Practical Group (A) Approach to home wiring circuits

Practical (1) Approach to wiring circuits

Make the connection for the following circuits by using the given equipments.

Equipments to use (All equipments for this practical will be provided)
Practical (2) Approach to wiring circuits with energy supply meter connection

Make the connection for the following circuits by using the given equipments. (Above equipments PLUS additional Power/Energy meter)
**Practical (3) Electrical Safety Testing**

**Approach to electrical safety testing & insulation resistance test by using megger**

Use the following megger & test the insulation resistance of the electrical machines, supply, cables as directed by teacher.

![Megger Image](image.png)

**Practical Group (8) Home Wiring Circuits**

**Practical (4) Open wiring circuit 1 on timber board**

You have to do the following wiring. Wiring to be done as open wiring without conduit.

![Wiring Diagram](image.png)
The teacher will provide the following timber board to fix the wiring circuits.

You need to purchase & bring the following tools & devices. If you are able to purchase & bring the tools & wiring accessories, you will complete UEEEEE008 as well as achieve the competency in

| UEEENE002B | Source and purchase material/parts for installation or service jobs |

for 17908 students.
<table>
<thead>
<tr>
<th>List of hand tools</th>
<th>Cost</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOOL KIT WITH CASE 29 PIECE WITH TORCH</td>
<td>$23.70</td>
<td>(Jay Car Electronics)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD2066</td>
</tr>
<tr>
<td>Wire stripper</td>
<td>$13.35</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1824</td>
</tr>
<tr>
<td>1000V , 7 pieces screw driver set</td>
<td>$19.70</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD 2022</td>
</tr>
<tr>
<td>7 piece Hex Nut Driver set</td>
<td>$19.95</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD 2339</td>
</tr>
<tr>
<td>Three cores main flex cable</td>
<td></td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WB 1562</td>
</tr>
</tbody>
</table>
Practical (5) Conduit wiring circuit on timber board

You have to do the following wiring. Wiring to be done as enclosed wiring in conduit
Equipments

In addition to above tools & equipments, you need to purchase & bring the following additional equipments & wiring accessories.
5.23 (a) One-way round PVC junction box; (b) Three-way square PVC junction box; (c) Round PVC junction-box take-off plate; (d) Junction-box extension ring

GERARD INDUSTRIES
Practical (6) Wiring circuit for socket outlet on timber board

Do the following circuits on timber board
Equipments

In addition to above tools & equipments, you need to purchase & bring the following additional equipments & wiring accessories.

Test your circuit
For an electrical contracting work for home electrical wiring for lighting & socket outlet power, the followings are minimum required electrical wiring accessories. The students do not need to buy them to complete the stage 1 electrical workshop. It is just for your information.

