

Level 1/2 Vocational Award in

ICT

(Technical Award)

Teaching from 2022 | Award from 2024

Version 2 - May 2023

SAMPLE ASSESSMENT MATERIALS - UNIT 2

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Unit 2: ICT in Context

Assignment

SAMPLE ASSESSMENT MATERIALS

40 HOURS

INSTRUCTIONS FOR CANDIDATES

Read the brief carefully prior to starting the assignment.

You will gain marks for key tasks that are completed in the Assessment window. The total time allocated for assessed tasks will be 40 hours. You cannot exceed this time. Recommended timings are given for each task.

Your work should include knowledge and understanding gained from classroom teaching.

Read the information and assignment tasks carefully to make sure you understand what is needed.

It is important that you work independently from other candidates and make sure the work you produce is your own unaided work.

Check your work carefully to make sure that it is accurate and correct and meets the assessment requirements.

INFORMATION FOR CANDIDATES

You and your teacher will be required to sign a declaration that all work presented is the work of you alone.

You must not discuss or share any details of the brief or tasks.

ICT in Context

Assignment Brief Summer 20xx

Your cousin has inherited a large sum of money and has used most of this to buy a company that hires equipment for gigs. The equipment he is hiring includes large screens, marquees, staging, grandstands and lighting hire. He has re-named the company *Gear4Gigs2Hire* and has asked you to help him by setting up some IT systems to help the business run smoothly.

You will need to:

- Create an appropriate logo to represent the business.
 Your cousin will use this logo on all documents as well as on the large equipment such as screens and marquees. He is open to suggestions regarding a colour scheme but wants to have a consistent style so people will recognise the brand easily.
- Create a system to keep track of equipment, customers and orders.
 This needs to be easy to navigate and use. He wants to be able to find specific information quickly and easily, such as which gigs are taking place in a certain month or in a certain country and would like to create reports that he can share with his staff.
- Create an automated way of creating customer invoices.
 This system must be easy to use and fool proof as he is dealing with large sums of money. The invoices must be professional, accurate, clear and reflect the branding.
- Create an automated letter.
 Your cousin would also like to contact existing customers in the UK who have spent more than £10,000 in the past three years. He wants to inform them that he has taken over the company and reassure them that he will be offering an even better service than before. To celebrate the takeover, he intends to offer them a 5% discount on orders placed in the next six months. The letter must be automated and reflect the branding.

The following files provide a sample of the data kept by Gear4Gigs2Hire.

You will need to access these datasets as a starting point:

[customers.csv]

[equipment.csv]

[orders.csv]

Assignment Tasks

You can complete the following tasks in **any order**. Read all the tasks before you begin to consider which would be most practical to do first.

Task 1

Unit content	Tasks		Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.1 2.1.1	1. (a)	PLANNING, CREATING, MODIFYING AND USING A DATABASE Plan and design a database in response to the client brief. You should: analyse the requirements of the client brief identify success criteria identify the different entities within the client brief	 Analysis of the client brief Success criteria Entity Relationship Diagram Database design including detailed justification of field types used and choice of validation rules. 	4 hours	Supervision: Indirect Guidance: Indirect Resources: Permitted	AO1 = 4 AO2 = 4 AO3 = 4	36 12
		 design a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy give a detailed justification of the field types you have used justify your choice of validation rules that you applied to field types. 	validation raies.		Collaboration: Not permitted		

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Unit content	Tasks	s:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.1.2	(b)	Create and modify your database according to your planning and design. You should: import data from a given CSV file create and add tables add fields create a primary key assign appropriate data types apply effective validation rules and error messages link tables using key fields and relationships add, edit and delete records check and test data to ensure it is error-free check and test the database to ensure it functions correctly.	 Populated database Adding, editing and deleting records Evidence of checking and testing. 	3 hours 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO1 = 2 AO2 = 4 AO3 = 4	10
2.1.3	(c)	 Interrogate your database. You should: create select queries, using a query builder including: single table/single criteria; multiple tables/multiple criteria; wildcard; parameter, calculations produce reports from queries, with at least one report showing customisation for fitness of purpose. 	 Query design and results Report design and results. 	1 hour 20 minutes		AO2 = 4	4

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Unit content	Tasks	:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
	(d)	 Create a user interface for your database. You should: create effective data entry forms that simplify data entry and navigation, include relevant fields and accept data and validation enhance the layout of the form to include an image for business purposes add features and controls that make the system user friendly and allow the user to navigate records, forms, queries and reports easily, VB and/or Macro. 	 Data entry forms which include an image Evidence of the use of features and controls, VB and Macro. 	1 hour 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO2 = 4	4
2.1.5	(e)	 Test and evaluate your database. You should: provide a test plan and select a range of test data including valid, extreme and erroneous data give detailed reasons for all testing methods give evidence for the testing carried out to test plan including evidence of test pass/fail evaluate the testing successes and failures and identify improvements. 	 Test plan with justification for testing methods Test table with results Evaluation including suggestions for improvements. 	2 hours		AO2 = 4 AO3 = 2	6

