

# FE103 OHS Assignment

## SECTION A

**Instructions:** Select the best answer for the following statements and place an 'X' in the appropriate box on the answer sheet attached to this examination paper. Each correct answer is worth ONE mark.

1. Who has a role to play in ensuring the health and safety of people in their workplace?
  - A. Occupational health and safety officer
  - B. Everyone
  - C. Managing director
  - D. Work Cover inspector
  
2. Which of the following identifies the steps in managing risks in the workplace?
  - A. Dismiss all employees that have had more than two accidents
  - B. Nominate OH&S committee, obtain legal representation, eliminate risks
  - C. Identify people that have accidents and replace them with people that don't have accidents
  - D. Identify then assess hazards, eliminate or control the risk, monitor and review
  
3. When isolating a circuit at a switchboard, the isolating device should be:
  - A. tagged and locked out
  - B. held in the "off" position with insulation tape
  - C. guarded by an assistant to ensure it is not switched on
  - D. in a locked switch room
  
4. A safe work method statement is used to ensure:
  - A. relevant staff know the hazards and control measures and have suitable training to safely complete the task
  - B. that the supervisor has a check list of all the work to be done
  - C. that the customer has a record of work done on a daily basis
  - D. all aspects of the work will be completed in an economical way
  
5. Before you start work on a site that is new to you, what should take place?
  - A. You should be paid a travel allowance
  - B. You should be introduced to the workers on the new site
  - C. All your tools and equipment should be delivered
  - D. You should have a site specific induction

6. You will be working on a construction site and are to organize your personal protective equipment (PPE). The job requires you to be grinding and cutting brackets for a cable tray. You pack the following: full face mask, hard hat, ear muffs, and gloves. What have you forgotten?

- A. Insulating mat
- B. Steel capped boots
- C. Safety glasses
- D. High voltage rescue kit

7. Asbestos is a dangerous product that is still present in a lot of buildings. Asbestos can harm you in the long term if you:

- A. swallow it
- B. breathe it in
- C. allow it to come into contact with your skin
- D. get it in your eyes

8. In which section of the *Wiring Rules* is the information on earthing?
- A. Section 2
  - B. Section 3
  - C. Section 4
  - D. Section 5
9. What level of current and duration of contact causes muscular cramping that may make it difficult to let go of a live cable?
- A. 300 to 500 $\mu$ A for less than 0.5 sec
  - B. 300 to 500mA for less than 0.5 sec
  - C. 10 to 50 $\mu$ A for less than 2 sec
  - D. 10 to 50mA for less than 2 sec
10. Which current path through the body would most likely prove fatal?
- A. Left thumb to left index finger
  - B. Right foot to left foot
  - C. Left hand to feet
  - D. Right hand to right elbow
11. If you come across an accident where power lines have been brought down, you should:
- A. stay at least 8 m clear
  - B. block all traffic both ways
  - C. test the cable to see if it is still live
  - D. use an insulated stick to push the cables out of harm's way
12. Low voltage is defined as voltage:
- A. below 1000V a.c. and above 50V a.c.
  - B. below 50V a.c. and 120V d.c.
  - C. above 1000v a.c.
  - D. below 24V a.c.
13. If a victim of electrocution seems to be unconscious, your first step should be to:
- A. ensure the victim is isolated from the energy source
  - B. run for help
  - C. immediately start mouth-to-mouth
  - D. immediately start CPR
14. After current from an electric shock has passed through the heart it may go into a quivering spasm known as:
- A. multiple sclerosis
  - B. myocardial infarction
  - C. ventricular fibrillation
  - D. muscular dystrophy

15. If a person came into contact with a 230V circuit and the impedance of the current path through his or her body was  $2000\Omega$ , the resulting current flow would be:

- A. 2.23 mA
- B. 1.7 mA
- C. 8.7 mA
- D. 115 mA

16. Fatalities due to incorrect wiring of plug tops and cord sets have decreased recently. One reason for this may be:

- A. all appliances now need to be double-insulated
- B. rewirable fuses have been replaced by circuit breakers
- C. flexible leads now have a larger cross-sectional area
- D. appliances now have molded plug and cord sets fitted

17. RCDs or safety switches are now mandatory on most socket outlet circuits. The letters RCD stand for:

- A. rolling control device
- B. restorative construct device
- C. residual current device
- D. restrictive control device

18. Why would someone in a damp area, such as a swimming pool or bathroom, be more susceptible to electric shock?

- A. Because their bare feet and wet skin lower their effective body resistance
- B. Because they are using electrical appliances
- C. Because there are more exposed socket outlets
- D. Because they are paying less attention

19. When working in a hazardous area with explosive dust, your main risk would be?

- A. Breathing in dust
- B. Keeping your clothes clean from dust
- C. Dust in your eyes
- D. An ignition source which could cause an explosion

20. What requirements are needed before using an elevated platform?

- A. Full tank of petrol
- B. 4 hours, worth of work
- C. Induction and training on equipment (machine)
- D. At least 2 people, 1 up top, 1 down bottom

