# Project Assessment: Research

**Event 1 of 2**

## Criteria

### Unit code, name and release number

MEM11011B - Undertake manual handling (1)

This unit sits in all 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

## Student details

### Student number

### Student name

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Version: *1.0*

Date created: *2 August 2018*

Date modified: *26/11/2019*

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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 |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge and performance as would be required to lift and move an object using basic manual handling equipment. |
| **Assessment Event number** | 1 of 2 |
| **Instructions for this assessment** | This is a project based assessment and will be assessing you on your knowledge and performance of the unit.  The assessment is open book, where you will complete research and answer questions related to a workplace scenario.  This assessment is in two (2) parts and includes an Assessment Feedback form:   1. Research Based 2. Assessment Checklist |
| **Submission instructions** | On completion of this assessment, you are required to upload it or hand it to your assessor for marking.  Ensure you have written your name at the bottom of each page of this assessment.  It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment all questions must be answered correctly. |
| **What do I need to provide?** | Pens |
| **What the assessor will provide?** | Computers, Internet Connection |
| **Due date and time allowed** | The estimated time to complete this assessment is 3 hours, however there is no time limit for students to complete this assessment. Students may complete the assessment outside of the classroom and submit to their teacher for marking. Assessment is due by week 4 |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with Every Students Guide to Assessment. |

## Specific task instructions

The instructions and the criteria in the tasks and activities below will be used by the assessor to determine if you have satisfactorily completed this assessment event. Use these instructions as a guide to ensure you demonstrate the required knowledge.

**Task 1 - Identifying Relevant Standards and Assessing Risk**

* Read the Introduction
* Access the Safe Work Australia website
* Answer the questions for each section
* Duties and Obligations
* Identifying Risks and Hazards
* Assessing Risks
* Controlling Risks

**Task 2 – Workplace Scenario**

* Read the scenario
* Read the Standard Operating Procedure
* Read the Delivery Docket
* Determine the weight of items
* Answer questions related to planning the task for the scenario

## Part 1: Research based

**Introduction**

Manual handling can be defined in many ways. In the workplace, manual handling is considered lifting, lowering, pushing, pulling, carrying, moving, holding or restraining something

Manual handling is more than just carrying or lifting a heavy object, some examples of hazardous manual handling (tasks) are:

* repeat work
* sustaining an awkward posture
* exposure to vibration

Between 2012 and 2015, more than 145,000 workers were injured in NSW workplaces as a result of hazardous manual tasks. Seven died and more than 1300 were permanently disabled (safework.nsw.gov.au. 2019)

There are [specific laws](https://www.legislation.nsw.gov.au/#/view/regulation/2017/404/chap4/part4.2) about managing hazardous manual tasks, as well as a [code of practice](https://www.safework.nsw.gov.au/__data/assets/pdf_file/0020/50078/Hazardous-manual-tasks-COP.pdf). Some laws are general while others relate to designers, manufacturers, suppliers and importers of plant.

Complete the following research tasks, access and interpret the risk management information related to hazardous manual tasks. Answer the questions using information from the websites you are guided to.