<table>
<thead>
<tr>
<th>Equipments</th>
<th>Unit price</th>
<th>Catalogue/Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC <em>Inspection Tee 20mm</em></td>
<td>$1.59</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>PVC <em>Inspection Tee 25mm</em></td>
<td>$2.06</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>2Way 20mm Junction Box</td>
<td>$1.30</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>3 Way 20mm Junction Box</td>
<td>$1.45</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>4 Way 20mm Junction Box</td>
<td>$1.45</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>1 Way 20mm Junction Box</td>
<td>$1.60</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>20mm Solid Elbow</td>
<td>$1.00</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td>25mm Solid Elbow</td>
<td>$1.10</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td><em>Coupling plain pvc 20mm grey</em></td>
<td>$0.53</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td><em>Coupling plain pvc 25mm grey</em></td>
<td>$0.64</td>
<td>Sparkydirect</td>
</tr>
<tr>
<td><strong>MAINS WALL-MOUNT LIGHT SWITCHES</strong></td>
<td><strong>$4.45</strong></td>
<td><em>(Jay Car Electronics)</em></td>
</tr>
<tr>
<td><strong>CIV Insulation tester/ multimeter</strong></td>
<td><strong>$174.95</strong></td>
<td><em>(Jay Car Electronics)</em></td>
</tr>
<tr>
<td><strong>TOOL KIT WITH CASE 29 PIECE WITH TORCH</strong></td>
<td><strong>$23.70</strong></td>
<td><em>(Jay Car Electronics)</em></td>
</tr>
<tr>
<td><strong>WIRE STRIPPER, CUTTER PLIERS</strong></td>
<td><strong>$11.70</strong></td>
<td><em>(Jay Car Electronics)</em></td>
</tr>
<tr>
<td>Description</td>
<td>Code</td>
<td>Price</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>SINGLE 240V GPO</td>
<td></td>
<td>$4.45</td>
</tr>
<tr>
<td>MAINS WALL SWITCH DOUBLE</td>
<td></td>
<td>$5.25</td>
</tr>
<tr>
<td>Back box, Grid switch, aluminium, surface flush mount, 1/2 module</td>
<td></td>
<td>$4.91</td>
</tr>
<tr>
<td>Box, Mount, Grid Plus, 3-4 Way, aluminium</td>
<td></td>
<td>$5.57</td>
</tr>
<tr>
<td>MCB, B, std, 16A, Starbreaker</td>
<td></td>
<td>$12.20</td>
</tr>
<tr>
<td>Conduit, flexible, Nylon, Adaptalok, 20mmx10m</td>
<td></td>
<td>$84.00</td>
</tr>
<tr>
<td>Conduit, flexible, polypropylene, 25mmx10m</td>
<td></td>
<td>$54.50</td>
</tr>
<tr>
<td>Lampholder, batten, angled, white moulded, lamp activated, 250V</td>
<td></td>
<td>$7.05</td>
</tr>
<tr>
<td>Woodscrew kit, countersunk, cross recess, single thread, steel, zinc plated, yellow passivated</td>
<td></td>
<td>$117.00</td>
</tr>
<tr>
<td>Metal Saddle</td>
<td></td>
<td>$7.00</td>
</tr>
<tr>
<td>Three cores main flex cable</td>
<td></td>
<td>$90.00</td>
</tr>
<tr>
<td>180 mm combination plier</td>
<td></td>
<td>$15.70</td>
</tr>
<tr>
<td>160mm side cutter</td>
<td></td>
<td>$14.35</td>
</tr>
<tr>
<td>Screw removing plier</td>
<td></td>
<td>$23.70</td>
</tr>
<tr>
<td>1000V, 7 pieces screw driver set</td>
<td></td>
<td>$19.70</td>
</tr>
<tr>
<td>Mini bench vice</td>
<td>$13.35</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1764</td>
</tr>
<tr>
<td>Stainless steel 6.5 inch cable shear</td>
<td>$15.70</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1898</td>
</tr>
<tr>
<td>10 pieces spanner set</td>
<td>$14.35</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1910</td>
</tr>
<tr>
<td>Wire stripper</td>
<td>$13.35</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1824</td>
</tr>
<tr>
<td>Modular crimping tool</td>
<td>$31.90</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TH 1936</td>
</tr>
<tr>
<td>T type Tap Wrench</td>
<td>$10.35</td>
<td>Jay Car Electronics</td>
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<tr>
<td></td>
<td></td>
<td>TD 2445</td>
</tr>
<tr>
<td>PC Drill Bits pack 10 pieces</td>
<td>$14.70</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD 2400</td>
</tr>
<tr>
<td>7 piece Hex Nut Driver set</td>
<td>$19.95</td>
<td>Jay Car Electronics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD 2339</td>
</tr>
<tr>
<td>Hack saw (Wire cutter)</td>
<td>$30</td>
<td></td>
</tr>
</tbody>
</table>

| Practical Group (C) Home Wiring Circuits Testing (Study electrical safe working) |

**Practical (7) Voltage, Current, Insulation Resistance testing**

Perform Voltage, Current, Insulation Resistance testing as directed by teacher.
Practical (8) Insulation Resistance testing of Earth/ Neutral Link

Connect the given circuit by using the provided equipments.
Test the insulation resistance as per following testing diagrams
Practical (9) Advanced Installation Testing on switch board & appliances

Direct interconnection between active conductors of different circuits

Ohmmeter indicates a short circuit

Test conducted with supply disconnected, neutral conductors disconnected from the neutral link and all control switches closed

Ohmmeter reads the resistance of the lamps, indicating an interconnection through a light point

