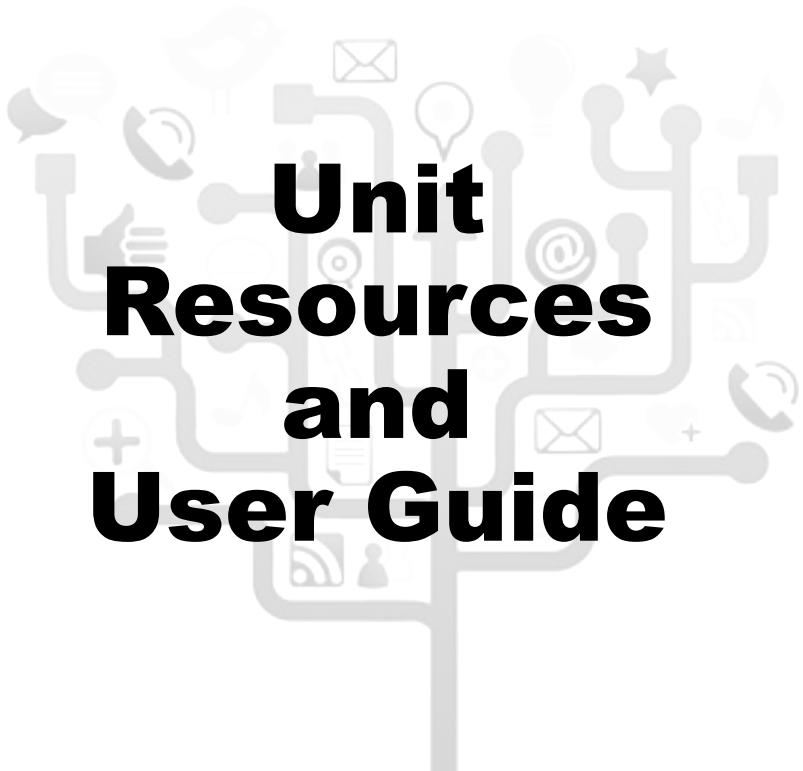


ICT - Information and Communications Technology

ICT30118

Cert. III in Information, Digital Media and Technology



Unit Resources and User Guide



LANE

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INTRODUCTION

Passing Lane Pty Ltd is pleased to introduce your school/institution to our vocational education and training unit resource packages.

ICT30118— Cert. III in Information, Digital Media and Technology

This document outlines the licensing terms and conditions of the unit resource packages.

It also provides basic information on how to use the materials.

Should you have any further questions or require any additional information do not hesitate to contact Passing Lane.

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INTRODUCTION-CONT'D

The Student/Trainee and the Teacher/Trainer manuals are developed to provide training content that addresses the specific 'Unit of Competency' as outlined on the following pages.

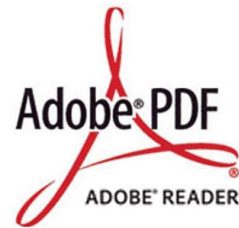
This unit manuals can be packaged with various manuals addressing other 'Units of Competency' in order to meet the 'Packaging Rules' of a particular Australian Training Package Qualification.

This resource has been designed to be delivered in a form that is conducive to the learning environment including:

- ☆ Online delivery
- ☆ Classroom delivery
- ☆ On the job training

The documents are designed in a 'landscape' format in order to make reading on a computer screen easier as well as reduces the need to scroll down pages. Documents can be easily printed if the learning environment requires the student or trainee to have hard copies of the learning materials.

The Student/Trainee and the Teacher/Trainer manuals are Portable Document Files (PDF) and are opened using Adobe Reader.