Task 2

Unit content	Tasks	:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.2	2	PLANNING, CREATING, MODIFYING AND USING A SPREADSHEE	T				36
2.2.1	(a)	Plan and design a spreadsheet in response to the client brief. You should: analyse the requirements of the client brief identify success criteria design a spreadsheet structure including worksheets, navigation, formulae, tools and techniques to be applied.	 Analysis of the brief Success criteria Spreadsheet structure. 	2 hours	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO1 = 2 AO2 = 2 AO3 = 2	6
2.2.2	(b)	Create and format your spreadsheet according to your planning and design. You should: import data from the given CSV file and generate additional content of your own enhance layout and format of the spreadsheet including font style; font size; enhanced grids/borders; titles; colours; merged cells; cell alignment; text wrap; headers or footers; forms; worksheet tab facilitate data entry through use of form controls, e.g. buttons, check box, drop-down lists, combo boxes, spinners, scroll bar define a print area in order to present a customer-friendly output create a navigation menu in order to customise and simplify the client use of the workbook.	Populated and formatted spreadsheet version 1.	2 hours		AO1 = 2 AO2 = 4	6

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Unit content	Tasks		Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.2.3	(c)	 Make use of appropriate data formatting and add suitable validation rules. You should: apply data formatting (e.g. currency, %, decimal places) apply conditional formatting use the date/time function facilitate data entry through use of validation form controls, e.g. drop-down lists, combo boxes, spinners, scroll bar create validation checks, e.g. range, type, presence, format create validation messages. 	Spreadsheet version 2 and corresponding evidence showing additional formatting, functions and validation.	1 hour 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO2 = 4	4
2.2.4	(d)	Use appropriate formulae and functions to meet the outcomes set in the brief. You should: use formulae with a single operator (+, -, *, /) use brackets to prioritise calculation use simple functions, such as SUM, AVERAGE, MAX, MIN, RAND, COUNT, COUNTA, INT/MOD use relative and absolute referencing use complex functions, such as IF, nested IF, IF(OR), IF(AND), SUMIF, AVERAGEIF, VLOOKUP, COUNTIF, goal seek, pivot tables use macros to link native function.	Spreadsheet version 3 and corresponding evidence showing use of formulae, functions and use of macros to link native function.	1 hour 20 minutes		AO2 = 4	4

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Unit content	Tasks	:	Evi	dence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.2.5	(e)	Arrange, reduce and output data to help make decisions. You should: use sorting on single items use sorting on multiple items use filters create a chart/graph with appropriate title, legend, axis labels and formatting.	•	Spreadsheet version 4 and corresponding evidence to show the use of sorting, filters, and a graph/chart.	1 hour 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration:	AO2 = 4	4
2.2.6	(f)	Modify data and formulae to model 'what if' scenarios. You should: use 'what if' investigations to change data use 'what if' investigations to change formulae.	•	Spreadsheet version 5 and corresponding evidence showing use of 'what if' investigations.	1 hour 20 minutes	Not permitted	AO2 = 4	4
2.2.7	(g)	 Test and evaluate your spreadsheet. You should: provide a test plan and select a range of test data including valid, extreme and erroneous data use a test table, based on the success criteria you identified in task a) above give detailed reasons for all testing methods give evidence for the testing carried out evaluate the testing successes and failures and identify improvements suggest how to implement these improvements. 	•	Test plan Test table with results Evaluation including suggestions for improvements.	2 hours 40 minutes		AO2 = 4 AO3 = 4	8

Task 3

Unit content	Tasks	s:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.3	3	PLANNING, CREATING AND MODIFYING AN AUTOMATED DOC	UMENT				18
2.3.1	(a)	Plan and design an automated document in response to the client brief. You should: analyse the requirements of the client brief Identify success criteria design a standard document including location of place holders, formatting and features to be used.	 Analysis of client brief Success criteria Design of document. 	2 hours	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration:	AO1 = 2 AO2 = 2 AO3 = 2	6
2.3.2	(b)	Create an effectively structured data source and link that to a standard document. You should: create a standard document that follows your planning and design create a source document based on your success criteria create appropriately divided fields create appropriate data within the fields create a link between the data source and standard document.	 Source document Standard document version 1 linked to data source. 	1 hour 20 minutes	Not permitted	AO2 = 4	4

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Unit content	Tasks	:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.3.3	(c)	Appropriately structure the content of the standard document and insert fields as required. You should: insert fields as required by the brief: address line; subject; salutation/valediction; personalised content within the document check accuracy: spelling; grammar; proofread add appropriate formatting and features: letterhead; watermark; autodate; alignment; set line spacing; justification; indexing; automatic fields, bullets and appropriate layout.	Standard document version 2 with inserted fields and appropriate formatting and features.	1 hour 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO2 = 4	4
2.3.4	(d)	Merge and output the final documents. You should: complete the merge and check accuracy check formatting following insertion of merged data output merged documents evaluate the document and identify improvements.	 Standard document version 3 showing completed merge Evaluation including suggestions for improvements. 	1 hour 20 minutes		AO2 = 2 AO3 = 2	4

Task 4

Unit content	Tasks	:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.4	4	PLANNING, CREATING, MANIPULATING AND STORING IMAGES					30
2.4.1	(a)	 Plan and design an image in response to the client brief. You should: analyse the requirements of the client brief identify success criteria plan design (sketches and layouts) with annotations select image source (self-taken (camera/scanner), images from 3rd party, images from internet or another secondary source identify key qualities of image (e.g. size, format) and limitations to editing identify any copyright or intellectual property rights and reference source. 	 Analysis of client brief Success criteria Annotated design documents for image including key qualities and limitations to editing Sourced images Source referencing including references to copyright/property rights. 	4 hours	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO1 = 8 AO2 = 2 AO3 = 2	12