Test conducted with supply disconnected, neutral conductors disconnected from the neutral link, all control switches closed and loads in circuit

Fig. 11.36(b) Testing for an interconnection between circuits, revealing a light point connected to active and neutral conductors of different circuits
Practical Group (D) Disassembling & re-assembling the electrical equipments

Practical (10) Disassembling & re-assembling the electrical equipments for movable switch board

- Note the original connection of movable switch board
- Remove the connection
- Take out the equipments
- Reinstall and reconnect the wire
- Do the safety test
Practical (11) Disassembling & re-assembling the 3 phase power socket

- Note the original connection
- Remove the connection
- Take out the equipments
- Reinstall and reconnect the wire
- Do the safety test
Practical (12) Disassembling & re-assembling the power supply to AC/DC motor

- Note the original connection
- Remove the connection
- Take out the equipments
- Reinstall and reconnect the wire
- Do the safety test

Practical Group (E) Disassembling & re-assembling the measuring electrical equipments

(Bring your own tools such as screw drivers (star/ flat, plier etc)

Practical (13) Disassembling & re-assembling the measuring devices

- Note the original connection
- Remove the connection
- Take out the equipments
- Reinstall and reconnect the wire
- Do the safety test
Practical (14) Voltage, Current Power Measuring devices connection

Connect the given circuits for voltage, current and power measurement

Practical (15) Resistors

Determine the resistance
A complete table showing how colored bands give the resistive values is shown below.

<table>
<thead>
<tr>
<th>Color</th>
<th>First Significant Figure</th>
<th>Second Significant Figure</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>0</td>
<td>0</td>
<td>1 $\times 10^0$</td>
</tr>
<tr>
<td>Brown</td>
<td>1</td>
<td>1</td>
<td>10 $\times 10^1$</td>
</tr>
<tr>
<td>Red</td>
<td>2</td>
<td>2</td>
<td>100 $\times 10^2$</td>
</tr>
<tr>
<td>Orange</td>
<td>3</td>
<td>3</td>
<td>1,000 $\times 10^3$</td>
</tr>
<tr>
<td>Yellow</td>
<td>4</td>
<td>4</td>
<td>10,000 $\times 10^4$</td>
</tr>
<tr>
<td>Green</td>
<td>5</td>
<td>5</td>
<td>100,000 $\times 10^5$</td>
</tr>
<tr>
<td>Blue</td>
<td>6</td>
<td>6</td>
<td>1,000,000 $\times 10^6$</td>
</tr>
<tr>
<td>Violet</td>
<td>7</td>
<td>7</td>
<td>10,000,000 $\times 10^7$</td>
</tr>
<tr>
<td>Grey</td>
<td>8</td>
<td>8</td>
<td>100,000,000 $\times 10^8$</td>
</tr>
<tr>
<td>White</td>
<td>9</td>
<td>9</td>
<td>1,000,000,000 $\times 10^9$</td>
</tr>
</tbody>
</table>

Tolerance values are indicated by the fourth color band (see fig 9.3) as follows.

<table>
<thead>
<tr>
<th>Fourth Band Color</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>Silver</td>
<td>+/- 10%</td>
</tr>
<tr>
<td>No fourth band</td>
<td>+/- 20%</td>
</tr>
</tbody>
</table>

Thus, for example, a resistor with a color code of Orange-Red-Grey-White has a resistance of 100,000 ohms with a tolerance of +/- 10%.
Exercise 9.8

Give the values, tolerances and reliabilities of resistors having the following color bands:

1. Orange, orange, green, silver, red. 3.3MΩ, +/-10%, 0.01%.
2. Green, blue, black, gold, brown. 56Ω, +/-5%, 0.1%.
3. Grey, red, orange, gold, orange. 82kΩ, +/-5%, 0.001%.

The Digital Code

This code is easier to use than the color band system, because there is less to remember. However, it is difficult to print numbers and letters onto a very small components, so the system is usually applied to larger resistors such as the wire-wound type.

R is used to denote the decimal point, so 1R0 is for a 1Ω resistor, 3R9 indicates 3.9Ω, 68R is 68Ω, 220R is 220Ω and so on.

