

Edexcel International AS/A Level

IAL INFORMATION
TECHNOLOGY

YIT11-20IO1

First teaching in 2018, first assessment 2019



Welcome to Pearson Edexcel

Welcome to Pearson Edexcel, the world's leading learning company and the UK's largest awarding body.

We set the standard for worldwide recognised qualifications, built on the UK educational system and accepted by universities worldwide.

We have a simple mission:
to help make a measurable impact on improving people's lives through learning.

'We judge ourselves – and invite others to judge us – not by the products that we make but by the impact on learners.'

John Fallon,
Chief Executive Officer,
Pearson



About Pearson Edexcel

- ❖ As the UK's largest awarding organisation, we are best placed to provide qualifications that are most closely aligned to the British educational system.
- ❖ We are the most reliable awarding organisation in the UK, recognised and trusted by educators, learners and employers to provide high quality qualifications.
- ❖ By helping you to realise student potential, you can prepare and empower all your students to progress to further education, university and employment.
- ❖ Our technology capability allows us to provide you with more advanced support services, tools and resources to make life easier for school leaders, teachers and students.
- ❖ Pearson Edexcel are leading the way, challenging thinking and creating new ideas so you can be confident our qualifications will always be world-class.



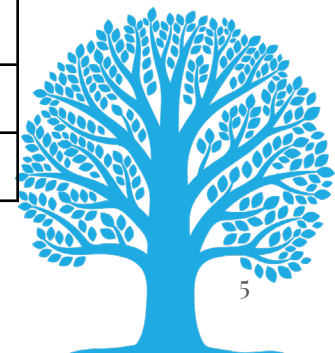
Aims and objectives

- ❖ To review the content of the qualification
- ❖ To explore how to plan the course and/or lessons
- ❖ To understand the assessment of the qualification and how to prepare students
- ❖ To identify the support available from Pearson



Agenda

Time	Item
5	Welcome
5	Aims and agenda
5	Getting to know you
10	Overview of qualification
10	Qualification content
15	Activity 1 – Identify the unit, topic and specification point(s)
5	Planning for teach the course
15	Activity 2 – Planning activities for Unit 4 – 19.2.5
10	Assessment
5	Activity 3 – Awarding marks
10	Preparing students for exams
10	Activity 4 – Sharing good practice
10	Available support
5	Questions



'Getting to know you' polls



Overview of qualification



What is the specification?

Specification and sample assessments (8)

Exam materials (7)

Forms and administration (2)











Teaching and learning materials (22)

- ❖ The specification is the main document you need to teach the course.
- ❖ It outlines the aims of the course, the content you **MUST** cover and all the information you need about assessing your students.
- ❖ A copy of this document is in your pack and on our website.



What are the SAMs and AdSAMs?

- ❖ SAMs is short for Sample Assessment Materials.
- ❖ AdSAMs is short for Additional Sample Assessment Materials. These documents are just as important as the specification.
- ❖ Both assessment materials are examples of the question papers and mark schemes and show the question types and how they will be marked by the examiners. We base all of our future papers and assessments on these sample assessment materials.

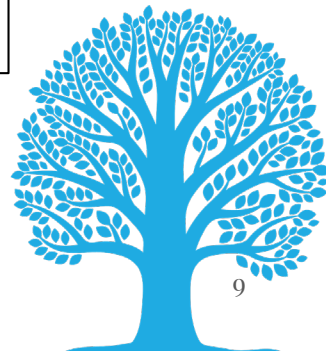
Sample assessment material		
	International A Level Information Technology - Additional Sample Assessment Material Unit 1 - WIT11 PDF 1.6 MB 16 Nov 2018	
	International A Level Information Technology - Additional Sample Assessment Material Unit 3 - WIT13 PDF 1.1 MB 16 Aug 2019	
	International A Level Information Technology - Additional Sample Assessment Material Unit 2 - WIT12 ZIP 3.7 MB 01 Mar 2019	
	International A Level Information Technology - Additional Sample Assessment Material - Mark Scheme Unit 3 - WIT13 PDF 717.8 KB 16 Aug 2019	
	International A Level Information Technology - Sample assessment materials PDF 12.6 MB 03 May 2019	
	International A Level Information Technology - Unit 4 - SAMs Datafiles ZIP 32.8 KB 17 Oct 2017	

Specification and sample
assessments (8)

Exam materials (7)

Forms and administration
(2)

Teaching and learning
materials (22)



What is the exemplar material?

