



Candidate Handbook answers

Progress check 2.1, p. 68

1. What is legislation?
A law debated and voted in by the government
2. What are an employee's main health and safety responsibilities?
 - **Take care of yourself and any other person who may be affected by your actions.**
 - **Report any equipment or other issues that pose risks to health and safety.**
 - **Cooperate with your employer in relation to health and safety issues.**
 - **Use any safety equipment provided – for example, you MUST wear a hard hat on a construction site even if you don't think it suits you!**
 - **Do not interfere with or misuse anything provided in the interests of health and safety.**
3. A customer wants to visit your site – how will you keep him or her safe?
 - **Training – make sure the visitor is aware of how to conduct him/herself safely in your workplace. This may involve a short training talk, for example.**
 - **He or she must be provided with any PPE needed in that area.**
 - **He/she is responsible for wearing the PPE, using safety equipment and following procedures put in place.**

Progress check 2.2, p. 73

1. What is RIDDOR?
Reporting Injuries, Diseases and Dangerous Occurrences Regulations
2. List five items of PPE.
 - **Ear defenders**
 - **Eye protection**
 - **Gloves**
 - **Hi-vis waistcoat**
 - **Protective footwear**
3. Who is authorised to work on asbestos?
Fully equipped and trained companies only

Progress check 2.3, p. 74

1. Who are the HSE?
Health and Safety Executive, a government agency authorised to enforce health and safety legislation as well as provide information
2. Who represents the workforce in matters of health and safety?
Safety representative
3. Who is the first person to call when someone is injured in the workplace?
First-aider



Progress check 2.4, p. 76

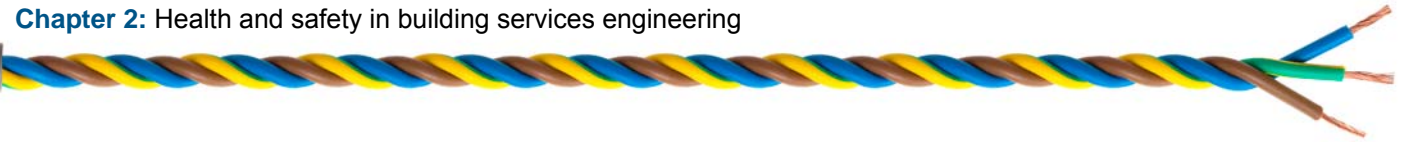
1. What is a hazard?
A situation that poses a threat
2. An electric shock can result in what?
 - Heart failure
 - Burn
 - Unconsciousness
3. What can cause manual handling and lifting injuries?
 - Incorrect lifting techniques
 - Attempting to lift something that is too heavy
 - Not using lifting equipment
 - Not wearing protective footwear and gloves

Progress check 2.5, p. 79

1. State three headings found on a risk assessment.
 - Tasks
 - Hazards
 - Control
 - Seriousness
 - Likelihood
2. What is the purpose of a method statement?
Describes in detail how work is to be carried out
3. Why is the finish time on a permit to work so important?
It is a prompt for a supervisor to investigate if the electrician is not back by the finishing time.

Working practice 2.1, p. 87

1. Were the two brown conductors still live even though the light was switched off?
They were the permanently live feeds to the loop-in system.
2. What should the electrician have explained to the apprentice before he allowed him to start work?
How the loop-in lighting system worked and that the entire circuit should be turned off before disconnecting any cables
3. What should the apprentice have done when he saw the cables and didn't know what they were for?
Checked with the electrician
4. What procedure should the apprentice have been taught to follow?
The safe isolation procedure



Progress check 2.6, p. 89

1. What are the two main hazards associated with electricity?

Shock and burns

2. What do you check when you carry out a visual inspection of an electric drill?

Plug, lead, outer casing

3. What should you do and not do when using an extension lead?

You should always use a three-core lead; you should not piggy-back one lead into another or leave it coiled on the drum when in use.

Progress check 2.7, p. 95

1. What are the three elements needed for combustion?

Fuel, oxygen, heat

2. What class is a petrol fire?

Class B

3. Which extinguisher would you use to tackle a paper or wood fire?

Water

4. What must be considered when transporting a gas cylinder?

- **Clearly mark the cylinder to show what it contains.**
- **Only use suitable lifting equipment such as cradles and slings.**
- **Never lift a cylinder by holding its valve.**
- **Secure cylinders to stop them falling or moving; they will usually be upright although some cylinders can be stacked horizontally.**
- **All regulators and hoses must be disconnected and protective valve caps fitted.**
- **The cylinders must not stick out from the sides of the vehicle that is carrying them.**
- **The vehicle must be marked to show what sort of gas it is carrying.**
- **The driver of the vehicle must be trained.**
- **There must be documentation in the vehicle stating the types of gas being carried.**

5. What should be done with a gas welding set before use?

- **You must be fully trained and qualified to carry out these operations.**
- **PPE must include a metal face protector, protective overalls and gloves.**
- **Other people must be protected from the heat and, in the case of arc welding, the bright light from the welding process.**
- **All equipment must be given a visual inspection before use; this includes inspection of the valves, cables and hoses.**
- **All equipment must be tested for leaks using an approved leak detection chemical.**
- **Starting the welding process and closing it down afterwards must be carried out in the correct order.**
- **Only approved hoses and other equipment must be used. Oxygen and fuel gas hoses must never be swapped around.**



Working practice 2.2, p. 100

1. How could the accident have been avoided?

A board big enough to straddle at least three joists and strong enough to take the weight of the masonry should have been used for the rubble.

Progress check 2.8, p. 100

1. How could you secure a ladder if you cannot tie it off at the top?

Secure it between top and bottom – to a window frame, for example

2. What is edge protection?

Prevents objects falling from the edge of a roof during works

3. Who needs to be involved if scaffolding needs to be more than 38 m high?

A professional engineer to design the scaffold

Progress check 2.9, p. 103

1. What are the signs that there may be underground services?

- **Valve or manhole covers**
- **Electrical and telecommunications boxes**
- **Patching of the road surface**

2. What is a prop?

The sides of the trench are covered with boards or metal sheets. These are held in place by adjustable steel poles called props. This stops the sides of the trench collapsing.

3. What are the basic precautions needed when working in a confined space?

- **Freedom of movement so that the work can be completed safely**
- **Ventilation so that there is a constant air supply and any gases resulting from the work can escape**
- **Escape routes for the people working in the space**

Progress check 2.10, p. 104

1. What sort of injuries can be suffered from manual lifting?

- **Strains**
- **Back injury**

2. How can you reduce the risk of injury when lifting a heavy object?

- **Get help from other people.**
- **Use lifting equipment.**

3. How do you ensure that a lifting team works in a coordinated way?

- **Appoint one person to take charge of the operation.**
- **Good communication between all people taking part.**

Knowledge check, p. 106

1. The Health and Safety at Work Act places responsibility for health and safety on:
b employers and employees
2. The Electricity at Work Regulations is intended to ensure:
d the electrical system in a workplace is safe for everyone who works there
3. Guidance Note 3 and the *IET On-Site Guide* are:
a non-statutory codes of practice
4. Construction site power tools should be powered using:
c a 110 V transformer
5. When transporting gas cylinders, the vehicle should:
b be marked to show what sort of gas it is carrying
6. Stored gas cylinders should:
d be stored with the oldest at the front
7. The type of ladder used for accessing a roof is:
a a roof ladder
8. The lining placed into a trench is called:
b battering
9. When should an excavation be inspected?
c At the start of each day of excavation work
10. What hazard can fumes present in a confined space?
b Asphyxiation or explosion