K indicates 1,000 so it indicates a value in thousands of ohms, or kilohms. Thus 1K0 is 1kΩ, 4K7 is 4.7kΩ, 82K is 82kΩ and so on.

M denotes 1,000,000 and gives values in millions of ohms or megohms. Thus, 1M5 is 1.5MΩ, 22M is 22MΩ and so on.

This system identifies tolerance in terms of a second letter placed after the rest of the code. The tolerance code is:-

B means +/- 0.1%
C means +/- 0.25%
D means +/- 0.5%
F means +/- 1%
G means +/- 2%
J means +/- 5%
K means +/- 10%
M means +/- 20%
N means +/- 30%

Examples of the use of the code are:

4R7J is 4.7Ω +/- 5%
6K8F is 6.8kΩ +/-1%
39KK is 39kΩ +/- 10%
4M7M is 4.7MΩ +/- 20%
Practical Group (F) DC Circuit Practicals (All equipments to be provided)

**Practical (16) DC Series circuit**

Measure the voltage & current in the branches of the given circuit

**Practical (17) DC parallel circuit**

Measure the voltage & current in the branches of the given circuit
**Practical (18) DC series parallel circuit**

Measure the voltage & current in the branches of the given circuit
Stage 1 Electrical Workshop Schedule

<table>
<thead>
<tr>
<th>Practical Classification</th>
<th>Practical Number</th>
<th>Week 1-3</th>
<th>Week 4-6</th>
<th>Week 7-9</th>
<th>Week 10-12</th>
<th>Week 13-15</th>
<th>Week 16-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.2,3</td>
<td>Group 1</td>
<td>Group 6</td>
<td>Group 5</td>
<td>Group 4</td>
<td>Group 3</td>
<td>Group 2</td>
</tr>
<tr>
<td>B</td>
<td>4,5,6</td>
<td>Group 2</td>
<td>Group 1</td>
<td>Group 6</td>
<td>Group 5</td>
<td>Group 4</td>
<td>Group 3</td>
</tr>
<tr>
<td>C</td>
<td>7,8,9</td>
<td>Group 3</td>
<td>Group 2</td>
<td>Group 1</td>
<td>Group 6</td>
<td>Group 5</td>
<td>Group 4</td>
</tr>
<tr>
<td>D</td>
<td>10,11,12</td>
<td>Group 4</td>
<td>Group 3</td>
<td>Group 2</td>
<td>Group 1</td>
<td>Group 6</td>
<td>Group 5</td>
</tr>
<tr>
<td>E</td>
<td>13,14,15</td>
<td>Group 5</td>
<td>Group 4</td>
<td>Group 3</td>
<td>Group 2</td>
<td>Group 1</td>
<td>Group 6</td>
</tr>
<tr>
<td>F</td>
<td>16,17,18</td>
<td>Group 6</td>
<td>Group 5</td>
<td>Group 4</td>
<td>Group 3</td>
<td>Group 2</td>
<td>Group 1</td>
</tr>
</tbody>
</table>

| UEEENEE001B | Apply OHS practices in the work place |

Study the class lessons + Online notes OHS Workbook and do the following exercises. The test question will be based on them.

Review questions

This section will help you revise what you have learnt in Section 1.

1. State the primary aim of the O.H. & S. Act.

2. Who does the O.H & S. Act cover?

3. What is the minimum number of employees in any workplace in which the OH&S Act requires a OH&S committee to be set up?

4. If a OH&S committee exists does it have the responsibility of ensuring the health and safety of employees?
5. Who has the responsibility of ensuring the health and safety of employees?

6. What is an OH&S Committee?

7. What can OH&S Committees do?

8. What can committee members do?

9. In one State alone there are over 50 deaths, 35,000 injuries and 5,000 illnesses costing billions of dollars annually. How do these costs affect the:
   a) Employee
   b) Employer
   c) Community

10. Can employees be dismissed for making a safety complaint?

11. What are the responsibilities of employees with respect to OH&S in the workplace?
12. State the responsibility of employers with regard to persons not employed by their organisation, e.g. members of the public visiting the site.

13. What are the responsibilities of employers with respect to OH&S in the workplace?

Review questions

This section will help you revise what you have learnt in Section 2.