21. Some risks involved when working from an elevated platform?
- A. Vertigo
  - B. Fall from height
  - C. Crushed between moving parts
  - D. All of the above
22. How often should fire extinguishers be service or checked?
- A. Every 3 months
  - B. Only after they have been used
  - C. Every 12 months and whenever used
  - D. Never
23. What information do you find on MSDS sheets attached to chemicals ,materials and substances
- A. How to carry safely
  - B. How to store safely
  - C. What PPE equipment is required
  - D. All of the above
24. On signs for safety, which background colour indicates what you must do?
- A. Red
  - B. Yellow
  - C. Green
  - D. Blue
25. On signs for safety, which background colour indicates a warning?
- A. Red
  - B. Yellow
  - C. Green
  - D. Blue
26. Who is ultimately responsible for the provision of a safe workplace?
- A. Inspectors
  - B. Work health and safety representative
  - C. Person conducting a business or undertaking
  - D. Director of division of workplace health and safety
- 27 Workplace health and safety laws are necessary because they provide ?
- A. A set of minimum standards to protect the health and safety of workers
  - B. National standards
  - C. Protection against prosecution
  - D. A complete set of laws that cover every workplace situation and activity

28. Identify from the list below the meaning of the term 'Industrial housekeeping'

- A. Quality control
- B. Keeping workplaces and access ways clean, neat and orderly
- C. Project management
- D. Material requirement planning

29. A confined space is often described as a space?

- A. Which may have a contaminated atmosphere
- B. Which is not intended or designed primarily as a place of work
- C. Which may have restricted means for entry and exit
- D. All of the above

30. Select a potential psychological hazard from the list below?

- A. Work station design
- B. Microwaves
- C. Electrical energy
- D. Harassment

## SECTION B

(30 Marks, 2 marks for each question unless other wise marked)

1. Give an example for each of the following hazard.

A. Chronic Hazard \_\_\_\_\_  
\_\_\_\_\_

B. Acute Hazard \_\_\_\_\_  
\_\_\_\_\_

2. When working on an elevated platform, falling from heights is a risk, list precautions you need to take?

1 \_\_\_\_\_

2 \_\_\_\_\_

3. Ladders are required to be properly looked after and stored. Give 2 examples of what you would check before using.

1 \_\_\_\_\_

2 \_\_\_\_\_

4. Name 2 areas classified as confined spaces.

1 \_\_\_\_\_

2 \_\_\_\_\_

5. Two substances that electricians may have to be cautious of when working on older installations are:

1. \_\_\_\_\_

2. \_\_\_\_\_

6. MSDS sheets gives information, what do the letters stand for?

M. \_\_\_\_\_

S. \_\_\_\_\_

D. \_\_\_\_\_

S. \_\_\_\_\_

7. When climbing ladders there are quite a few risks involved name 2 controlling methods you would employ.

1. \_\_\_\_\_

2. \_\_\_\_\_

8. When considering hazard controls there are 5 main ways to implement such controls, name 2 other than PPE.

1. \_\_\_\_\_

2. \_\_\_\_\_

9. When manual handling a large heavy motor, describe 2 actions which you could take to reduce the risk of injury

1. \_\_\_\_\_

2. \_\_\_\_\_

10a. A major concern when working in confined spaces both underground and above ground (e.g. inside containers) is:

1. \_\_\_\_\_

10b. How can this concern be controlled or made safe to work on?

2. \_\_\_\_\_



11. A domestic electrician working on new and old houses will at some stage work in a confined space, name 2 examples of a confined space in a domestic setting.

1. \_\_\_\_\_

2. \_\_\_\_\_

12. Name 2 types of fire extinguishers that can be used on an electrical fire?

1. \_\_\_\_\_

2. \_\_\_\_\_

13. Fire extinguishers need to be installed and displayed how?

1. \_\_\_\_\_

2. \_\_\_\_\_

14. When planning to move an object by hand, list 2 things you would check before attempting.

1. \_\_\_\_\_

2. \_\_\_\_\_

15. List 2 hazards that can cause long term effects, either physical or psychological

1. \_\_\_\_\_

2. \_\_\_\_\_

## Section C (40 marks total, as shown)

1. ( 2 marks) Name 2 substances that people take which can have an adverse effect on their ability to work safely.

1. \_\_\_\_\_

2. \_\_\_\_\_

2. ( 4 marks) List 4 factors (effects) that contribute to physical or psychological problems caused by using outdoor machinery incorporating laser equipment?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

3. ( 4 marks) For the above question (2), list for each factor a method for overcoming the problem.