[Specification and sample assessments \(8\)](#)

[Exam materials \(7\)](#)

[Forms and administration \(2\)](#)

[Teaching and learning materials \(22\)](#)

- ❖ The exemplar material goes through a paper question by question with exemplar responses.
- ❖ Lead Examiners comment in terms of applying the mark scheme.

Exemplar material



Exemplar questions and answers - Unit 2

| ZIP 5.6 MB | 08 Apr 2019



Exemplar responses with commentaries - Unit 1

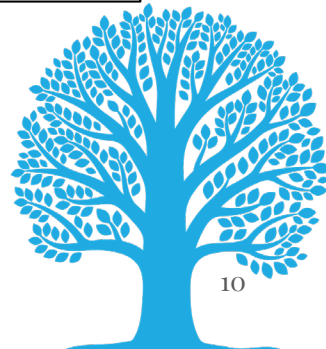
Exemplars with examiner commentaries for Unit 1

| PDF 908.1 KB | 18 Oct 2018



International A Level Information-Technology Exemplar Unit 2

| PDF 1.6 MB | 03 Apr 2019



International AS and A Level Information Technology

Content

The Pearson Edexcel IAS in Information Technology consists of two externally-examined units: Units 1 and 2.

The Pearson Edexcel IAL in Information Technology consists of four externally-examined units: Units 1 to 4.

Assessment Objectives (AO)

AO1 Demonstrate knowledge and understanding of the concepts of Information Technology

AO2 Apply knowledge and understanding of the concepts of Information Technology

AO3 Analyse and evaluate Information Technology information and problems

AO4 Use analysis and evaluation to design solutions

Structure of assessment

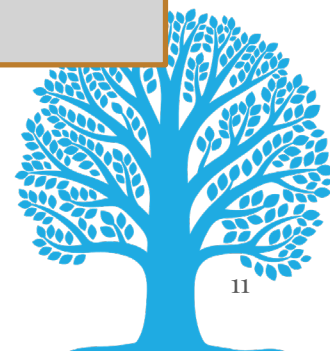
All units are externally assessed
Availability: June

Unit 1: 2-hour written examination

Unit 2: 3-hour examination, including practical and task-based questions

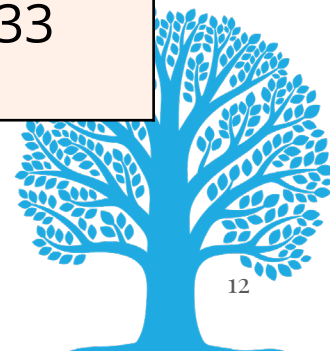
Unit 3: 2-hour written examination

Unit 4: 3-hour examination, including practical and theoretical questions

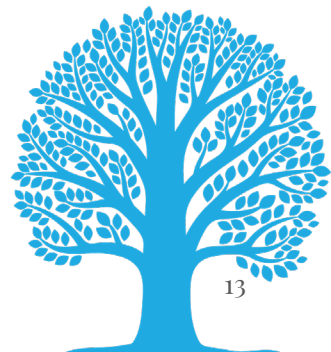


Where are each of the AOs assessed?

		% in IAS	% in IA2	% in IAL
AO1	Demonstrate knowledge and understanding of the concepts of Information Technology	24	10	17
AO2	Apply knowledge and understanding of the concepts of Information Technology	40	36	38
AO3	Analyse and evaluate Information Technology information and problems	10	14	12
AO4	Use analysis and evaluation to design solutions	26	40	33



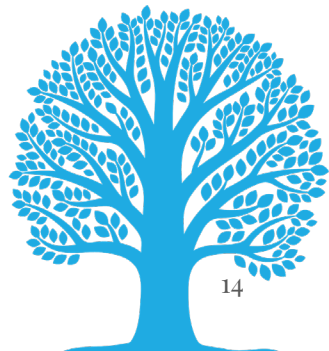
Qualification content



IAS Unit content

IAS Unit 1	
Topic 1	Hardware and software
Topic 2	Networks
Topic 3	The online environment
Topic 4	IT systems
Topic 5	Data and databases
Topic 6	Wider issues

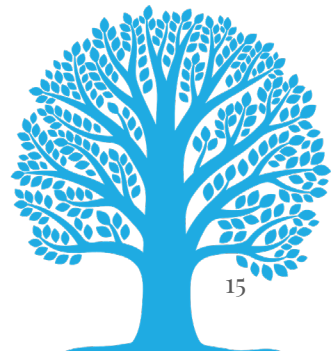
IAS Unit 2	
Topic 7	Understanding the functionality of HTML
Topic 8	Understanding the functionality of CSS
Topic 9	Understanding the functions of JavaScript
Topic 10	Designing web pages
Topic 11	The semantic web



