# Knowledge Assessment

# Trainer & Assessor Marking Guide

**Event 1 of 2**

## Criteria

### Unit code, name and release number

MEM16008A - Interact with computing technology (1)

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

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

MEM30305 - Certificate III in Engineering - Fabrication Trade (4)

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

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

Version: *1.0*

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For queries, please contact:

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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 details | Instructions |
| --- | --- |
| **Instructions for the trainer and assessor** | This is a written assessment and will be assessing the student on their knowledge of interacting with computer technology.  This assessment is in 3 parts:   1. *Multiple choice* 2. *True/False* 3. *Short answer questions*   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** | *Calculator, pen* |
| **Assessor must provide** | *Classroom / Computers with access to the internet. (if Assessment available online)* |
| **Time allowed** | *45mins* |

## Part 1: Multiple choice

1. (RK4) From the list below, select safe work practices that can be applied to lower the risk of eye strain:

Table 1 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Ensure adequate lighting around workstation |  |
| 1. Comfortable distance between your eyes and the monitor |  |
| 1. Adjustment of font size and colour contrast for ease of reading |  |
| 1. All of the above | X |

1. (RK4) Select the best work practice that can minimise injuries while working on your computer work station:

Table 2 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Sit fully back in your chair and adjust the seat back for lower back support |  |
| 1. Adjust your chair height so that your elbows are at desktop level to reduce shoulder and neck strain |  |
| 1. Use a footrest if your feet don’t touch the floor, to reduce pressure on the backs of your legs |  |
| 1. All of the above | X |

1. (RK2) What type of software application is used to help prevent damage to your data?

Table 3 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Virus scanning software | X |
| 1. Email software |  |
| 1. Cloud software |  |
| 1. Word processing software |  |

1. (RK4) What type of information should you share with caution when using internet based services?

Table 4 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Credit card details |  |
| 1. User name and password information |  |
| 1. Personal information such as address, date of birth and banking details |  |
| 1. All of the above | X |

1. (PC5.1) If you are unsure of the processes to be followed when using computing technology in the workplace, the most appropriate person to consult for clarification and assistance would be the:

Table 5 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Workplace Supervisor |  |
| 1. Site Manager |  |
| 1. Workplace trades person |  |
| 1. Designated workplace employee who has undertaken training on computing equipment and software | X |

1. (PC4.3)When shutting down computer programs, it is important to…

Table 6 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Unplug the device from the power supply |  |
| 1. Press the emergency stop button to isolate the machine |  |
| 1. Follow the start-up/shut-down procedure provided by the workplace | X |
| 1. Do not shut down equipment. Leave it for someone else to shut-down |  |

1. (PC5.2)If a computing device is not functioning as intended and troubleshooting is required, which of the following could provide you with assistance?

Table 7 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. The designated workplace employee who has undertaken training on computing equipment and software |  |
| 1. The manufacturer of the device |  |
| 1. The user manual for the device |  |
| 1. All of the above | X |

1. (RK1)The basic functions of computing technology (CNC) in the workplace is:

Table 7 Multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Consistent and reduced production time |  |
| 1. Precise and accurate |  |
| 1. Consistent motion control |  |
| 1. Diagnostic |  |
| 1. All of the above | X |

## Part 2: True or false

Table 7 True or false

| Question | Write *True* or *False* |
| --- | --- |
| 1. (RK4)Regular breaks are not necessary when using computing technology for long periods of time | False |
| 1. (RK4)All computing devices within the workplace must be electrically tested and tagged prior to use | True |
| 1. (RK3) Poorly placed or unsecured computer cables on the floor are not a hazard if they can be seen. | False |
| 1. (RK4) It is important to shut down or log out of computing systems after use, to ensure no unauthorised personnel can access the system | True |
| 1. (RK3) Good computer housekeeping commonly involves removing unused files and backing up data | True |
| 1. (PC5.2)The option within Microsoft applications can be used to access online help. | True |
| 1. (RK1) The capabilities of CNC machinery over manual manufacturing will allow the production to be constantly accurate and of high quality | True |

## Part 3: Short answer

1. (RK2) Match each computer application with the correct description below.