Unit content	Tasks	:	Evi	dence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.4.2	(b)	Create and modify an image using appropriate tools and techniques. You should: compare file types (png, tiff, jpeg) and fitness for purpose (size, resolution, scalability) select software according to image type (vector/raster) select image properties (RGB/CMYK) and canvas size based on output requirements import image/create image using tools/create hybrid image as appropriate use standard and advanced tools to create and modify your image Standard: Select marquees, lassos, cut, copy, crop, move, group, rotate, distort, enlarge/shrink, magic wand, bring to front/send to back, brushes/pencil, adjust line thickness/style, simple lines, shapes, curves (freehand and auto), fill, add text, edit text Advanced: Blur, blend, smudge, sharpen, colour mode, brightness, contrast, layers, merge layers, masking/mask layer, change alpha, cloning, background eraser, airbrush, gradient.	•	Comparison of file types Image showing modification, using standard and advanced tools and techniques, image properties and software used.	2 hours 40 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO2 = 6 AO3 = 2	8

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Unit content	Tasks	:	Evidence Required	Recommended Time	Controls	AOs and marks	Overall Marks
2.4.3	(c)	Store the image appropriately and output the final image in a format that is fit for purpose. You should: store your image(s) using version control store your images using an appropriate file type (vector or raster) output final version in an optimised format test the file types electronically and digitally to evaluate fitness for purpose evaluate your final product against success criteria, identifying possible improvements.	 Evidence of file storage which shows version control and file type Output of final version in an optimised format Evidence of testing Evaluation against success criteria with suggestions for improvements. 	3 hours 20 minutes	Supervision: Indirect Guidance: Indirect Resources: Permitted Collaboration: Not permitted	AO2 = 4 AO3 = 6	10
						Total Marks	120

Guide to Controls

There are a number of different aspects that are controlled within the internal assessment of our Vocational Awards. These are:

- supervision
- guidance
- resources
- collaboration

Supervision

One level of supervision features throughout the Unit 2 ICT assessment:



Candidates do not need to be directly supervised at all times.

The centre must ensure that:

- all candidates participate in the assessment
- there is sufficient supervision to ensure that work can be authenticated
- the work an individual candidate submits for assessment is his/her own.

Candidates' work must remain within the centre at all times and must be stored securely between timetabled sessions.

Guidance

Throughout the Unit 2 ICT Controlled assessment there is indirect control on guidance:

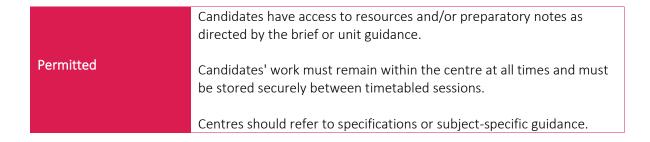
Category of Advice/Feedback: Teachers can:	Indirect Control
Review candidates' work and provide oral and written advice at a general level.	✓
Evaluate progress to date and propose broad approaches for improvement.	×
Provide detailed specific advice on how to improve drafts to meet assessment criteria.	×
Give detailed feedback on errors and omissions which leave candidates with no opportunity to show initiative themselves.	×
Intervene personally to improve the presentation or content of work.	×

Before giving additional assistance beyond that described above, teachers must ensure that there is provision to record this assistance. Details must be documented on the record form issued by WJEC. The intervention must be taken into account when marking the work. Annotation should be used to explain how marks were applied in the context of the additional assistance given. Failure to follow this procedure constitutes malpractice.

Resources

In Unit 2, candidates will be undertaking tasks that are typical of the workplace and are therefore allowed resources that would be typically used in that environment.

Throughout the Unit 2 ICT Controlled assessment resources are permitted:



Centres should refer to the WJEC guidance Malpractice-a guide for centres and the JCQ suspected malpractice in examinations and assessments policies and procedures if they are unsure how to proceed.

Collaboration

Candidates are not able to collaborate on any tasks within Unit 2.

Redrafting

Re-drafting is allowed within the time of the controlled assessment and without teacher feedback.

Time

The total time allocated for assessed tasks will be 40 hours. Candidates cannot exceed this time. In terms of time controls, Unit 2 tasks feature recommended timings for guidance only. Nonetheless, centres should discourage candidates from exceeding them or devoting insufficient time to this work.

Mark scheme

Guidance

Assessment grids for Controlled Assessment Unit 2

Generic marking principles

- Marks awarded are always whole marks (not half marks, or other fractions).
- Answers should only be judged on the quality of spelling, punctuation and grammar when these
 features are specifically assessed by the question as indicated by the mark scheme. The meaning,
 however, should be unambiguous.
- Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).
- Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Banded mark schemes

Banded mark schemes are divided so that each band within a section has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains a range of marks.

Stage 1 – Deciding on the band

Beginning at the lowest band, assessors should look at the appropriate section of the candidate's work and check whether it matches the descriptor for that section's mark band. If the descriptor at the lowest band is satisfied, assessors should move up to the next band and repeat this process for each band until the descriptor matches the work.

If a candidate's work covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the candidate's work should be used to decide on the mark within the band. For instance, if work is mainly in band 2 but with a limited amount of band 3 content, the work would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Assessors should not seek to mark candidates down as a result of small omissions in minor areas of their work.