IA2 Unit content

IA2 Unit 3	
Topic 12	Manipulating data
Topic 13	Enabling technologies
Topic 14	Using IT systems in organisations
Topic 15	Systems development
Topic 16	Emerging technologies

IA2 Unit 4	
Topic 17	Use of features of database solutions
Topic 18	Relational database concepts
Topic 19	Database solutions



Unit breakdown

- ❖ A unit is made up of numbered topics.
- ❖ Each topic has numbered sub-topics.
- ❖ Sub-topics may be further broken down to give clarification of the content to cover.

Topic 1: Hardware and software

Digital devices consist of both hardware and software components. From the hardware perspective, it is important to understand the technologies that enable these devices. From the software perspective, it is important to understand licensing and maintenance. Understanding both the hardware and software will enable students to assess and select components to meet the requirements of an individual, organisation or scenario.

What students need to learn

1.1 Hardware

1.1.1 Understand the features and functions of contemporary digital devices.

Features and functions:

- portability
- performance
- storage
- user interface
- connectivity
- media support
- energy consumption
- expansion capability
- security features.

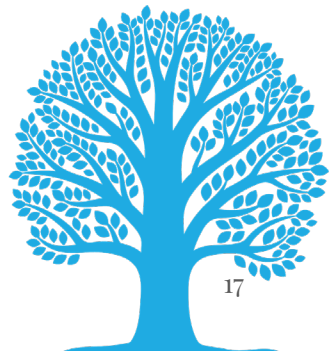
Contemporary digital devices:

- computers
- embedded systems
- peripheral devices
- mobile phones
- storage devices.



Activity 1

**Identify the unit, topic and
specification point(s)**

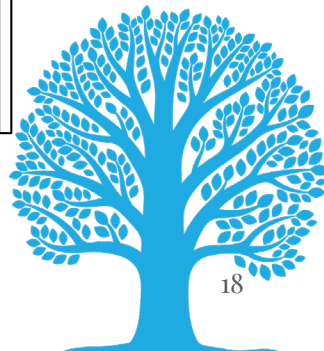


Activity 1 – Identify the unit, topic and specification point(s)

Here are some questions that have been created by teachers for use in the classroom.

Identify the unit and specification point(s) that you think each of the questions belong to.

Activity 1 – Identify the Unit and Topic			
Here are some questions written by teachers for use in the classroom.			
For each question, identify the unit and the specification bullet point(s) that you think it belongs to. Add notes in the final column to answer the question. The first one has been done for you.			
Question	Unit	Bullet(s)	Notes
<p>1 A unique learner ID:</p> <ul style="list-style-type: none"> • starts with two uppercase letters • followed by 3 single digits (0-9) • followed by 1 lowercase letter <p>Set-up a format check so that only learner IDs in this format are accepted.</p>	4	<p>18.3.2 (e)</p> <p>18.3.4 (b)</p> <p>19.2.3(eiii)</p>	<p>Format check using input mask</p> <p>>LL000<L</p>
<p>2 A school runs after school clubs. It keeps information about these clubs in a relational database.</p> <p>These four entities will be used in the database:</p> <p>Student (Student_ID, Surname, First_name, DOB)</p> <p>Teacher (Teacher_ID, Surname, First_name, Email_address)</p> <p>Club (Club_ID, Club_name, Teacher_ID)</p> <p>Club_enrolment (Club_ID, Student_ID)</p> <p>Create an entity relationship diagram for this database. Annotate your diagram to show the primary and foreign keys.</p>			



Activity 1 – Answers

Let's go through the answers to the questions.
Please use the final column to add any notes that will be helpful to you.



Planning for teaching the course



High-level planning

- ❖ IAS 180 guided learning hours (6 hours per week, for one academic year)
- ❖ IAL 360 guided learning hours (6 hours per week, for two academic years)
- ❖ Notionally, 3 hours per week, per unit



Teaching support materials

Specification and sample assessments (3)

Exam materials (8)

Forms and administration (3)

Teaching and learning materials (16)

Editable scheme of work for each unit, with links to resources if applicable.

Scheme of work

W DOC

[Editable scheme of work for Unit 2](#)
 | DOCX 627.5 KB | 28 Feb 2019

W DOC

[Editable scheme of work for Unit 3](#)
[Editable scheme of work for Unit 3](#)

Scheme of work includes:

- clear reference to the specification
- what should be covered in the lesson and how to cover it
- resources.