|  |
| --- |
| Task 1- Identifying Relevant Standards and Assessing Risk |

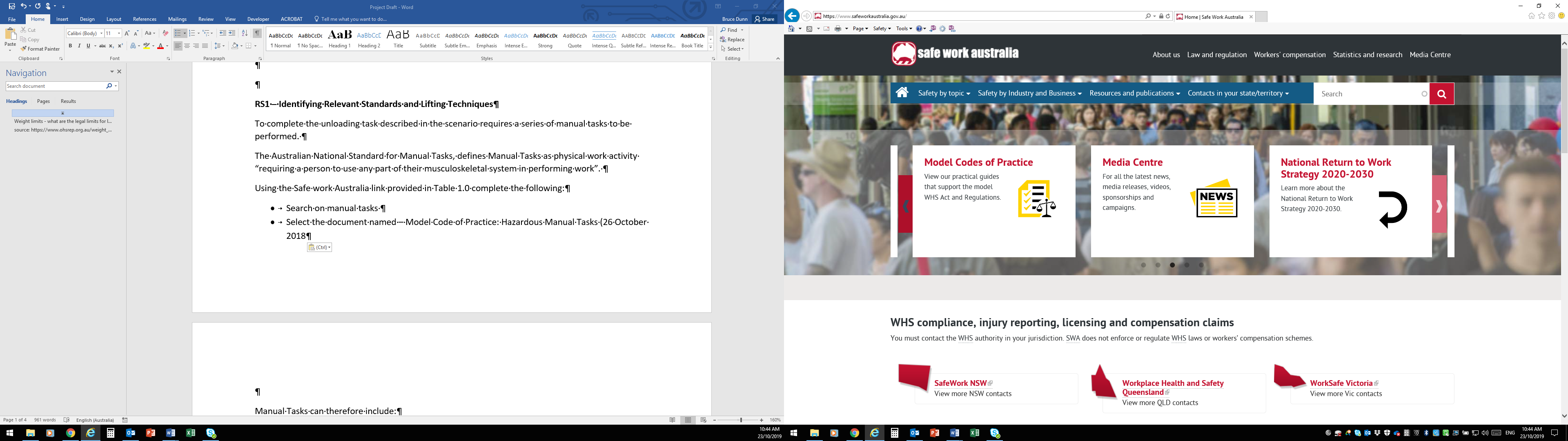
### Access Website

#### Table 1.0

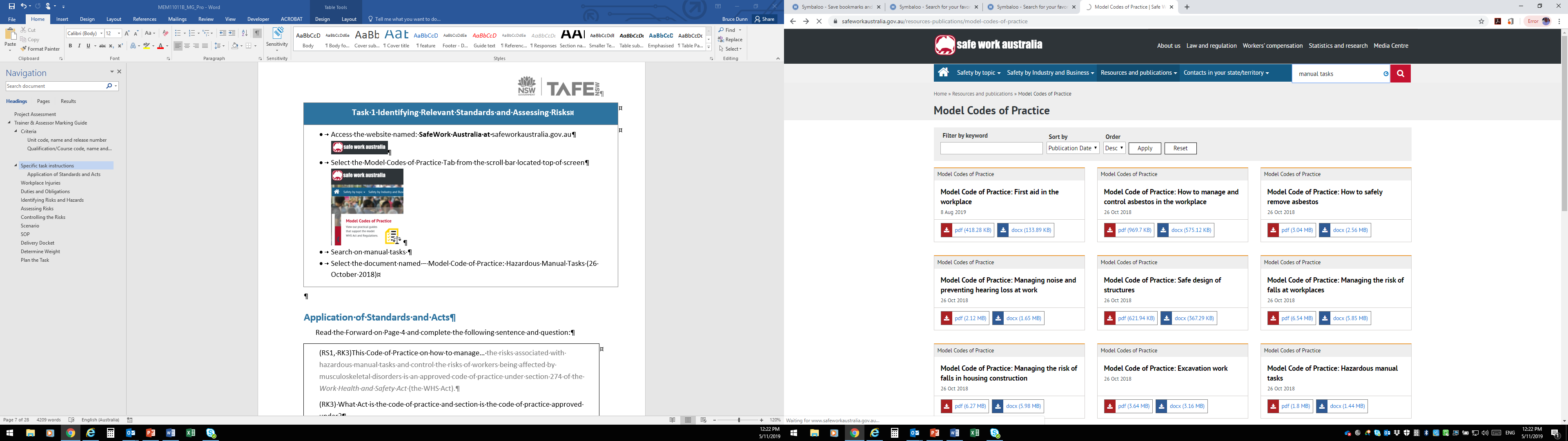
1. Access the website named: **SafeWork Australia** at safeworkaustralia.gov.au

[](https://www.safeworkaustralia.gov.au/)

1. Select the Model Codes of Practice Tab from the scroll bar located top of screen



1. Search on manual tasks



1. Select the document named – Model Code of Practice: Hazardous Manual Tasks (26 October 2018)

### Application of Standards and Acts

Read the Forward on Page 4, and complete the following sentence and question:

#### Table 2.0

|  |
| --- |
| This Code of Practice on how to manage… \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |
| --- |
| What Act is the code of practice (including the section) approved under?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Workplace Injuries

Read the Introduction on page 5 and answer the following questions.