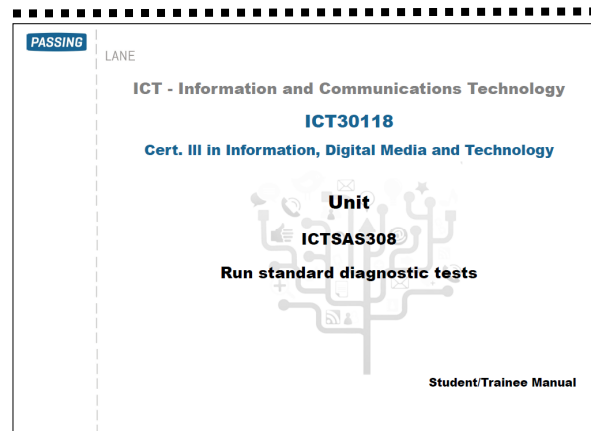
The latest Acrobat Reader software is available at no charge from the website <http://get.adobe.com/reader/>

INTRODUCTION—CONT'D

The Student/Trainee and the Teacher/Trainer manuals can be used on both PC and MAC platforms.

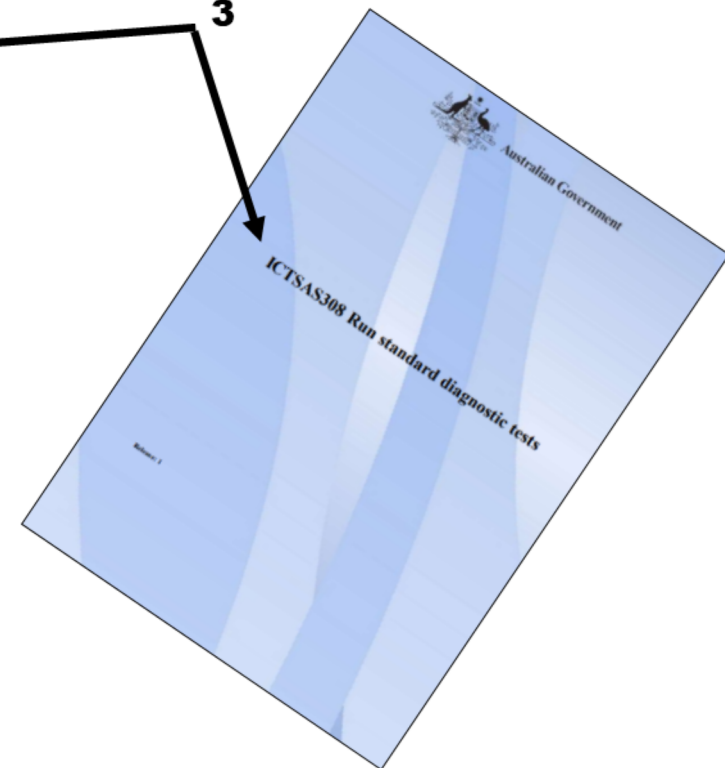
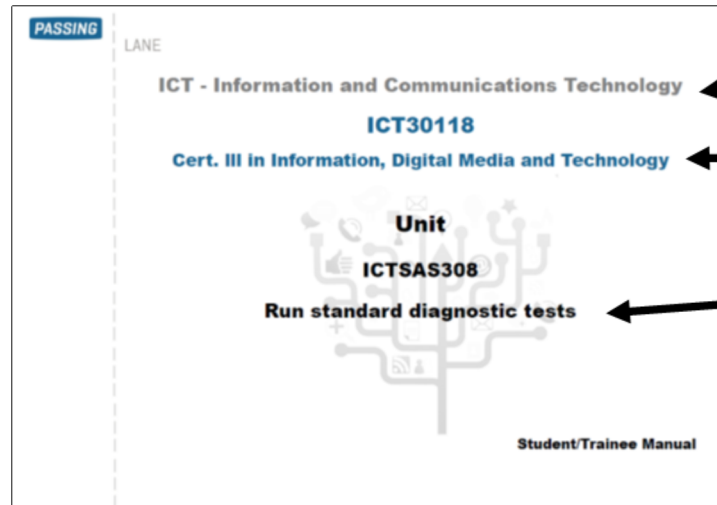
Generally, the materials are easily exported to most learning platforms.