Stage 2 – Deciding on the mark

Once the band has been decided, assessors can then assign a mark. WJEC will provide exemplar work already awarded a mark, and this should be used as reference material when assessing the work.

When marking, assessors can use these examples to decide whether a candidate's work is of a superior, inferior or comparable standard to the example. Assessors are reminded of the need to revisit the work as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the work submitted.

Where work is not creditworthy, that is, contains nothing of any significance to the project, or has been omitted, no marks should be awarded.

Internal standardisation

It is essential that where there is more than one teacher in a centre, work from all teaching groups is standardised internally. This is to ensure that the final assessment reflects a single agreed standard for all teaching groups involved. All centres will receive detailed feedback from moderation via the secure web site on results day.

Differentiation within our mark schemes

The following grid demonstrates our starting point to formulating our mark schemes. These are used in order to ensure differentiation between our bands. Mark schemes will use this table as the basis for the assessment of each question but will reflect the specific demands of the question.

Band Descriptor	AO1	AO2	AO3
Excellent	 Aware of a wide range of detailed and accurate knowledge. Demonstrates fully developed understanding that shows 	 Knowledge and understanding is consistently applied to the context of the question/task. Practical skills are consistently and 	 Analysis and evaluation skills are used in a highly effective way. Evidence is selected to construct an effective and balanced argument.
Very Good	relevance to the demands of the question.Effective and precise use of terminology.	 effectively applied and are of a high standard. Is able to form a fully developed and thorough interpretation that is fully accurate. 	Detailed and substantiated evaluation that offers secure judgements leading to rational conclusions.
Good	 Has a range of detailed and accurate knowledge. Demonstrates well developed understanding that is relevant to the demands of the question. Precise use of terminology. 	 Knowledge and understanding is applied to the context of the question/task. Practical skills are effectively applied and are of a high to medium standard. Is able to form a developed interpretation that is mostly accurate. 	 Analysis and evaluation skills are used in an effective way. Evidence is selected to construct a developed argument, that may not be presented in equal measure. Detailed evaluation that offers generally secure judgements, with some link between rational conclusions and evidence.
Satisfactory	 Includes accurate knowledge. Demonstrates sound understanding that is relevant to the demands of the question/task. Generally precise use of terminology. 	 Knowledge and understanding is mainly applied to the context of the question/task. Practical skills are appropriately applied and are of a medium standard. Is able to form a sound interpretation that is generally accurate. 	 Analysis and evaluation skills are used in an appropriate and sound way. Evidence is selected to construct a sound argument OR Evidence is selected to construct a detailed one-sided argument. Evaluation that offers some judgements, with some link between conclusions and evidence.

Basic	 Shows some accurate knowledge. Demonstrates partial understanding that is relevant to the demands of the question. Some use of appropriate terminology. 	 Knowledge and understanding is partially applied to the context of the question/task. Practical skills are of a medium to low-level standard. Is able to form some interpretation that shows some accuracy. 	 Analysis and evaluation skills are used in a suitable way with a sound level of competence but may lack precision. Evidence is selected to construct a one-sided argument Evaluation that offers generalised judgements and conclusions, with minimal use of evidence.
Limited	 Limited knowledge with some relevance to the topic or question. Little or no development seen. Very little or no use of terminology. 	 Knowledge and understanding is applied in a minimal manner to the context of the question/task. Practical skills are of a low-level standard. Can only form a simple interpretation, if at all, with very limited accuracy. 	 Analysis and evaluation skills are used with limited competence. Unsupported evaluation that offers simple or no judgements/conclusions.

When you look at each of our mark schemes, each band has a sequence of performance descriptors. The descriptors work like a ladder: from a bottom rung, to a top. The lower level band 'Limited' is the simplest descriptor in terms of candidates' performance. The descriptors progress through the grid to the more challenging aspect of that assessment objective. It's important to note that not all questions will use every bullet point listed in the table above, however candidates should demonstrate all of the requirements that are included in the published mark schemes in order to achieve full marks at a particular level. If a candidate gets full marks at a particular level, markers should see whether they're also demonstrating any of the requirements from the next level up. Often candidates will achieve some of the descriptors at one level, but not all of them. In this case, apply a best fit principle.

Further information on how the mark schemes for our Vocational Awards have been constructed, including information on the use of the mark bands for Excellent, Very Good and Good can be found in the Vocational Awards Administration Guide.

TASK 1 - PLANNING, CREATING, MODIFYING AND USING A DATABASE

1 (a) Plan and design a database in response to the client brief.

You should:

- analyse the requirements of the client brief
- identify success criteria
- identify the different entities within the client brief
- design a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy
- give a detailed justification of the field types you have used
- justify your choice of validation rules that you applied to field types.

• justify your choice of validation rules that you applied to field types.		01 AO2 AO3		[12]
	AO1	AO2	AO3	Total mark
AO1 Award two marks for full identification of success criteria. Award one mark for partial identification of success criteria.	4	4	4	12
Award two marks for full identification of the different entities within the brief.				
Award one mark for partial identification of the different entities within the brief.				
AO2 Award four marks for a detailed and thorough design of a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy.				
Award three marks for an effective design of a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy.				
Award two marks for a basic design of a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy.				
Award one mark for a limited design of a database structure which includes tables, relationships, forms, queries, reports, fields, primary and foreign keys, data types, field properties, validation rules minimising data redundancy.				
AO3 Award two marks for a detailed justification of field types used. Award one mark for a limited justification of field types used.				
Award two marks for a detailed justification of their choice of validation rules. Award one mark for a limited justification of their choice of validation rules.				