1. What is housekeeping? List some hazards that can occur as a result of poor housekeeping.

2. List some emergencies that pose a threat to health and safety.

3. It is essential that the employer provides personal protective equipment for the employee, for example respiratory protection. List five other types of protective gear that is required by the worker.

4. What sort of extinguisher should be used on an oil based fire?

5. What sort of extinguisher should not be used on an oil based fire?

6. Describe the major steps to be taken in the case of a workplace fire
7. Before attempting a job requiring manual lifting there are a number of safety factors to consider. List five factors that would be considered essential.

- 
- 
- 
- 
- 

8. A ladder rests against a wall at a height of 4m. How far from the wall should the base of the ladder be?

9. List three ways in which industrial chemicals can enter the body.

- 
- 
- 

10. What is a MSDS and what is it for?

- 

11. What information should a label on a dangerous substance contain?

- 

Review questions

This section will help you revise what you have learnt in Section 3.

1. What is meant by heat stress?

- 

2. What are the effects of excess heat on the human body?

- 
3. What are the "prevention and control" measures for excess cold?

4. List effects of vibration exposure on the worker.

5. Excessive vibration can be controlled and prevented. List five ways in which this can be achieved.

   -
   -
   -
   -
   -

6. What is noise?

7. What are the long term effects of exposure to noise?


9. What are the psychological symptoms of stress?

10. What are some of the physiological symptoms of stress?
11. What are some of the effects of alcohol consumption on the human body?

12. What is the O.O.S. and what are some of its symptoms?

This section will help you revise what you have learnt in Section 5.

1. List effects that electricity can have on the human body.

2. List three major hazards connected with electricity.
   - 
   - 
   - 

3. What care should be taken when using electric tools?

4. Electrical and electronic equipment can sometimes be fitted with "safety interlock" switches to doors and covers. State the reasons for this safety feature.

5. What is the special safety feature of Residual Current Devices (RCDs), sometimes referred to as a safety switch?

6. Can RCDs give the consumer complete electrical protection? Give reasons for your answer.
7. If electrical equipment is "locked off" who should retain the keys until all the maintenance work is finished?

8. When should a worker place a "danger tag" on electrical equipment?

9. Double insulated portable tools provide additional safety protection from electric shock. All such tools are marked DOUBLE INSULATED DO NOT EARTH. Why should double insulated equipment never be earthed?

**Review questions**

*This section will help you revise what you have learnt in Section 6.*

1. Describe the procedures you would use to remove a victim from what is believed to be a live electrical situation.

2. What procedures for rescue should occur if the voltage is known to be 1000 volts or above?

**Review questions**

*This section will help you revise what you have learnt in Section 7.*

1. When an accident occurs and a person is injured, it is most important to ensure that: (tick the correct box)
   - [ ] no further injury occurs to the victim
   - [ ] the ambulance is called
   - [ ] no injury occurs to rescuers
   - [ ] no damage occurs to property.
2. The ABC of first aid represents: (tick the correct box)
   □ airway, breathing, conscious
   □ airway, breathing, conscious
   □ airway, breathing, circulation
   □ airway, bleeding, circulation.

3. The best place to feel for a victim’s pulse is in the carotid artery which is located on the: (tick the correct box)
   □ side of the Adam’s apple
   □ rear of the left ear
   □ inside of the thigh
   □ chest above the sternum.

4. The occupational health and safety (first aid) regulation states the requirements for the provision of first aid in the workplace, including: (tick the correct box)
   □ a first-aid facility
   □ first-aid equipment and personnel
   □ a register of injuries and treatment
   □ all of the above.

5. DRABC is an abbreviation of the priorities for a first-aid action plan. Complete the words below.
   D ____________
   R ____________
   A ____________
   B ____________
   C ____________

6. If you are alone and you have to give first aid, what should you do about telephoning for help? (tick the correct box)
   □ stabilise the victim and then phone
   □ quickly telephone and then give emergency care
   □ concentrate on emergency care and not take time to phone
   □ perform the ABCs of emergency care for one minute and then phone.
7. You would assume that a victim is in cardiac arrest if: (tick the correct box)

- there is no pulse
- there are no signs of breathing
- the pupils of the eyes are dilated
- all of the above signs are present.