The materials can also be printed and bound and handed out as hardcopies to each student or trainee.



MATERIALS CONTENT

The title page of both the Student/Trainee and the Teacher/Trainer manuals specify 1) the training package it has been developed for, 2) the qualifications which the content in each manual has been written for and 3) the specific unit the content is addressing.



MATERIALS CONTENT—CONT'D

The beginning of both manuals is the 1) 'Unit of Competency Overview' page, which aligns directly with the endorsed 'Unit of Competency' in the training package.

This page is to let the readers know what the materials in the manuals are addressing.

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LANE

UNIT OF COMPETENCY OVERVIEW

The following pages are extracts from Training.gov.au website and outlines this specific 'Unit of Competency' including the 'Elements' and the 'Performance Criteria'. The content within this manual has been developed to address this unit.

ICTSAS308 - RUN STANDARD DIAGNOSTIC TESTS

ELEMENT	PERFORMANCE CRITERIA
1. Identify common symptoms and preventative maintenance techniques for ICT software and hardware	1.1 Plan troubleshooting processes for ICT software and hardware to guide the resolution of common ICT problems based on requirements for ICT testing and maintenance 1.2 Determine and document common symptoms of ICT problems for ICT software and hardware to increase troubleshooting process efficiency and focus 1.3 Identify and select testing and preventative maintenance techniques taking into consideration the common symptoms of ICT problems to complete planning troubleshooting processes
2. Operate system diagnostics	2.1 Run the system diagnostic program according to specifications to identify required modifications in line with requirements for ICT testing and maintenance 2.2 Modify the system configuration as indicated by the diagnostic program to address symptoms 2.3 Carry out preventative maintenance techniques to address common symptoms of ICT problem
3. Monitor and remove system viruses	3.1 Scan system to check and maintain virus protection 3.2 Report identified viruses and proposed actions to superior to gain approval 3.3 Implement approved actions to remove detected virus infections using software tools and procedures and by restoring backups 3.4 Document virus symptoms and removal information to keep a record of actions for future application

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Student / Trainee Manual
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ICTSAS308 Run standard diagnostic tests Date this document was generated: 10 January 2019