TASK 1 - PLANNING, CREATING, MODIFYING AND USING A DATABASE 1 (b) Create and modify your database according to your planning and design. You should: create and add tables add fields create a primary key assign appropriate data types apply effective validation rules and error messages link tables using key fields and relationships import data from a given CSV file add, edit and delete records check and test data to ensure it is error-free check and test the database to ensure it functions correctly. [10] AO2 AO1 AO3 Total mark 2 4 4 10 A01 Award **two** marks for full import of data from the given CSV file. Award **one** mark for partial import of data from the given CSV file. AO2 Award four marks for a fully developed creation of the database with wellconsidered validation rules and error messages. Tables will be linked effectively using key fields and relationships. Award three marks for a developed creation of the database with suitable consideration of validation rules and error messages. Tables will be linked appropriately using key fields and relationships. Award **two** marks for a basic creation of the database with partial consideration of validation rules and error messages. There will be some linking of tables using key fields and relationships. Award **one** mark for a limited creation of the database with generally appropriate validation rules and error messages. There will be a limited attempt to link key fields and relationships. AO₃ Award four marks for fully developed checking and testing to ensure the data is error-free and the database functions correctly. Award three marks for developed checking and testing to ensure the data is error-free and the database functions correctly. Award two marks for basic checking and testing to ensure the data is errorfree and the database functions correctly. Award one mark for limited checking and testing where not all errors will be found and the database may only partially function.

TASK 1 - PLANNING, CREATING, MODIFYING AND USING A DATABASE 1 (c) Interrogate your database. You should: create select queries, using a query builder including: single table/single criteria; multiple tables/multiple criteria; wildcard; parameter, calculations produce reports from queries, with at least one report showing customisation for fitness of [4] purpose. AO1 AO2 **AO3** Total Mark AO2 4 4 Award **four** marks for a fully developed interrogation of the database which uses a comprehensive range of select queries including on multiple tables/multiple criteria, wildcard, parameter and calculations. There will be effective reports from queries showing assured customisation for fitness of purpose. Award **three** marks for a developed interrogation of the database which uses a good range of select queries including on multiple tables/multiple criteria, wildcard, parameter and calculations. There will be appropriate reports from queries showing suitable customisation for fitness of purpose. Award **two** marks for a basic interrogation of the database which uses an appropriate range of select queries with some attempt to use multiple tables/multiple criteria, wildcard, parameter and calculations. There will be meaningful reports from queries with at least one report showing customisation for fitness of purpose. Award one mark for a limited interrogation of the database which uses a generally appropriate range of select queries. There will be straightforward reports from queries with some consideration given to customisation.

TASK 1 - PLANNING, CREATING, MODIFYING AND USING A DATABASE 1 (d) Create a user interface for your database. You should: create effective data entry forms that simplify data entry and navigation, include relevant fields and accept data and validation enhance the layout of the form to include an image for business purposes add features and controls that make the system user friendly and allow the user to navigate records, forms, queries and reports easily, VB and Macro. [4] A01 AO2 **AO3** Total mark Award **four** marks for a fully developed creation of the user interface for 4 4 the database with effective data entry forms that simplify data entry and navigation. It will demonstrate a well-considered image which enhances the layout of the form and a comprehensive range of features and controls that make the system user friendly. There will be confident use of VB and Macro. Award **three** marks for a developed creation of the user interface for the database with appropriate data entry forms that simplify data entry and navigation. It will demonstrate a relevant image which enhances the layout of the form and a good range of features and controls that make the system user friendly. There will be some use of VB and/or Macro. Award two marks for a basic creation of the user interface for the database with data entry forms that partially simplify data entry and navigation. It will demonstrate an image which enhances the layout of the form and a basic range of features and controls that make the system user friendly. Award one mark for a limited creation of the user interface for the database with limited data entry forms to help data entry and navigation. It will demonstrate an image and a limited range of features and controls that help make the system user friendly.

TASK 1 - PLANNING, CREATING, MODIFYING AND USING A DATABASE 1 (e) Test and evaluate your database. You should: provide a test plan and select a range of test data including valid, extreme and erroneous data give detailed reasons for all testing methods give evidence for the testing carried out to test plan including evidence of test pass/fail evaluate the testing successes and failures and identify improvements. [6] AO2 AO3 Total AO1 Marks AO2 2 6 4 Award **four** marks for a comprehensive test plan that selects a wide range of test data including valid, extreme and erroneous data. There will be well-considered reasons for all testing methods with detailed evidence for the testing carried out. Award three marks for a detailed test plan that selects a good range of test data including valid, extreme and erroneous data. There will be rational reasons for all testing methods with evidence for the testing carried out. Award two marks for a basic test plan that selects a range of test data including valid, extreme and erroneous data. There will be reasons for most testing methods with evidence for the testing carried out. Award **one** mark for a limited test plan that selects a range of test data. There will be reasons for some testing methods with at least partial evidence for the testing carried out. AO3 Award **two** marks for full evaluation of the testing successes and failures with identified improvements. Award one mark for partial evaluation of the testing successes and failures with some identified improvements.

TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET 2 (a) Plan and design a spreadsheet in response to the client brief. You should: analyse the requirements of the client brief identify success criteria design a spreadsheet structure including worksheets, navigation, formulae, tools and techniques to be applied. [6] AO1 AO2 AO3 Total mark A01 2 2 2 6 Award **two** marks for full identification of success criteria. Award **one** mark for partial identification of success criteria. AO2 Award two marks for a detailed design of a spreadsheet structure. Award **one** mark for a limited design of a spreadsheet structure. AO3 Award two marks for a detailed analysis of the requirements of the client brief. Award **one** mark for a limited analysis of the requirements of the client brief.

TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET

2 (b) Create and format your spreadsheet according to your planning and design.

You should:

- import data from the given CSV file and generate additional content of your own
- enhance layout and format of the spreadsheet including font style; font size; enhanced grids/borders; titles; colours; merged cells; cell alignment; text wrap; headers or footers; forms; worksheet tab

[6]

- facilitate data entry through use of form controls, e.g. buttons, check box, drop-down lists, combo boxes, spinners, scroll bar
- define a print area in order to present a customer-friendly output
- create a navigation menu in order to customise and simplify the client use of the workbook.

		AO1	AO2	AO3	Total Mark
)	AO1	2	4	-	6
	Award two marks for full import of data from the given CSV file.				
	Award one mark for partial import of data from the given CSV file.				
	AO2				
	Award four marks for a comprehensive spreadsheet that demonstrates an enhanced layout and format in an effective manner, and which has a comprehensive data entry system using a wide range of techniques. There will be a defined print area in order to present an effective customer-friendly output and a coherent navigation menu in order to simplify the client's use of the workbook.				
	Award three marks for an effective spreadsheet that demonstrates an enhanced layout and format in an effective manner, and which has a working data entry system that uses a range of techniques. There will be a defined print area in order to present a customer-friendly output and a functional navigation menu in order to simplify the client's use of the workbook.				
	Award two marks for a basic spreadsheet which demonstrates an enhanced layout and format, and which has a data entry system that uses a range of techniques. There will be a defined print area in order to present an effective customer-friendly output and a navigation menu that may only partially function.				
	Award one mark for a limited spreadsheet that demonstrates some enhancements of the layout and format and has a data entry system using a narrow range of techniques. There will be a defined print area and a navigation menu, and these might contain errors.				

TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET 2 (c) Make use of appropriate data formatting and add suitable validation rules. You should: apply data formatting (e.g. currency, %, decimal places) apply conditional formatting use the date/time function facilitate data entry through use of validation form controls, e.g. drop-down lists, combo boxes, spinners, scroll bar create validation checks, e.g. range, type, presence, format create validation messages. [4] AO1 AO2 AO3 **Total Mark** AO2 4 4 Award **four** marks for effective application of data formatting, conditional formatting and use of the date/time function to create a user-friendly spreadsheet. There will be assured use of a comprehensive range of validation form controls that will facilitate data entry. A good variety of validation checks will be used, and these will have relevant validation messages. Award three marks for appropriate application of data formatting, conditional formatting and use of the date/time function to create a user-friendly spreadsheet. There will be good use of a range of validation form controls that will facilitate data entry. A variety of validation checks will be used, and these will have relevant validation messages. Award two marks for application of data formatting, conditional formatting and use of the date/time function which will help to make the spreadsheet more user-friendly. There will be use of some validation form controls that will facilitate data entry. Validation checks will be used with validation messages. Award **one** mark for use of data formatting and/or conditional formatting and/or use of the date/time function. There will be

some use of validation form controls to facilitate data entry and

validation checks. Some features may not function fully.

TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET 2 (d) Use appropriate formulae and functions to meet the outcomes set in the brief. You should: use formulae with a single operator (+, -, *, /) use brackets to prioritise calculation use simple functions, such as SUM, AVERAGE, MAX, MIN, RAND, COUNT, COUNTA, INT/MOD use relative and absolute referencing use complex functions, such as IF, nested IF, IF(OR), IF(AND), SUMIF, AVERAGEIF, VLOOKUP, COUNTIF, goal seek, pivot tables use macros to link native function. [4] A01 AO2 AO3 **Total Mark** AO2 4 4 Award **four** marks for effective use of a wide range of formulae and simple functions to meet set outcomes. There will be effective use of complex functions to meet these outcomes. Learners will demonstrate competent use of relative and absolute referencing and there will be successful use of macros to link native function. Award **three** marks for appropriate use of a range of formulae and simple functions to meet set outcomes. There will be use of complex functions to meet these outcomes. Learners will demonstrate relevant use of relative and absolute referencing and there will be an attempt at use of macros to link native function. Award **two** marks for use of a range of formulae and simple functions to meet set outcomes. There will be basic use of complex functions to meet these outcomes. Learners will demonstrate limited use of relative and absolute referencing.

Award **one** mark for use of formulae and simple functions to

meet set outcomes.

