name appears on the bottom of each page of the submitted assessment. |
| **About this marking guide** | The student’s response to each question must contain the information indicated in this marking guide in order for their response to be correct.  All questions must be answered correctly in order to satisfactorily complete this assessment event.  Assessors will need to make a judgement call as to whether each answer/response meets the criteria based upon the:   * Rules of Evidence:   + Validity – does the answer address the assessment question and does the evidence reflect the four dimensions of competency?   + Sufficiency – is the answer sufficient in terms of length and depth?   + Currency – has the work been done so recently as to be current?   + Authenticity – is this work the student’s own authentic work? * Principles of Assessment:   + Fairness – individual student’s needs are considered in the assessment process   + Flexibility – assessment is flexible to the individual student   + Validity – any assessment decision is justified, based on the evidence of performance of the student   + Reliability – evidence presented for assessment is consistently interpreted and assessment results are comparable irrespective of the assessor conducting the assessment * Dimensions of competency   + Task skills   + Task Management Skills   + Contingency Planning Skills   + Job Role Environment Skills |
| **Student must provide** | Pens, pencils ,eraser |
| **Assessor must provide** | Class room suitable for conducting written assessment test |
| **Time allowed** | 1 Hour |

*[Delete any text you don’t need before you distribute this document.]*

## Part 1: Multiple choice

Read the question and each answer carefully. Put an X in the table next to your chosen answer.

1. (RK3) Before operating workplace equipment, it is important to obtain relevant information by viewing the:

Table 1: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Technical manuals/specifications |  |
| 1. Service logbooks and maintenance manuals |  |
| 1. Standard operating procedures |  |
| 1. Drawings and exploded views |  |
| 1. All of the above | X |

1. (RK1, RK3) Where would you find a machine Standard Operating Procedure (SOP)?

Table 2: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. On or next to a machine |  |
| 1. Manufactures handbook |  |
| 1. Supervisor/managers office |  |
| 1. All of the above | X |

1. (RK1, RK3) Why do we use SOPs’?

Table 3: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. To show you how well a machine runs |  |
| 1. To follow a set of instructions correctly and safely to complete a task | X |
| 1. Show emergency evacuation routes |  |
| 1. To avoid producing products of minimal quality |  |

1. (RK4) If you are going onto a new worksite, whom should you talk to first about site WHS procedures?

Table 4: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Your manager |  |
| 1. Site manager | X |
| 1. Safe Work NSW |  |
| 1. Store person |  |

1. (RK1) (PC1.1, 2.1) The term ‘quality’ used in a quality procedure is commonly described as:

Table 5: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. The best the product can be made |  |
| 1. Meeting the specifications and customer expectation | X |
| 1. Looking good with a good paint job |  |
| 1. The best that you can do |  |

1. (RK1 RK2) What are **three** benefits of working to specification in an engineering/fabrication workshop? Select the three (3) answer choices.

Table 6: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Quality products | X |
| 1. Reduced costs | X |
| 1. Customer confidence, satisfaction and loyalty | X |
| 1. Time spent on quality control can be reduced |  |

1. (RK2) (RS1) (PC1.2, 2.1,2.2) What is the quality procedure to follow if a problem was detected during the manufacturing process?

Table 7: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Fix it then notify your supervisor |  |
| 1. Ignore it until next time you do the job |  |
| 1. Let your supervisor know what the problem is and recommend a solution. | X |
| 1. Fix it and continue the process |  |

1. (RK2) (PC1.2) The responsibility for the correct manufacturing /fabrication of an item is the:

Table 8: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Supervisor |  |
| 1. Tradesperson | X |
| 1. Customer |  |
| 1. Quality control inspector |  |

1. (PC1.1, 2.2) When should a product be inspected:

Table 9: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Just before shipping to the customer |  |
| 1. In the warehouse |  |
| 1. In the quality control department |  |
| 1. At each stage of the production of the product | X |

1. (RK4) Select three (3) safe work procedures that must be observed when working in a workshop environment.

Table 10: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Wear PPE at all times | X |
| 1. Work fast to get the job completed |  |
| 1. Be cautious when using and handling sharp objects and tools | X |
| 1. Be aware of heavy objects when manual handling | X |

1. (RK4) What safe work practices would be used when handling sharp objects and tools?