ICTSAS308 Run standard diagnostic tests

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

Unit Sector

Systems administration and support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify common symptoms and preventative maintenance techniques for ICT software and hardware	1.1 Plan troubleshooting processes for ICT software and hardware to guide the resolution of common ICT problems based on requirements for ICT testing and maintenance 1.2 Determine and document common symptoms of ICT problems for ICT software and hardware to increase troubleshooting process efficiency and focus 1.3 Identify and select testing and preventative maintenance techniques taking into consideration the common symptoms of ICT problems to complete planning troubleshooting processes
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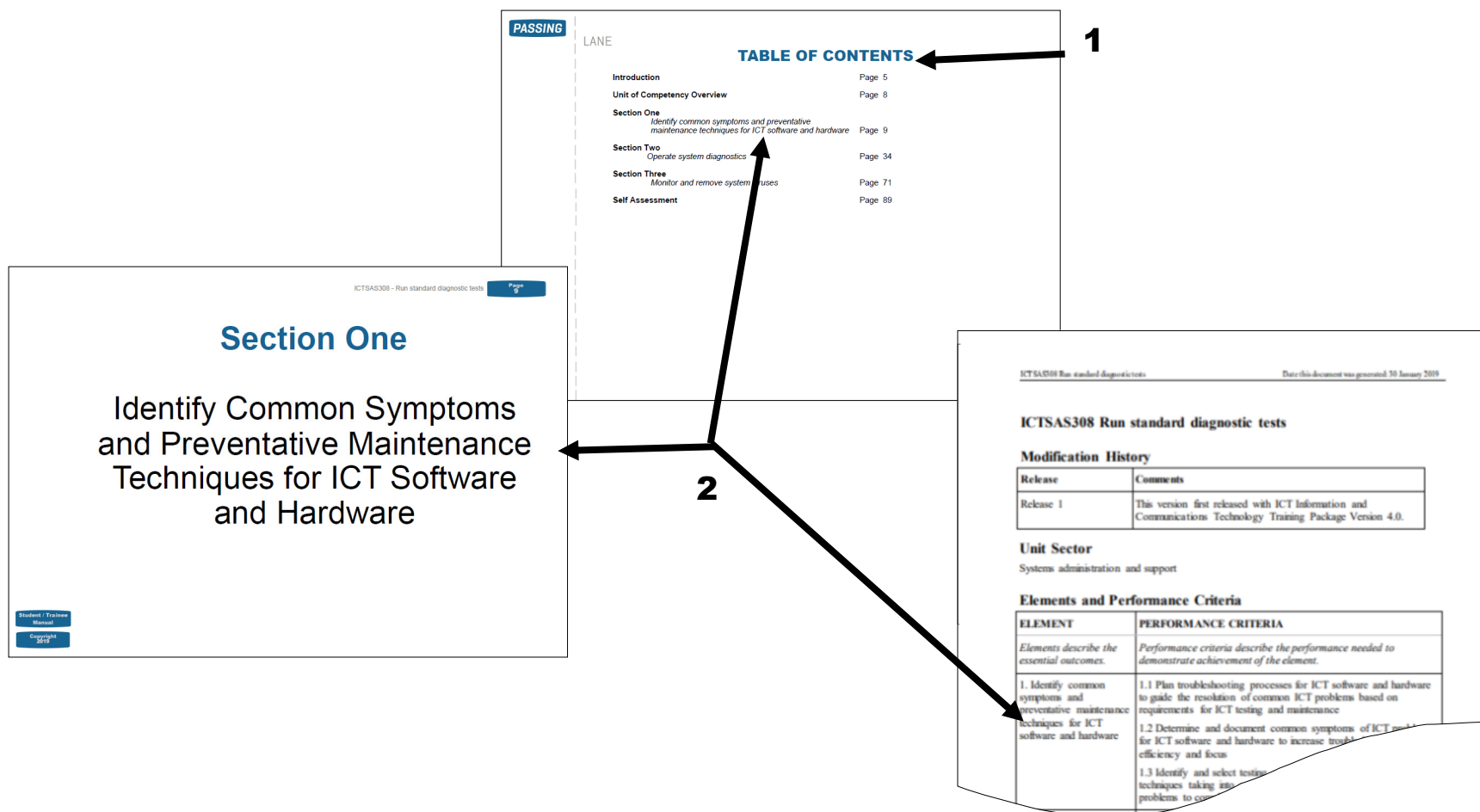
Approved
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MATERIALS CONTENT—CONT'D

The manuals contain detailed information aligned specifically to the 'Unit of Competency' and the unit's 'Elements' and 'Performance Criteria'.

The 1) Table of Contents for both manuals show that each section title is the 2) 'Unit of Competency' 'Element'.



MATERIALS CONTENT—CONT'D

In each section 1) the content is broken down into sub-sections and the titles for each sub-section is the same as the 2) 'Element's' 'Performance Criteria'.


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Section One

Identify Common Symptoms and Preventative Maintenance Techniques for ICT Software and Hardware

1

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PLAN TROUBLESHOOTING PROCESSES FOR ICT SOFTWARE AND HARDWARE TO GUIDE THE RESOLUTION OF COMMON ICT PROBLEMS BASED ON REQUIREMENT FOR ICT TESTING AND MAINTENANCE

Diagnosing faults with information technology such as computers can be exceedingly challenging because most of the workings of digital technology cannot actually be seen. This is unlike the situation in the analogue world where problems can usually be physically observed. If a car tyre is flat – you can see it. If a house window is broken – you can see it. If a light bulb is burned out – you can see it.