Study the class lessons for drawing & draw and submit the following diagrams by hand drawing:

1. [Diagram 1]

2. [Diagram 2]

3. [Diagram 3]
Stage 1 Electric Workshop Practical for Advanced Diploma Classes

Bridging

Two-screw connector — taped and within 50 mm of switch, Earthing conductors taped together
Fig. 6.10 *In this surface conduit system, actives are looped at the switch and neutrals or earths at the outlet or luminaire*
Fig. 6.17 Connections for two-way switching using the "looping-in" system with surface wiring in conduit
Fig. 6.22 Multiposition control of a luminaire, using single-core, two-core, and twin and earth cable. Connection of 'strap wires' to intermediate switches depends on the internal bridging positions of switches used.
Notes
1. This drawing is to be read in conjunction with a separate specification and DWG nos. F8476, F8477, C7748 and B8121.
2. Screw 5x (3POs on wall adjacent to light switches, 1180 above floor level.
3. c Suspension fan, see DRG F8478.

Fig. 6.40 Electrical plan for a small canteen
Fig. 6.44 Single-line diagram of additions to a distribution board
5. Excessive vibration can be controlled and prevented. List five ways in which this can be achieved. 
   - 
   - 
   - 
   - 
   - 

6. What is noise? 

7. What are the long term effects of exposure to noise? 


9. What are the psychological symptoms of stress? 

10. What are some of the physiological symptoms of stress?
11. What are some of the effects of alcohol consumption on the human body?


12. What is the O.O.S. and what are some of its symptoms?


Review questions

This section will help you revise what you have learnt in Section 5.

1. List effects that electricity can have on the human body.

2. List three major hazards connected with electricity.
   - 
   - 
   - 

3. What care should be taken when using electric tools?

4. Electrical and electronic equipment can sometimes be fitted with "safety interlock" switches to doors and covers. State the reasons for this safety feature.

5. What is the special safety feature of Residual Current Devices (RCDs), sometimes referred to as a safety switch?

6. Can RCDs give the consumer complete electrical protection? Give reasons for your answer.
7. If electrical equipment is “locked off” who should retain the keys until all the maintenance work is finished?

8. When should a worker place a “danger tag” on electrical equipment?

9. Double insulated portable tools provide additional safety protection from electric shock. All such tools are marked DOUBLE INSULATED DO NOT EARTH. Why should double insulated equipment never be earthed?
Review questions

This section will help you revise what you have learnt in Section 6.

1. Describe the procedures you would use to remove a victim from what is believed to be a live electrical situation.
2. What procedures for rescue should occur if the voltage is known to be 1000 volts or above?
Review questions

This section will help you revise what you have learnt in Section 7.

1. When an accident occurs and a person is injured, it is most important to ensure that: (tick the correct box)
   □ no further injury occurs to the victim
   □ the ambulance is called
   □ no injury occurs to rescuers
   □ no damage occurs to property.

2. The ABC of first aid represents: (tick the correct box)
   □ airway, breathing, conscious
   □ airway, bleeding, conscious
   □ airway, breathing, circulation
   □ airway, bleeding, circulation.

3. The best place to feel for a victim’s pulse is in the carotid artery which is located on the: (tick the correct box)
   □ side of the Adam’s apple
   □ rear of the left ear
   □ inside of the thigh
   □ chest above the sternum.

4. The occupational health and safety (first aid) regulation states the requirements for the provision of first aid in the workplace, including: (tick the correct box)
   □ a first-aid facility
   □ first-aid equipment and personnel
   □ a register of injuries and treatment
   □ all of the above.
5. DRABC is an abbreviation of the priorities for a first-aid action plan. Complete the words below.

D ____________
R ____________
A ____________
B ____________
C ____________

6. If you are alone and you have to give first aid, what should you do about telephoning for help? (tick the correct box)

☐ stabilise the victim and then phone
☐ quickly telephone and then give emergency care
☐ concentrate on emergency care and not take time to phone
☐ perform the ABCs of emergency care for one minute and then phone.

7. You would assume that a victim is in cardiac arrest if: (tick the correct box)

☐ there is no pulse
☐ there are no signs of breathing
☐ the pupils of the eyes are dilated
☐ all of the above signs are present.