Table 8 Matching Question

| Application | Description |
| --- | --- |
| Word | * Software that provides the flat pattern development of shapes manufactured in the steel fabrication, sheet metal, piping and plastics industries |
| Excel | * Software application that is used mainly to send and receive emails. It can also be used to manage various types of personal data including calendar appointments and similar entries, tasks, contacts, and notes |
| Outlook | * Software that supports the design process. The software helps us create, modify, analyze, and enhance a design. |
| Computer  Aided Design  (CAD) | * Graphical data processing Software that users can edit, type, save and print with. Commonly used to produce documents such as letters |
| Sheet and Plate 4 | * software program that uses spreadsheets to organize numbers and data with formulas and functions |

1. (RK1)List two (2) types of computer hardware used to produce hardcopies of documents/materials

**Answers may include, but are not limited to:**

Printer, Plotter, vinyl cutter, Profile cutter, screen printer, photo copier, fax machine.

1. (RK2) List two (2) software applications used to communicate with other people

**Answers may include, but are not limited to:**

SMS, MMS, E-mail, Skype, Face time, facebook call, VoIP, Snapchat, Instagram, instant manager, blog, forum.

1. (RK1) List two (2) ways you could store and transfer DATA from one computer to another.

**Answers may include, but are not limited to:**

USB flash drive, Email, cloud drive, File transfer, Bluetooth transfer, Wi-Fi transfer, Skype, USB Hard Disk Drive (HDD).

1. (PC5.2) List two (2) ways where online help and other reference materials may be obtained for computer software applications’.

**Answers may include, but are not limited to:**

The help feature within the application, YouTube videos, Forums, Software manuals, Blogs, Quick Reference Guides, hold mouse over icons.

1. (RK3) List two (2) safe housekeeping practices you would follow when using computing technology.

**Answers may include, but are not limited to:**

* *Correct start up and shutdown procedures are followed.*
* *Touch screen devices are used with clean hands and not operated using sharp objects.*
* *Workspace is kept clean and tidy and not cluttered.*
* *Maintenance scheme is followed and equipment is maintained.*
* *Electrical cables are placed neatly and not run across walkways.*
* *Damaged equipment is isolated and reported.*
* *Equipment is shut down when not in use.*
* *Electrical cables are tested and tagged and in date prior to use.*

1. (RK1) Complete the table below:

* Select from the “Computing technology list” below and match it with the functions/capabilities provided in the table below. An Example answer is shown in the table.

|  |  |  |
| --- | --- | --- |
| Computing Technology List | | |
| Local-Area Network(LAN)/WIFI | Memory stick | Smart phone/Tablet |
| Digital camera | Computer Numerical Control (CNC) | Laser printer/Plotter |

|  |  |  |
| --- | --- | --- |
| Computing technology | Functions/capabilities | Application in the workplace |
| **(Example)**  Notebook computer/laptop | * loading software applications * Using the internet * Creating and editing files * Storage of files * E-mail | * Editing documents * Downloading information(manuals/part numbers * E-mail communication * Loading specialised engineering software * CAD-Engineer drawing design |
| Local-Area Network(LAN)/WIFI | * Connecting computers together within a network * Ability to connect to the internet * Access to VoIP services | Can be used to source and store information within local or remote locations such as:  Enables the communication between people via the internet like:   * E-mail * Live chat * Blogs * Videos * Teleconferencing |
| Smart phone/Tablet | * Making Phone calls * Sending text messages * Sending Video/images * Sending/retrieving email information * Accessing the internet * Running trade based applications | Portable device in the workplace used for communicating between other members within the workplace, especially when working onsite |
| Laser printer/Plotter | Printing off hard copies of workplace documents such as:   * Emails * Drawings * Required documents | Printing off work related information to communicate to the workplace. |
| Digital camera | Taking Visual Photographs/video | Keeping a visual recording of jobs within the workplace for future referencing. |
| Memory stick | Storing Data and files that may be used to transfer information from one computer to the other. | Transferring files from one computer to the other  Storing soft copy documents for later use. |
| Computer Numerical Control (CNC) | Interpreting G-Code/M-code co-ordinates so machinery can operate creating work pieces to high tolerances and quality, that may not have been possible by hand | CNC technologies can be found on the following equipment with in the workplace   * Plasma cutter * Laser cutter * Welding machine * Turret punching * Milling machines * Lathe |

1. (RK3)Complete the table below by:

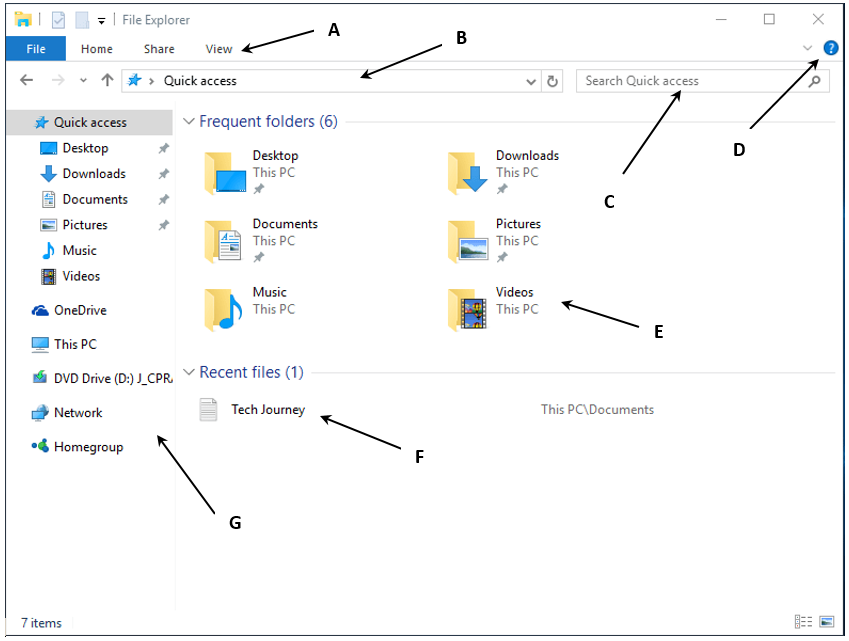
* Select the typical hazards associated with computing technology from the list provided and match it with the control measures provided in the table below.

|  |  |
| --- | --- |
| Typical Hazards | |
| Muscular disorders | Eye Strain |
| Trips and Falls | Electric shock |

|  |  |
| --- | --- |
| Typical Hazards | Hazard control Measures |
| Electric shock | * Ensure all leads have been tested and tagged and in date. * Visually inspect the power cord of the device you are going to use to check it isn’t frayed or damaged. * Visually inspect the device itself to make sure it appears to be in working order. * Ensure machines are turned off after use. * If unsure how to operate any equipment, ask for instructions. |
| Eye Strain | * If you are regularly experiencing headaches after viewing a screen for long periods you may need your vision checked by an optometrist. * Use your glasses if you need to. * Try and position your device so there isn’t glare from the sun, lights or other reflective surfaces. * Can you adjust the settings on your device to larger fonts, better contrasting colours etc. * Adjust the ‘ease of access’ options on your device. |
| Muscular disorders | * Use a docking station that connects your laptop to a screen and keyboard which you can adjust to the right height. * Alternatively, if you elevate your laptop to view the screen properly, use an external keyboard and mouse to avoid raising your arms out of the neutral position. |
| Trips and Falls | * Be mindful of surrounding areas/situations. Don’t put your full focus on computing devices whilst in the workplace environment. * Avoid using mobile computing technologies while walking (you may walk into someone else, other obstacles, or enter a work environment when it is not safe). |

1. (PC2.2) Below is a screenshot from Microsoft Windows File Explorer. Each of the letters (from A to G) in the screenshot indicate a component of the File Explorer software.

In the Table below, place the correct letter (from A to G) next to the matching description provided.



*(Example is provided in the following table as a reference)*

|  |  |
| --- | --- |
| Component | Description |
| ***A***  ***(Example)*** | A menu bar is a user interface element that contains selectable commands and options for a specific program. |
| *E* | A folder, also called a directory, is a special space used to store files, other folders, and shortcuts on a computer. |
| *G* | The Navigation Pane lists all of the drives, history, desktop, and downloads.  It is used for quick access of recent files and/or places used within the application or environment. |
| *D* | Help button links to online help documents relation to the current active application. This will like to “how to” documentation to assist you within the current application or environment. |
| *B* | An address bar is a text field near the top of a Web browser window that displays the URL of the current webpage and or file location. |
| *F* | A file is an object on a computer that stores data, information, settings, or commands used with a computer program. |
| *C* | A field located within a software application and/or web page where you type a word or piece of information that you want to find. |