This means that you must adopt an analytical approach based upon a good understanding of computer systems in order to try to logically discover computer faults.

The designers of computers and computer software go to great lengths to make their products seem simple to use. However this ease of use disguises the fact that this technology is astoundingly complex, delicate and sophisticated.

This means that when faults do occur there may be several possible reasons for them. It is, of course, true that some of these problems can be caused by computer viruses – and these will be discussed later in this unit.

However, it is usually incorrect to immediately assume that a fault must be caused by a computer virus in the absence of any clear reason to think so, although it is sometimes difficult to distinguish hardware or software faults from the problems which actually are caused by computer viruses.

But as Murphy's Law of computer servicing reminds us:

'Because a computer simply behaves oddly, it does not mean that it has a virus.'

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ICTSAS308 Run standard diagnostic tests Date this document was generated: 30 January 2019

ICTSAS308 Run standard diagnostic tests

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

Unit Sector

Systems administration and support

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify common symptoms and preventative maintenance techniques for ICT software and hardware	1.1 Plan troubleshooting processes for ICT software and hardware to guide the resolution of common ICT problems based on requirements for ICT testing and maintenance 1.2 Determine and document common symptoms of ICT problems for ICT software and hardware to increase troubleshooting efficiency and focus 1.3 Identify and select testing techniques taking into account problems to consider

The manual's information is supported with graphics, charts, tables, photos and drawings.

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MATERIALS CONTENT-CONT'D

As earlier mentioned, the materials are vocational education and training unit resources in the form of Student/Trainee and the Teacher/Trainer manuals.

We will go through each in more detail.

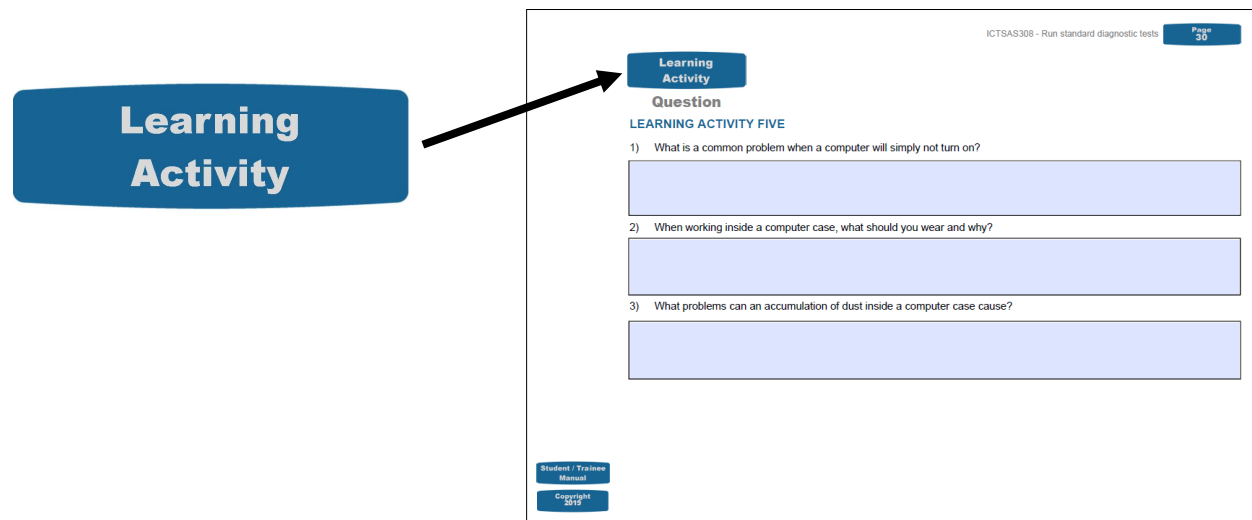
STUDENT/TRAINEE MANUAL

The 'Student/Trainee Manual' could be likened to a textbook.