	TASK 2 - PLANNING, CREATING, MODIFYING AND USIN	G A SPRI	EADSHE	ΞT	
2 (e)	Arrange, reduce and output data to help make decisions.				
	 You should: use sorting on single items use sorting on multiple items use filters create a chart/graph with appropriate title, legend, axis labels 	and forn	natting.		[4]
		AO1	AO2	AO3	Total Mark
	Award four marks for highly effective arrangement, reduction and output of data to help make decisions and a broad range of sorts on both single and multiple items and of filters. There will be creation of a high-quality chart/graph with a well-considered title, legend, axis labels and formatting. Award three marks for effective arrangement, reduction and output of data to help make decisions and a range of sorts on both single and multiple items and of filters. There will be creation of an appropriate chart/graph with a relevant title, legend, axis labels and formatting. Award two marks for arrangement, reduction and output of data to help make decisions and sorts on both single items and of filters. There will be creation of an appropriate chart/graph with a title, legend, axis labels and formatting. Award one mark for an attempt to arrange, reduce and output data to help make decisions. There will be some use of sorting and/or filters and the creation of a chart/graph with a title, legend, axis labels and formatting.	-	4	-	4

	TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET					
2 (f)	Modify data and formulae to model 'what if' scenarios.					
	You should:					
	 use 'what if' investigations to change data use 'what if' investigations to change formulae. 				[4]	
		AO1	AO2	AO3	Total Mark	
	AO2	-	4	-	4	
	Award four marks for highly effective modelling of possible scenarios by using coherent 'what if' investigations to change data and to change a formula.					
	Award three marks for effective modelling of possible scenarios by using coherent 'what if' investigations to change data and to change a formula.					
	Award two marks for basic modelling of possible scenarios by using 'what if' investigations to change data and to change a formula.					
	Award one mark for an attempt to model possible scenarios by using 'what if' investigations to change either data or a formula.					

TASK 2 - PLANNING, CREATING, MODIFYING AND USING A SPREADSHEET 2 (g) Test and evaluate your spreadsheet. You should: provide a test plan and select a range of test data including valid, extreme and erroneous data use a test table, based on the success criteria you identified in task a) above give detailed reasons for all testing methods give evidence for the testing carried out evaluate the testing successes and failures and identify improvements suggest how to implement these improvements. [8] A01 AO2 **AO3 Total Mark** AO2 4 8 4 Award **four** marks for a comprehensive test plan that selects a wide range of test data including valid, extreme and erroneous data. There will be well-considered reasons for all testing methods with detailed evidence for the testing carried out. Award three marks for a detailed test plan that selects a range of test data including valid, extreme and erroneous data. There will be rational reasons for all testing methods with evidence for the testing carried out. Award **two** marks for a basic test plan that selects a limited range of test data including valid, extreme and erroneous data. There will be reasons for all testing methods with evidence for the testing carried out. Award **one** mark for a limited test plan that selects relevant test data. There will be some consideration for testing methods with evidence for the testing carried out. AO3 Award **four** marks for a well-reasoned and rigorous evaluation of the testing successes and failures with insightful suggestions to improve the spreadsheet. Award three marks for a reasoned and coherent evaluation of the testing successes and failures with rational suggestions to improve the spreadsheet. Award two marks for a basic evaluation of the testing successes and failures with some rational suggestions to improve the spreadsheet. Award **one** mark for a limited evaluation of the testing successes and failures with some suggestions to improve the spreadsheet, although these may not always be practical.

	TASK 3 - PLANNING, CREATING AND MODIFYING AN AUTOM	ATED D	OCUMEI	NT	
3 (a)	Plan and design an automated document in response to the client	t brief.			
	 You should: analyse the requirements of the client brief Identify success criteria design a standard document including location of place holde used. 	ers, form	atting ar	nd featui	res to be [6]
		AO1	AO2	AO3	Total Marks
	AO1 Award two marks for full identification of success criteria. Award one mark for partial identification of success criteria.	2	2	2	6
	AO2 Award two marks for a detailed design of a standard document. Award one mark for a limited design of a standard document.				
	AO3 Award two marks for a detailed analysis of the requirements of the client brief. Award one mark for a limited analysis of the requirements of the client brief.				

	TASK 3 - PLANNING, CREATING AND MODIFYING AN AUTOM	ATED D	OCUMEI	N T	
3 (b)	Create an effectively structured data source and link that to a star You should: create a standard document that follows your planning and a create a source document based on your success criteria create appropriately divided fields create appropriate data within the fields create a link between the data source and standard document	lesign	ocument		[4]
		AO1	AO2	AO3	Total Mark
	Award four marks for a high-quality standard document that follows planning and design documents. There will be an effective source document based on the success criteria. The divided fields will be highly appropriate and contain relevant data. There will be a successful link between the data source and standard document. Award three marks for a good quality standard document that follows planning and design documents. There will be an appropriate source document based on the success criteria. The divided fields will be appropriate and contain relevant data. There will be a successful link between the data source and standard document. Award two marks for a basic standard document that follows some elements of the planning and design documents. There will be a source document based on the success criteria. The divided fields will be mostly appropriate and contain relevant data. There will be a link between the data source and standard document. Award one mark for a limited standard document with divided fields and mostly appropriate data within the fields. There will be some link between the data source and standard document.	-	4	-	4