Week	Topic area / aims / learning outcomes	Exemplar classroom activities / teaching points / suggested teaching resources
1	<p>7.1.1 Understand how HTML is used to structure web pages:</p> <ol style="list-style-type: none"> doctype elements tags. <p>7.1.2 Understand how to declare the language of an html document.</p> <p>7.1.3 Understand how the head element is used to supply information about the document:</p> <ol style="list-style-type: none"> document title. <p>7.1.4 Be able to write organised syntax:</p> <ol style="list-style-type: none"> lower case letters 	<p>Activity 1: Webpage structure</p> <p>Tutors to discuss/demonstrate the basic structure of a webpage including:</p> <ul style="list-style-type: none"> adding a doctype <code><!DOCTYPE html></code> specifying the character set <code><meta charset="UTF-8"></code> adding elements (encompass opening tag, closing tag and content) adding tags (labels used to mark up the beginning and end of an element) declaring the language of an html document <code><html lang="en"></code> adding a document title <code><title>Example Title</title></code> writing organised syntax. <p>Tutors to provide a task that will enable the students to create the basic structure of a web page.</p> <p>Note: Students should include this basic structure in every web page they create.</p>



Activity 2

Planning activities for Unit 4 19.2.5



Activity 2 – Planning to teach

Unit 4 – 19.2.5

19.2.5 Be able to evaluate the appropriateness and effectiveness of a user interface and justify features in relation to a given problem

Command word **Assess**

Lesson objective – learners will be able to assess the appropriateness and effectiveness of a data entry form

Activity 2 – Planning to teach Unit 4 – 19.2.5

19.2.5 Be able to evaluate the appropriateness and effectiveness of a user interface and justify features in relation to a given problem.

Prior to this lesson learners have spent time practising building user interfaces within a relational database. They have also learnt about user experience through research and teacher-led sessions.

However, they have not been introduced to the command word assess, which is one of the command words associated with 'evaluate' in this unit.

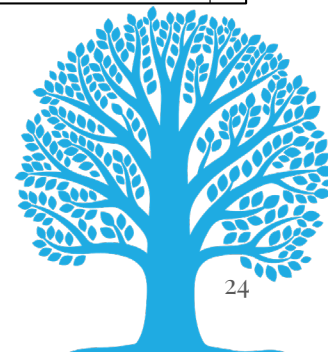
Taxonomy - Command word Assess

Give careful consideration to all the factors or events that apply and identify which are the most important or relevant. Make judgements about significance/importance.

(Learners do not need to make recommendations)

Lesson objective - Learners will be able to assess the appropriateness and effectiveness of a data entry form.

Give Ideas of how the lesson could be organised/activities that could be used



Give Ideas of how the lesson could be organised/activities that could be used

- Tutor to explain the keyword 'assess' in terms of the taxonomy for the unit.
- Tutor to show and discuss a completed example of an 'assessment'
- Tutor to give the factors that are important in terms of data entry forms or learners could work in pairs/small groups to research the factors that are important.
- Tutor provides a data entry form for learners to assess individually/in pairs
- Tutor splits learners into pairs. Each learner assesses a data entry form produced by the other learner
Each learner assesses one of their own data entry forms



Assessment

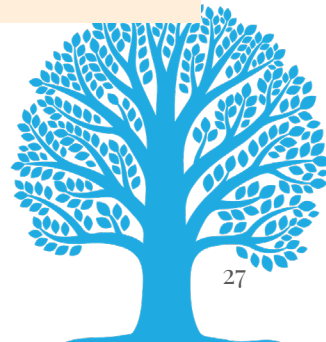


Unit 1 (WIT11)

Please check the examination details below before entering your candidate information

Candidate surname		Other names	
Pearson Edexcel International Advanced Level	Centre Number	Candidate Number	
	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
Thursday 23 May 2019			
Morning (Time: 2 hours)		Paper Reference WIT11/01	
Information Technology International Advanced Level Unit 1			
You do not need any other materials.		Total Marks	

- ❖ Students are assessed through a 2-hour written examination, set and marked by Pearson.
- ❖ 80 marks in total
- ❖ All questions are mandatory.
- ❖ All questions require a written response on the paper.
- ❖ Question types include multiple-choice, short open response, medium open response, small essay, small practical, big essay and big practical.