The manuals contain detailed information aligned specifically the 'Unit of Competency' and the unit's 'Elements' and 'Performance Criteria' and are supported with graphics, charts, tables, photos and drawings.

The manuals contain a series of 'Learning Activities'.

Each learning activity is identified with the following icon.



MATERIALS CONTENT-CONT'D

Learning activities come in the following forms.

- ☆ Questions
- ☆ Research
- ☆ Tasks
- ☆ Interviews

Questions

Questions would relate to the information presented on previous pages.

Research

This type of learning activity would require the student or trainee to locate information by using research methods. The information they would be required to locate would be in line and/or support the information that the manual had outlined in previous pages.



Learning
Activity

Research

Tasks

This learning activity type would require the student/trainee to actually do or undertake something and would be reinforcing the knowledge they have gained from reading the manual's previous pages.

Interviews

This learning activity type would require the student/trainee to interview person(s) in an actual workplace environment or a person(s) who are experienced in the industry sector which the student/trainee is currently undergoing training.

The student/trainee is made aware of the type of learning activity by noting the learning activity type displayed under the learning activity icon.

MATERIALS CONTENT—CONTID

The learning activities in the Student/Trainee manuals are 'Form Enabled' so that if the resources delivered are online, the activities can be filled in using the computer keyboard.

The student or trainee would simply place the cursor in the field and click once with the mouse.

Seconds later the blue colour disappears and the student enters his/her answers into the field .

Learning Activity

Question

LEARNING ACTIVITY FIVE

1) What is a common problem when a computer will simply not turn on?

Answers are typed into the form enabled blue area

2) When working inside a computer case, what should you wear and why?

3) What problems can an accumulation of dust inside a computer case cause?

Student / Trainee Manual

Page 30

When the student or trainee leaves the filled in field to move on to the next field, the previous field returns to a blue colour.

IT IS VERY IMPORTANT THAT THE MANUAL IS SAVED REGULARLY.

It is recommended that the student or trainee set up a 'Student/Trainee' folder on their computer and saves their manuals to that folder.

The '**first**' SAVE will have the software will ask if you wish to replace the file and the student/trainee would click YES.

Saving does not prevent the student or trainee from going back to previous fields to make changes.

After the 'first' SAVE, the student or trainee would need to use the '**SAVE AS**' function.

MATERIALS CONTENT—CONT'D

Self Assessment

At the end of each manual is a series of questions that the student or trainee should review and answer.

This self assessment is to ensure in the student's or trainee's mind that they have reviewed and understood the information that was presented in the manual.

If they are unsure of their understanding in any of the topics reviewed, they are encouraged to go back and review the information again and/or seek the assistance of their teacher or trainer.

TEACHER/TRAINER MANUAL

The Teacher/Trainer manuals have exactly the same content as the Student/Trainee manuals.

The only differences are the explanatory introduction pages and after each learning activity there are 'Teacher/Trainer Guidance Notes'. These provide the answers to the 'Learning Activities' as well as some notes on how to assess the student/trainee's submission to each learning activity.

ICTSAS308 - Run standard diagnostic tests

Learning Activity

Question

LEARNING ACTIVITY FIVE

1) What is a common problem when a computer will simply not turn on?

2) When working inside a computer case, what should you wear and why?

3) What problems can an accumulation of dust inside a computer case cause?

TEACHER / TRAINER GUIDANCE NOTES

1) It is often a failed 'power supply'.
2) Your body carries static electricity, so by wearing a static discharge strap this static electricity is discharged away from any sensitive computer components to avoid damage.
3) An accumulation of dust can cause damaging static electricity charges, form a layer of insulation over some components which can cause them to overheat and malfunction and even become a source of combustion.

Teacher/Trainer Manual

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The PDFs can be converted to WORD files using PDF conversion tools that are readily available on the market.



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If the training package changes are substantial, Passing Lane will update the materials.

However, there would be a small upgrading fee charged to those schools or institutions wanting to upgrade their materials.