Table 11: Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Wear gloves |  |
| 1. Remove burrs from material |  |
| 1. Keep sharp tools in their correct storage until ready for use |  |
| 1. All of the above | X |

## Part 2: True or false

Read the question and then write **True** or **False** in the space provided.

Table 1: True or false

| Question | Write *True* or *False* |
| --- | --- |
| 1. (RK2) (PC2.2) Tolerance is a word used in manufacturing to state the minimum and maximum allowable variation to a nominal size. | T |
| 1. (RK2) Tolerances are only important on machined/fabricated items | F |
| 1. (RK2) (PC2.2) Joint misalignment on a job is a fault, and will not conform to specification | T |
| 1. (RK2) (PC1.2) The removal of burrs and sharp edges are not part of the quality procedure required for a finished product. | F |
| 1. (RK2) (PC1.2) Weld spatter **does not** need to be removed if the job is going to be painted. | F |
| 1. (RK3) Standard Operating Procedures (SOP) is another way to ensure quality and is described as “A set of instructions or methods of working so that everyone does it the same way” | T |
| 1. (RK1) (PC1.1) A quality job means it meets the expectations and specifications given by the customer. | T |
| 1. (RK1) (PC1.1) An internal customer is anyone within the same organisation that is involved in the process of supplying goods or services. | T |

## Part 3: Short answer

Read the question carefully. Your answer should be a minimum of 1words but no longer than 50 words.

1. (RK2) You have been supplied with the wrong type of steel for the part you are manufacturing. You have already started producing the part in question. What is the procedure you and your employer should follow? Provide three (3) steps.

Stop the process and the notify supervisor

Consult customer order and engineering specifications.

Contact the customer and inform them of the situation

1. (RK1) What is your role in the quality chain?

To be responsible for the quality of work you produce

1. (RK2) (RS3) (PC1.2, 2.1, 2.2) Give an example of how you would take responsibility to check a part for conformance to specifications. Provide 3 steps you would typically find in this quality procedure and include the tools that you would use for each step.

Checking size – Using measuring tools i.e.

(*Mech*) - Micrometer, rule, calipers with the engineer drawing

(*Fab*) - Calipers, rule, measuring tape

Alignment - Using measuring equipment i.e.

(*Mech*) - Dial indicator, straight edges, feeler gauges and engineers square

(*Fab*) straight edge, engineers/flat square,

Performance - Using measuring tools i.e.

(*Mech)* - Flow rates, pressure test gauges, temperature monitors

1. (PC1.1) List three (3) possible factors that can affect the overall quality of an item and lead to the job not meeting customer requirements.

Responses can include, but are not limited to:

* Outdated drawings
* Poor records
* Operator error
* Lack of training
* Poor techniques
* Poor machinery
* Outdated and inaccurate tooling and measuring equipment

1. (PC1.1) Complete the following questions by referencing a Customer Request Document on the following page.

a. What is the name of the company requiring the components (Drill Plate)?

* Precision Parts

b. How many components do they require?

* 6

c. What is the finish required by the customer?

* Scale removed
* Sharp edges removed

d. What is the tolerance required by the customer?

* +/- 0.5mm

e. What is the due date for delivery of the components to the customer?

* 20/10/2020

**Customer Request Document**

**Copy to be sent to customer**

**Drill Plate**

|  |  |
| --- | --- |
| Customer Information | |
| **Date** |  |
| **Customer Name** | **Precision Parts** |
| **Address** | **20 Sylvan Road Petersburg** |
| **Phone** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Component Request | | Customer: | |
| **Component** | **Drill plate** | **Delivery Address:**  **20 Sylvan Road Petersburg** | |
| **Number Required** | **6** |
| **Date Required** | **20/10/2020** |
| **Manufacture Time (hours/days)** | **18 hours** | **Order Received/On time** | **Yes/no** |
| **Delivery Time (from receival of order)** | **18 + 24 Delivery of material + 6 Hours Delivery = 48 Hours** | **Items Conform to specification** | **Yes/no**  **Signed:** |
| **Tolerance** | **+/- 0.5mm** | **Damaged Items** | **Yes/no** |
| **Finish** | **Scale removed**  **Sharp edges removed** | **Components Checked**  **(Conform to Specification)** | **Signed:** |
| **Other Information** | | | |
| **Feedback or Remarks** | | | |