Unit 2 (WIT12)

Please check the examination details below before entering your candidate information

Candidate surname	Other names
Pearson Edexcel International Advanced Level	Centre Number Candidate Number
Monday 10 June 2019	
Morning (Time: 3 hours)	Paper Reference WIT12/01
Information Technology International Advanced Level Unit 2	
You must have: Questions folder	Total Marks

1 Web pages can use meta tags.

(a) Figure 1 shows HTML code that contains a meta tag.

```
3 <head>
4   <meta http-equiv="refresh" content="5;URL=http://www.nasa.gov">
5 </head>
```

Figure 1

Explain the purpose of the HTML code on line 4.

(2)

- ❖ Students are assessed through a 3-hour examination including practical and theoretical questions, set and marked by Pearson.
- ❖ 80 marks total
- ❖ All questions are mandatory.
- ❖ Each student will need to access a computer during the examination.
- ❖ The paper consists of short open response, medium open response, code, extended open response.

Open file **Q01b.html** in a browser to identify the errors.

Open the file in your editor.

Amend the code to correct the **two** errors.

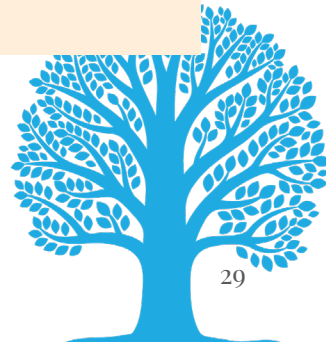
Save your amended code as **Q01bFINISHED.html**

Unit 3 (WIT13)

Please check the examination details below before entering your candidate information

Candidate surname		Other names	
Pearson Edexcel		Centre Number	Candidate Number
International Advanced Level		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Additional sample assessment material for first teaching September 2018			
Time: 2 hours		Paper Reference WIT13/01	
Information Technology			
International Advanced Level			
Unit 3			
You do not need any other materials.			Total Marks
<input type="text"/>			<input type="text"/>

- Students are assessed through a 2-hour written examination, set and marked by Pearson.
- 80 marks in total
- Traditional written examination paper.
- All questions require a written response on the paper.
- All questions are mandatory.
- Question types include short open response, medium open response, small essay, small practical, big essay, big practical.



Unit 4 (WIT14)

Pearson Edexcel International Advanced Level	
Sample assessment material for first teaching September 2018	
Time: 3 hours	Paper Reference WIT14/01
Information Technology International Advanced Subsidiary/Advanced Level Unit 4	
You must have: The files Dog Walking.accdb, Staff.xlsx, Candidate evidence template.docx	

(c) A data entry form should include user interface components that support users.

Assess the extent to which the data entry form you created in question 1(b) does this.

Type your response in the appropriate place in the template.

Do not include any screen prints.

Re-save your template.

(9)

- ❖ Students are assessed through a 3-hour examination including practical and theoretical questions, set and marked by Pearson.
- ❖ 80 marks total
- ❖ All questions are mandatory.
- ❖ The paper consists of small practical, big practical and two big essay questions.

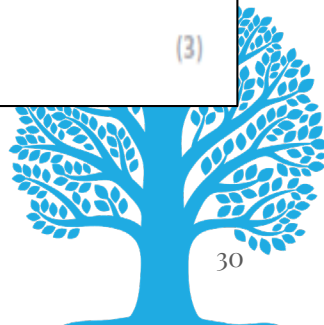
(ii) Set up a range check on the field NumberWalksPerDay so that only 1, 2 or 3 dog walks per day are accepted.

Screenprint the table in **Design** view, making sure that the range check can be clearly seen.

Paste the screen print into the appropriate place in the template.

Re-save your template.

(3)



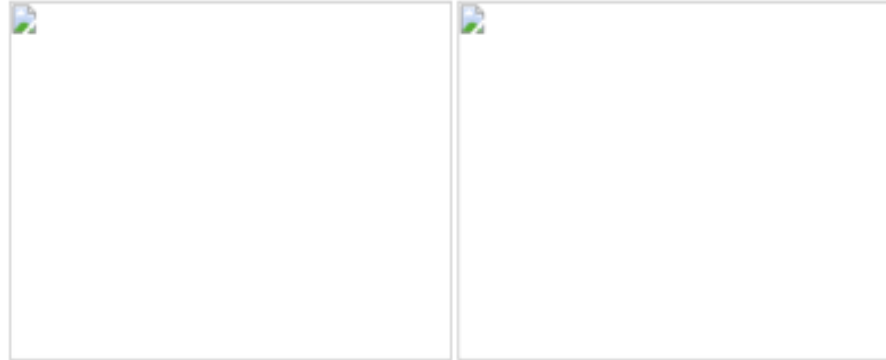
Common mistakes



Unit 2 – Common mistakes

In this example the student has used *absolute referencing* for the images on the page to their exam account.

