UEENEEE137A (SIN S7314) – Document and Apply Measures to Control O.H.S. Risks Associated With Electrotechnology Work

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| Candidate Name: | Michael Lys | | | | |
| Assessment Date: |  | **ASSESSMENT #** | **1** | **ATTEMPT #** |  |
| **STUDENT DECLARATION**  I certify that I understand the assessment instructions (see page over) and the submitted work is my own.  Signed: | | | | | |

**Assessment Notes**

**Time allowed:** 60 minutes **Pass Mark 75% Aids Permitted:** AS/NZS 3000:2018

AS/NZS 4836:2011

WA OHS Act (1984) Extract

Code of Practice for Persons working on or near energized electrical installations.

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| **Assessor Feedback** | |
| Performance demonstrated by this assessment is: | Satisfactory **(S)** or Not Yet Satisfactory **(NYS)** |
| **Assessor Comment: The candidate’s result was: % Assessor please note: Where verbal clarification has been sought from a student to gather additional assessment evidence from an assessment item, question/s and response/s must be recorded, signed, and dated by the assessor, against the relevant assessment item/s.**  **Comments to the student:**  Review all the worksheets and/or exercises.  Attend evening tutorials.  Join a study group.  Apply for a retest before the end of your enrolment period.  Other:  Notes:   1. Students are allowed two assessment attempts in the enrolment period. 2. This result is conditional until the practical and other assessments have been passed. | |
| Assessor Name: | Assessor Signature: |
| Date assessment outcome and feedback received on: | Student Signature: |

**Instructions**

1. Attempt **ALL** questions. **Neatly write** word and/or short sentence responses in the space(s) provided.
2. Follow all written and verbal instructions for all answers, calculations, working out and diagrams.
3. For **multiple choice** questions –choose the *most* correct answer, **place a cross (X)** in the box containing the correct answer. If you make a mistake, place a cross in the box you consider to be the correct answer and **CIRCLE** the new answer.
4. All diagrams must be neat.
5. All material handed in must have your **full name** on it.
6. All calculations and numerical answers must be shown correct to two decimal places and include both the unit of measurement and metric prefix if applicable.
7. Write the entire clause number when required by the question.
8. Time allowed and permitted aids are indicated on the test paper.
9. Programmable and/or graphic calculators are not permitted.
10. All bags, text books, pencil cases etc. must remain on the floor. Only the required pens, pencils, erasers, calculators are to be on the work surface.
11. Consult your assessor for assistance if required.
12. **NO** collaboration of **any** description between students.
13. The student may not leave unless finished. If a student leaves for any reason they will be deemed to have completed the assessment. Once finished hand in your completed assessment and leave the room.
14. Mobile phones must be **Switched Off** and placed in student’s bag, for the duration of the test. If a student’s mobile is seen during the test, that student will be **failed**.
15. If the test is interrupted for any reason, a new test must be attempted at another time.
16. Verbal and written feedback will be given to the student for their results.

***Signing the Student Declaration on the front page indicates that you have read and agree to follow these instructions***

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| 1. | With reference to “AS/NZS 4836:2011” state **ONE (1)** factor which can increase the risk of a work task.  ................................................................................................................................. | (1) |
| 2. | With reference to “AS/NZS 4836:2011” state the meaning of the term  **ISOLATED**.  .................................................................................................................................  ................................................................................................................................. | (1) |
| 3. | With reference to “AS/NZS 4836:2011” list the **THREE (3)** general principles for the management of risks.  3.1)  .................................................................................................................................  3.2)  .................................................................................................................................  3.3)  ................................................................................................................................. | (3) |
| 4. | With reference to “AS/NZS 4836:2011” list the **FIVE (5)** options in order of preference used in **General risk control**.  4.1)  .................................................................................................................................  (4.2)  .................................................................................................................................  (4.3)  .................................................................................................................................  (1.4)  .................................................................................................................................  (4.5)  ................................................................................................................................. | (5) |
| 5. | With reference to “AS/NZS 4836:2011” when working near asbestos, state **THREE (3)** tasks you should not undertake without completing a risk assessment.  5.1)  .................................................................................................................................  (5.2)  .................................................................................................................................  (5.3)  ................................................................................................................................. | (3) |