#### Table 3.0

|  |
| --- |
| What is a musculoskeletal disorder (MSD)?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name five (5) MSD’s   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Name two (2) ways an MSD can occur   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Duties and Obligations

Read Section 1.2 *What is a hazardous manual task*, and complete the five (5) points following the sentence below:

#### Table 4.0

|  |
| --- |
| A hazardous manual task is a task requiring a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following:   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 1.3 and complete the following:

#### Table 5.0

|  |
| --- |
| Name 3 persons that have duties in managing the risks of hazardous manual tasks:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| What are the duties of Workers and other persons in relation to hazardous manual tasks?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Identifying Risks and Hazards

Read Section 1.4 and complete the following points:

#### Table 6.0

|  |
| --- |
| Name the first three (3) steps required for a person conducting a business or undertaking (PCBU) to manage risks to health and safety related to a musculoskeletal disorder associated with a hazardous manual task.  In order to manage risk under the WHS Regulations, a duty holder must:   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 2 and answer the following:

#### Table 7.0

|  |
| --- |
| The first step in the risk management process is to identify all hazardous manual tasks. This involves finding all relevant things and situations that may contribute to an MSD.  Name the four (4) aspects hazards generally arise from:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 2.1 and answer the following question.

#### Table 8.0

|  |
| --- |
| Who should a PCBU consult with when identifying hazardous manual tasks?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 2.2 and answer the following.

#### Table 9.0

|  |
| --- |
| Name four (4) characteristics of hazardous manual tasks:   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Section 2.2 describes force as; the amount of muscular effort required to perform a movement or task. Forceful muscular exertions overload muscles, tendons, joints and discs and are associated with most MSDs.

There are several different types of forces i.e.

Repetitiveforce*—*using force repeatedly over a period of time

Sustained force*—*occurs when force is applied continually over a period of time

High force*—*occurs when increased muscle effort is required in response to a task. It maybe from the back, arm or leg muscles or by the hands and fingers.

Sudden force*—*jerky or unexpected movements while handling an item or load. These movements are particularly hazardous because the body must suddenly adapt to the changing force.

Complete Table 10.0 below, with two (2) examples of each type of force you have been exposed to in your workplace. Use the examples provided in section 2.2 as a guide.

|  |  |  |
| --- | --- | --- |
| Table 10.0 Types of Forces | | |
| **Force Type** | **Definition** | **Workplace Example** |
| Repetitive | using force repeatedly over a period of time | 1.  2. |
| Sustained | occurs when force is applied continually over a period of time | 1.  2. |
| High Force | occurs when increased muscle effort is required in response to a task. It maybe from the back, arm or leg muscles or by the hands and fingers. | 1.  2. |
| Sudden Force | jerky or unexpected movements while handling an item or load. These movements are particularly hazardous because the body must suddenly adapt to the changing force. | 1.  2. |

## Assessing Risks

Read Section 3 and complete the following:

#### Table 11.0

|  |
| --- |
| For hazardous manual tasks this means…..\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * how…\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * whether…\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * what…\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * how….\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 3.2 and complete the following:

#### Table 12.0

|  |
| --- |
| The first step…\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  their health and safety representative, and management who have control over how the task is done. |
| You should describe the task and….\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  and then work through the assessment together to determine which risk factors pose a risk and why the risk exists.  The whole task should be examined, although….\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   * what …\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * how ….\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Read Section 3.4 and complete the following five (5) points following the sentence below.

#### Table 13.0

|  |
| --- |
| When conducting a risk assessment, think about the sources of any risks present in the task. These will be the things you may be able to change to eliminate or reduce the likelihood of an MSD. For example   * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ * \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Controlling the Risks

The WHS Regulations require duty holders to work through the hierarchy of control measures when managing certain risks, including risks from hazardous manual tasks; however, the hierarchy can be applied to any risk. The hierarchy ranks control measures from the highest level of protection and reliability to the lowest.

The Hazardous Manual Tasks Code of Practice COP) provides the details of risk control in section 4.