Space Images



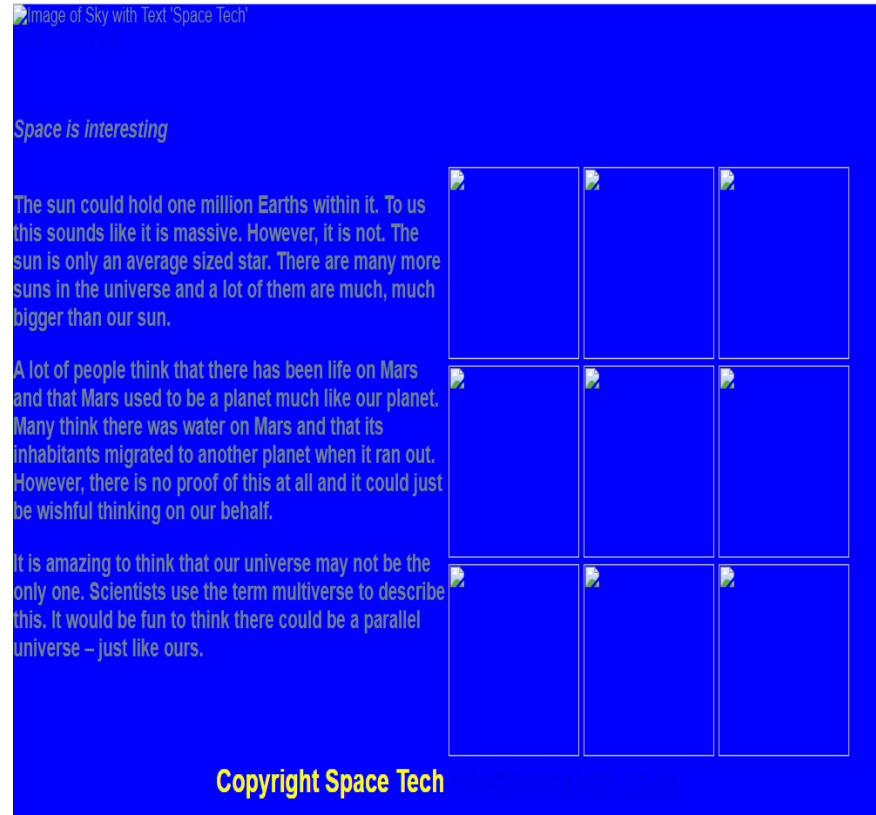
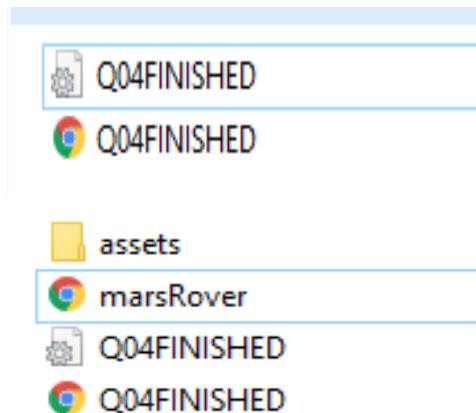
```
13      <h1>Space Images</h1>
14      
15      
16      
```



Unit 2 – Common mistakes

In this example the student has not ensured their answers are consistent with the resources provided for the question.

The completed folder for this question should have included the original assets folder and the student's answers.



Unit 4 – Common mistakes

In this example the student is using an append query.

However, they have truncated the fields. If truncation occurs, the examiner cannot say for certain the method they have chosen works.

Add Equipment qAppEquipment

Equipment

*

AssetNumber

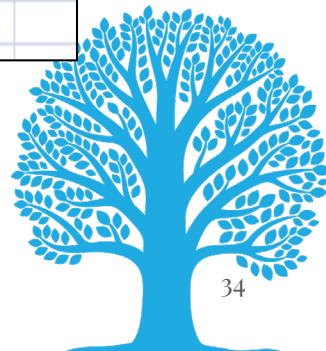
Category

AssetType

LastSafetyTest

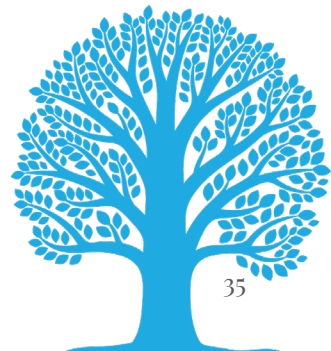
...