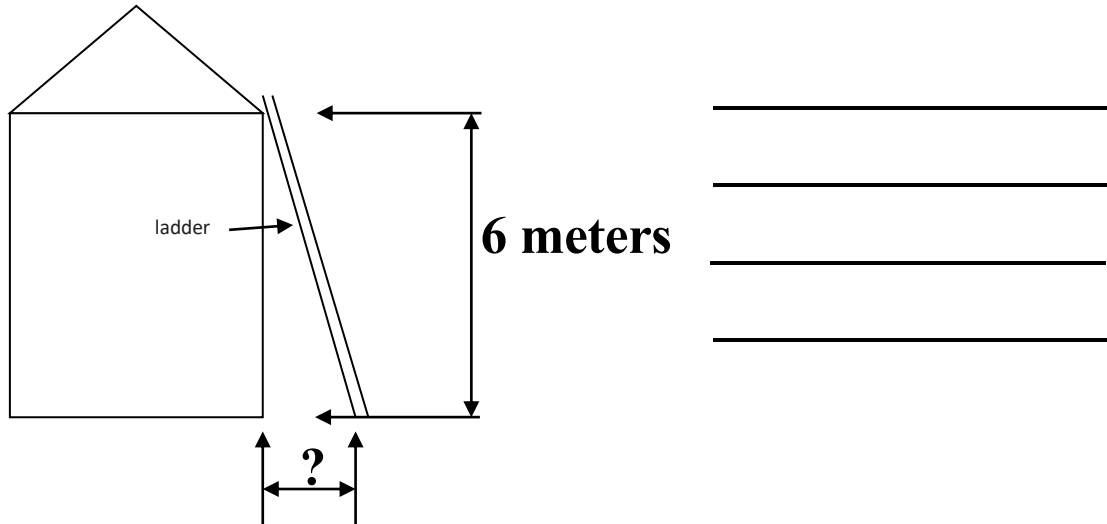
1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

**Question 4 (2 marks)** From the diagram below show working out calculation for the distance the bottom (base) of the ladder needs to be from the wall.



**Question 5 (4 marks)** Explain what the 4 Safety signs below are telling you.

Blue back with white  
Writing & symbol



\_\_\_\_\_  
\_\_\_\_\_

yellow back with black  
symbol



\_\_\_\_\_  
\_\_\_\_\_

yellow back with black  
symbol and writing



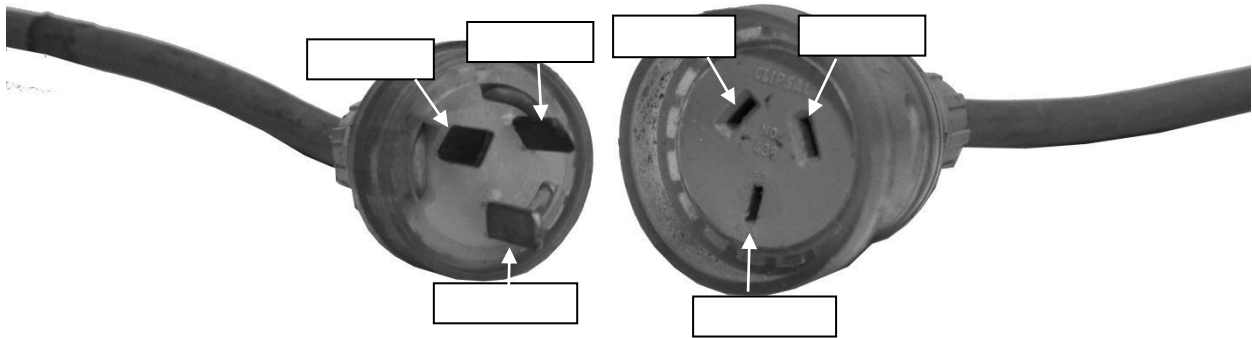
\_\_\_\_\_  
\_\_\_\_\_

red back with black  
writing



\_\_\_\_\_  
\_\_\_\_\_

**Question 6. (4 marks)** Label boxes with correct polarity for a standard extension lead.



**Question 7 (10 marks)**

**On the next page (safe work method statement part 1) fill out required job, possible hazards, risks and risk factor for job listed below, where you are the contractor**

- 1 Project is a domestic house
- 2 Job is to pre-drill holes in timber frame ready for wiring
- 3 Equipment to be used , electric drill, extension lead and a 25mm drill bit

Some holes are at a height of 1.8m (no ladder required)

(If not enough room to write turn over page and write on back)

(Risk factor level numbers to use on table below)

How likely is it to happen?	How severely could it hurt someone?			
	Extreme Death or permanent disablement	Major Serious bodily injury	Moderate Casualty treatment	Minor First aid only
Very likely	1	2	3	4
Likely	2	3	4	5
Unlikely	3	4	5	6
Very unlikely	4	5	6	7

**Question 8 (10 marks)**

**On the page after the SWMS page fill out Risk assessment sheet provided for job listed in question 7**

# Safe Workplace Method Statement (SWMS)

## Question 7 (10 marks) Pre-drilling holes in timber frame

Job Activity	Hazard	Specific Risk	Risk Factor (level)



Student Name : \_\_\_\_\_

Class : \_\_\_\_\_

## ANSWER SHEET

### Section A – (Multi-choice Questions)

#### Instructions:

Enter your personal details in the top right hand corner of this sheet.

Place an **X** in box of your choice. If you make a mistake, circle your answer ⊗ and choose again.

Question	A.	B.	C.	D.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
<b>Totals</b>				

Question	A.	B.	C.	D.
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
<b>Totals</b>				

**Total Marks Section A:** \_\_\_\_\_