**Read Section 4.1 and complete:**

* Table 14.0 – missing description or method
* Table 15.0 – two (2) responses

**You must always aim to eliminate the risk. If eliminating the hazards and associated risks is not reasonably practicable, you must minimise the risk by one or more of the following:**

#### Table 14.0

|  |  |
| --- | --- |
| Table 14 .0 Hierarchy of Control Measures | |
| **Method** | **Description** |
| Substitution |  |
| Isolation |  |
|  | engineering controls are physical control measures to minimise risk. Control measures should be aimed at eliminating or minimising the frequency, magnitude and duration of movements, forces and postures by changing:   * the work area * tool * load * environment * method of handling, or * the way work is organised. |

#### Table 15.0

|  |
| --- |
| What are the two (2) least effective control measures in hierarchy form risk management of hazardous manual tasks?  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Give two (2) examples of control measures for Level 1, Level 2, and Level 3.

#### Table 16.0

|  |  |  |
| --- | --- | --- |
| Examples of Control Measures | | |
| **Level** | **Hierarchy of Control Measures** | **Examples of Control Measures** |
| Level 1 | Elimination | 1.  2. |
| Level 2 | Substitution | 1.  2. |
| Isolation | 1.  2. |
| Engineering | 1.  2. |
| Level 3 | Administrative | 1.  2. |

**Task 2 – Workplace Scenario**

* Read the scenario
* Read the Standard Operating Procedure
* Read the Delivery Docket
* Determine the weight of items
* Answer questions related to planning the task for the scenario

## Scenario

An apprentice has been informed that the delivery truck has arrived and will be unloaded by the overhead crane in the dock. The workshops supervisor requests the apprentice to use the scissor lift trolley to move all of the items from the dock to the stock racks at the southwest corner of the workshop (50 metres from the dock).

“Also put the fasteners into the storeroom next to the racks”.

The Supervisor reminds the apprentice that the Standard Operating Procedure Scissor Lift 500 Kg – TF50 Standard Operating Procedure must be followed and to read the SOP before moving the items. The apprentice reads the SOP as shown on the following page.

## Standard Operating Procedure (SOP)

|  |  |  |
| --- | --- | --- |
| Scissor Lift 500 Kg – TF50 Standard Operating Procedure  (Assessment resource only – not intended for actual use as a SOP) | | |
|  |  | |
| **Description** | | |
| The Scissor Lift Trolley has a lift capacity of 500kg and features a pump action foot pedal and trigger release. An overload valve will prevent operation if the lift capacity is exceeded. | | |
| **Specifications** | | |
| Capacity : 500 kg | | Height Lowered: 285 mm |
| Colour: Yellow | | Height Raised: 880 mm |
| Material: Steel | | Table Length: 850 mm |
|  | | Table Width: 500 mm |
| **Operations** | | |
| Loads must be centrally located on the table | | Loads must not exceed rated capacity of scissor lift |
| Round Bar or Pipe must be chocked and strapped onto the table | | Loads must be transported with the table in the lowered position |
| Load length must not exceed 2 metres | | Transport loads on paved or sealed surfaces only. |
| Load width must not exceed 600 mm | |  |

## Delivery Docket

The delivery docket lists the material on the truck as:

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Qty | Size/Material | Weight |
| A | 2 pcs | Mild steel bar Ø100 mm x 1 m long | 63.2 kg/m |
| B | 2pcs | Mild steel bar Ø200 mm x 1 m long | 253 kg/m |
| C | 4 pcs | Steel plate 200 mm x 1200 mm x 20 mm thick | 7850 kg/m3 |
| D | 2 boxes | M20 x 100 mm high tensile bolts (100 bolts per box) | 300 g per bolt |
| E | 2 boxes | M20 nuts (100 nuts per box). | 55 g per nut |

## Determine Weight

Part of the risk assessment process is to determine material weight. Complete Table 17.0 below by calculating the total weight for items B to E. Item A has been completed as an example.