Field:	Expr1: [Forms]![frmEq	Expr2: [Forms]![frmEq	Expr3: Date()	Expr4: [Forms]![frmEq	Expr5: [Forms]![frmEq
Table:					
Total:	Group By	Group By	Group By	Group By	Group By
Sort:					
Append To:	Category	AssetType	LastSafetyTest	Faulty	FaultNotes
Criteria:					
or:					



Activity 3

Awarding marks



Activity 3 – Marking

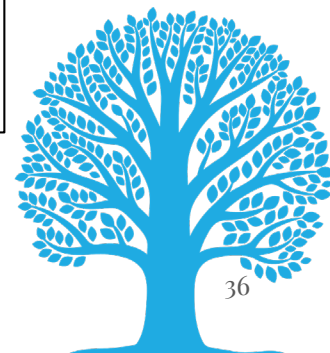
A web page contains images.

The images should fade out to 50% when the mouse cursor hovers over them.

Open file **Q02b.html** page in your editor.

Add CSS code to enable the fade effect.

	Answer	Additional guidance	Mark
	Code is: <pre>img:hover { opacity: .5; }</pre> Other solutions are possible.		2
B1	Award one mark for using the img:hover tag img:hover (1)		
B2	Award one mark for setting the opacity to 50%. opacity: .5; OR opacity: 0.5; (1)		



Activity 3 – Answer

```
<style>
```

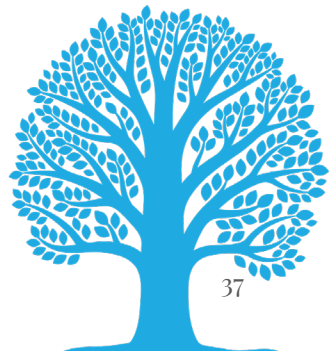
```
img:hover{
```

```
opacity: 0.5;
```

```
}
```

1 mark

1 mark



Preparing students for exams



Understand timings

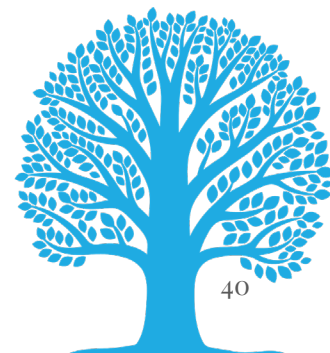
- ❖ All of the exams have a maximum of 80 marks.
- ❖ Units 1 and 3 are 2 hours long.
- ❖ Units 2 and 4 are 3 hours long.
- ❖ Units 1 and 3, approximately 1.5 seconds per mark.

Approximately how long should a student spend on answering a 20-mark question in Unit 2?



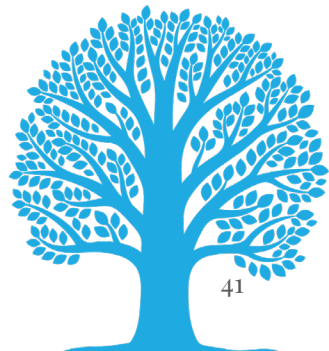
Understand taxonomy (key command words)

Command word	Description
Amend	Requires changes/additions/deletions/rearrangement of a symbolic representation.
Analyse and recommend	Examine elements in detail and provide support for a course of action.
Apply	Make use of skills and knowledge of databases in a given context, for example applying a data validation rule to a specific field in a table.
Assess	Give careful consideration to all the factors or events that apply and identify which are the most important or relevant. Make judgements about significance/importance.
Complete	Requires the completion of a table/diagram/algorithm (in any notation).
Construct	Usually requires creation of an artefact using subject-specific symbolic representation, rules, and syntax.
Create	Usually requires creation of an artefact using subject-specific



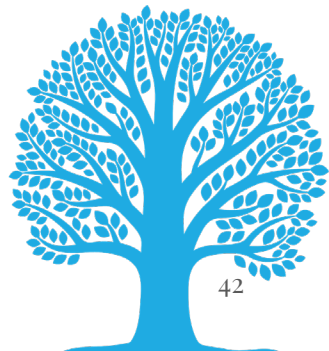
Walking-talking mocks (Units 1 and 3)

- ❖ Students sit in the same exam room where they will do their exam, preferably in the same seats.
- ❖ Students are given an exam paper which is as close to being like the real thing as possible.
- ❖ Students are literally walked through every question on the paper – the person leading the session talks them through the smallest steps, such as underlining key words, how to plan, things to remember, etc.
- ❖ Students then write their responses in timed conditions.