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| 6. | List **TWO (2)** damaging effects of high fault current. 6.1)  .......................................................................................................................... (6.2)  .......................................................................................................................... | (2) |
| 7. | What are **THREE (3)** possible uses of ELV supply for fixed wiring in a typical domestic installation?  7.1)  .................................................................................................................................  7.2)  .................................................................................................................................  7.3)  ................................................................................................................................. | (3) |
| 8. | According to the “Code of Practice for Persons working on or near energised electrical installations”, what are the **Three** steps that must be met if fault finding and testing are to be performed on energised equipment.  8.1)  .................................................................................................................................  (8.2)  .................................................................................................................................  (8.3)  .................................................................................................................................  **Clause number:** …………………………………………….. | (4) |
| 9. | According to the “Code of Practice for Persons working on or near energised electrical installations”, who must prepare the SWMS document.  ......................................................................................................................................  **Clause number:** ......................................................................................................... | (2) |
| 10. | According to “AS/NZS 3000:2018”, Name **THREE (3)** control measures that can be taken to minimise the risk of direct contact with live parts.  10.1)  ................................................................................................................................. 10.2)  .................................................................................................................................  10.3)  ................................................................................................................................. | (3) |

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| 11. | With reference to “AS/NZS 4836:2011” who can give permission for tag removal? State the Clause number.  ......................................................................................................................................  **Clause number:** ......................................................................................................... | (2) |
| 12. | State **ONE (1)** reason why HV is more dangerous than LV.  .................................................................................................................................  ................................................................................................................................. | (1) |
| 13. | Name **TWO (2)** specific control measures used to reduce the risks associated with working on or around **HV** installations ?  13.1)  .................................................................................................................................  13.2)  ................................................................................................................................. | (2) |
| 14. | List **TWO (2)** items of PPE that are **MANDATORY** on all construction / demolition sites in Western Australia?  14.1)  .................................................................................................................................  14.2)  ................................................................................................................................. | (2) |
| 15. | With reference to “AS/NZS 4836:2011” what Category of multimeter should be used where the prospective fault current is between 5 kA and 25 kA?  ................................................................................................................................. | (1) |
| 16. | With reference to “AS/NZS 4836:2011” state **THREE (3)** checks that you should carry out on meters before use.  16.1)  .................................................................................................................................  16.2)  .................................................................................................................................  16.3)  ................................................................................................................................. | (3) |
| 17. | With reference to “AS/NZS 4836:2011”, state why should you fit a ‘out of service’ tag to an item of electrical equipment?  .................................................................................................................................  ................................................................................................................................. | (1) |

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| 18. | What electrical technical term is used to describe the following condition?  “Voltage between **TWO (2)** points on the earth’s surface that are 1metre distant from each other”   * a) Induced Voltage * b) Step Voltage * c) Touch Voltage * d) Transferred Voltage | | | (1) |
| 19. | With reference to “AS/NZS 4836:2011 state **THREE (3)** suitable securing | | | (3) |
|  | devices for isolation of electrical supply. | | |  |
|  | 19.1) | | |  |
|  | ................................................................................................................................. | | |  |
|  | 19.2) | | |  |
|  | ................................................................................................................................. | | |  |
|  | 19.3) | | |  |
|  | ................................................................................................................................. | | |  |
| 20. | With reference to “AS/NZS 4836:2011” what must an electrical isolation point be capable of apart from switching of the supply?  .............................................................................................................................. | | | (1) |
| 21. | With reference to “AS/NZS 3000:2018” **Section 1**, What are the **TWO (2)** main purposes for ‘Electrical Installation Circuit Arrangements’? State Clause number.  ......................................................................................................................................  **Clause number:** ......................................................................................................... | | | (3) |
| 22. | State **TWO (2)** hazards associated with **electric arc welding**. | | | (2) |
|  | 22.1) | | |  |
|  | ................................................................................................................................. | | |  |
|  | 22.2) | | |  |
|  | ................................................................................................................................. | | |  |
| 23. | State **ONE (1)** hazard associated with **optical fibre cables**.  .............................................................................................................................. | | | (1) |
| **TOTAL MARKS** | | **SCORE** | **%** | |
| **50** | |  |  | |