#### Table 17.0

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Qty | Size/Material | Weight | Weight per item | Total Weight |
| A | 2 pcs | Mild steel bar Ø100 mm x 1 m long | 63.2 kg/m | = 63.2kg x 1  = 63.2 kg | = 63.2 x 2 pieces  = 126.4 kg |
| B | 2 pcs | Mild steel bar Ø200 mm x 1 m long | 253 kg/m | =253kg x 1  = 253.0 kg |  |
| C | 4 pcs | Steel plate 200 mm x 1200 mm x 20 mm thick | 7850 kg/m3 | = 0.2 x 1.2 x 20 x 7. 85 |  |
| D | 2 boxes | M20 x 100 mm high tensile bolts (100 bolts per box) | 300 g per bolt | = 100 x 300 |  |
| E | 2 boxes | M20 nuts (100 nuts per box). | 55 g per nut | = 100 x 55 |  |

## Plan the Task

#### Table 18.0

|  |
| --- |
| What is the total weight of all the items listed on the delivery docket?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| What is the capacity of the scissor lift?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Image 1.0 Below shows Item A (2 off) and Item C (2 off) positioned on the scissor lift table.

|  |
| --- |
| **Image 1.0 Load Placement** |
|  |

#### Table 19.0

|  |
| --- |
| What is the weight of this load?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Is the weight within the capacity of the Scissor Lift?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| The load positioning in Image 1.0 has been planned to meet the requirements of the SOP. In the space below provide three (3) reasons why the load positioning does comply to the SOP |
| 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Would Item B (2 off) and Item A (2 off) be able to be transported using the same method?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Image 2.0 below left shows at ratchet tie down strap. Read the description and specification for the strap and answer the following questions.

|  |  |
| --- | --- |
| Image 2.0 | |
|  | **Description**  50mm Standard Action Ratchet Tie Down Kit with Hook and Keeper, Lashing Capacity 2500 kg, Length 9 Metres.  **Specifications**   * Model Name: 50 mm Standard Action Ratchet Tie – Down with Hook and Keeper * Material: Polyester Webbing * Colour: Silver * Strap: 50mm wide * Lashing Capacity: 2500 Kg * Length: 9 Metres * Fastener Style: Ratchet * Hook (s): 2 x Wire Hooks with keeper * Australian Standards Number: AS/NZS 4380:2001 |

#### Table 20.0

|  |
| --- |
| What is the Australian Standard this strap conforms to?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| What does conformance to an Australian Standard mean?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Would this strap be suitable for the tie down of the items listed on the delivery docket? Provide 3 reasons supporting your answer.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Reasons:  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

#### Table 21.0

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| --- |
| Transporting this load through a workshop over a distance of 50 metres would present hazards. In the space below list three (3) hazards that would be typically encountered:  1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  3.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| It has been suggested by a work colleague that to avoid the hazards of transporting the load through the workshop an alternative shorter route should be taken. The alternative route is only 30 metres but includes crossing an unsealed part of the yard.  Would this route be a satisfactory alternative, to avoid the workshop hazards?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (Provide a reason for your answer)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

#### Table 22.0

|  |
| --- |
| The fasteners need to be placed in the storeroom next to the racks. The weight per box may or may not be too heavy for a single person manual lift.  What type of injury can occur when a lift is attempted beyond a person’s physical capability?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

#### Table 23.0

|  |
| --- |
| Give three (3) examples of the injury types answered above:  Any 3 of the following:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

## Part 2: Assessment Checklist

The following checklist will be used by your assessor to mark your performance against the assessment criteria of your submitted/presented project. Use this checklist to understand what skills and/or knowledge you need to demonstrate in your submission/presentation. All the criteria described in the Assessment Checklist must be met. The assessor may ask questions while the submission/presentation is taking place or if appropriate directly after the task/activity has been submitted/completed.

| TASK/STEP # | Instructions | S | U/S | Assessor Comments |
| --- | --- | --- | --- | --- |
| 1 | *Student undertakes research to answer all questions by completing Tables 1.0 to 16.0* |  |  | *Date of Observation:* |
| 2 | *Student reads all information provided in the Workplace Scenario and answers all questions by completing Tables 17.0 to 23.0* |  |  | *Date of Observation:* |

## Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor Feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***