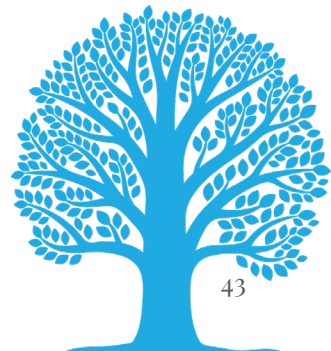
Unit 2 – importance of file locations/links

- ❖ Can be useful to give students responses with common mistakes.
- ❖ Students are given a response that includes absolute referencing to a location the students do not have access to.
- ❖ Students are given access to a response where original files have not been submitted with the answer files.
- ❖ Students can then see the direct consequences of what happens when this takes place.



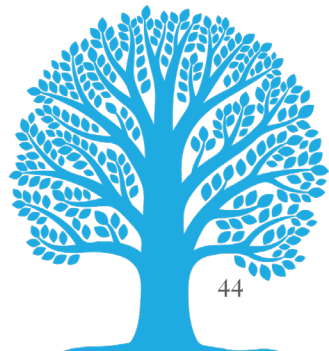
Unit 4 – importance of screenprint evidence

- ❖ Can be useful to give students two versions of the same responses to a particular question and a mark scheme.
- ❖ In the first example the screenprints do not include any truncation, etc. and the response achieves full marks.
- ❖ In the second example, exactly the same response is used but problems are introduced into the screenprint evidence, e.g. truncation, and it does not achieve full marks.
- ❖ Students can then see the direct consequences of not ensuring all of their evidence can be seen.



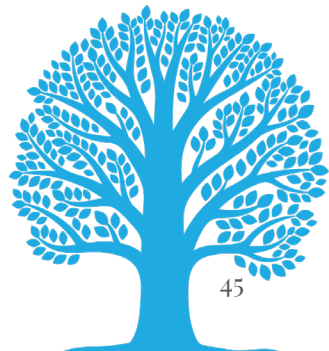
Units 2 and 4 – importance of showing the skills they can use

- ❖ At times it may be that the students cannot remember how to/or be able to use the skills necessary to fully complete a task.
- ❖ For example – not being able to get the code fully working/not being able to add a combo box to a form. Candidates are rewarded for what they can do. It is not always necessary to have a fully working product in order to achieve marks.



All units – mock exams

- ❖ Assign time for learners to complete full mock exams within the allotted time.
- ❖ Provide detailed feedback.



Available support



Support

A [Getting Started Guide](#) to help you understand the scope and structure of content and assessment and how the planning and delivery can work for you and your students

[Suggested teaching resources](#)

[Editable schemes of work](#)

[Student guide](#)

[Exemplar scripts](#) with examiner commentaries to give additional indication of marking standards

[ExamWizard](#)

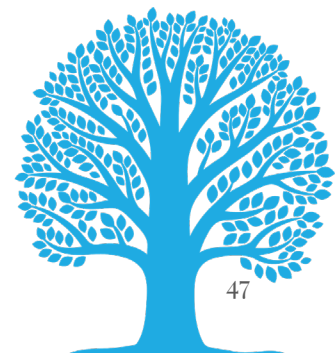
[ResultsPlus](#)

[Access to scripts](#)

[Past exam papers and mark schemes](#)

Training events ([past training events](#), [upcoming training events](#))

[Teacher resource pack](#) – including lesson plans and worksheets



Subject advisor

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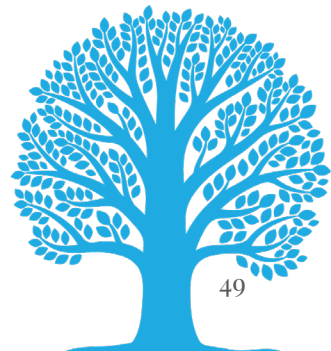
[Contact us](#)

https://twitter.com/@Pearson_CS



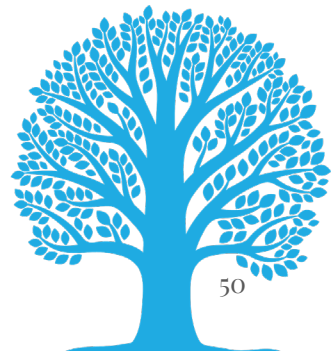
Any questions?

**Thank you for
attending**



**Please fill in your
evaluation forms.**

**We value your
feedback!**



ALWAYS LEARNING