TASK 3 - PLANNING, CREATING AND MODIFYING AN AUTOMATED DOCUMENT

- 3 (c) Appropriately structure the content of the standard document and insert fields as required. You should:
 - insert fields as required by the brief: Address line; Subject; Salutation/Valediction; Personalised content within the document
 - check accuracy: Spelling; Grammar; Proofread
 - add appropriate formatting and features: Letterhead; Watermark; Autodate; Alignment; Set line spacing; Justification; Indexing; Automatic fields, bullets and appropriate layout.

spacing; Justification; Indexing; Automatic fields, bullets and	арргорпас	е тауоит.		[4]
	AO1	AO2	AO3	Total Mark
AO2	-	4	-	4
Award four marks for highly appropriately structured content within the standard document and fields inserted as required. There will be clear evidence of effective checking for accuracy. Highly appropriate formatting and features will be added to produce a very high-quality document that is free from errors. Award three marks for appropriately structured content within				
the standard document and fields inserted as required. There wi be evidence of effective checking for accuracy. Appropriate formatting and features will be added to produce a high-quality document that is almost free from errors.	II			
Award two marks for structured content within the standard document and fields inserted as required. There will be some evidence of checking for accuracy. Appropriate formatting and features will be added to produce a basic document that is most free from errors.	ly			
Award one mark for structured content within the standard document and most fields inserted as required. There will be evidence of limited checking for accuracy although there may be number of errors remaining. Some limited formatting and features will be added.	а			

	TASK 3 - PLANNING, CREATING AND MODIFYING AN AUTO	MATED	DOCUM	IENT	
3 (d)	 Merge and output the final documents. You should: complete the merge and check accuracy check formatting following insertion of merged data output merged documents evaluate the document and identify improvements. 				[4]
		AO1	AO2	AO3	Total Marks
	Award two marks for a successful merge with checks to ensure functionality. There will be checking of formatting following insertion of merged data and evidence of successful output of the merged documents. Award one mark for a mostly successful merge. There will be limited checking of formatting following insertion of merged data and evidence of successful output of the merged documents.	-	2	2	4
	AO3 Award two marks for a detailed evaluation of the document that identifies improvements. Award one mark for a limited evaluation of the document that identifies improvements.				

TASK 4 - PLANNING, CREATING, MANIPULATING AND STORING IMAGES

4 (a) Plan and design an image in response to the client brief.

You should:

- analyse the requirements of the client brief
- identify success criteria
- plan design (sketches and layouts) with annotations
- identify and select image source (self-taken (camera/scanner), images from 3rd party, images from internet or another secondary source
- identify key qualities of image (e.g. size, format) and limitations to editing
- identify any copyright or intellectual property rights and reference source.

[12]

	AO1	AO2	AO3	To Ma
AO1	8	2	2	1
Award two marks for full identification of success criteria.				
Award one mark for partial identification of success criteria.				
Award two marks for fully appropriate identification and selection of image source.				
Award one mark for partially appropriate identification and selection of image source.				
Award two marks for full identification of key qualities of image and limitations to editing.				
Award one mark for partial identification of key qualities of image and limitations to editing.				
Award two marks for full identification of appropriate copyright or intellectual property rights and reference source.				
Award one mark for appropriate referencing of source.				
AO2				
Award two marks for a fully annotated design document for image and limitations to editing.				
Award one mark for a partially annotated design document for image and limitations to editing.				
AO3				
Award two marks for a detailed analysis of the requirements of the client brief.				
Award one mark for a limited analysis of the requirements of the client brief.				

	TASK 4 - PLANNING, CREATING, MANIPULATING AND S	STORING	S IMAGE.	S							
4 (b)	Create and modify an image using appropriate tools and techniques. You should: compare file types (png, tiff, jpeg) and fitness for purpose (size, resolution, scalability) select software according to image type (vector/raster) select image properties (RGB/CMYK) and canvas size based on output requirements import image/create image using tools/create hybrid image as appropriate use standard and advanced tools to create and modify your image Standard: Select marquees, lassos, cut, copy, crop, move, group, rotate, distort, enlarge/shrink, magic wand, bring to front/send to back, brushes/pencil, adjust line thickness/style, simple lines, shapes, curves (freehand and auto), fill, add text, edit text Advanced: Blur, blend, smudge, sharpen, colour mode, brightness, contrast, layers, merge layers, masking/mask layer, change alpha, cloning, background eraser, airbrush, gradient. [8]										
		AO1	AO2	AO3	Total Marks						
	AO3 Award two marks for a detailed comparison of file types and fitness for purpose. Award one mark for a limited comparison of file types and fitness for purpose. For AO2 please use the mark bands below:	-	6	2	8						

Band	AO2											
	5-6 marks											
3	 A very good response which demonstrates: highly effective application of knowledge and understanding when selecting software, image properties and canvas size based on output requirements import/creation of an image using a range of tools to create a highly effective hybrid image 											
	 highly effective skills when using both standard and advanced tools to create and modify the image. 											
	3-4 marks											
2	A good response which demonstrates: • effective application of knowledge and understanding when selecting software, image properties and canvas size based on output requirements											
	 import/creation of an image using tools to create an effective hybrid image effective skills when using standard tools to create and modify their image. 											
	1-2 mark											
1	 A basic response which demonstrates: some application of knowledge and understanding when selecting software, image properties and canvas size based on output requirements import/creation of an image using some tools to create a hybrid image. some skills when using tools to create and modify their image. 											
	0 marks											
	Response not creditworthy or not attempted.											

4 (c) Store the image appropriately and output the final image in a format that is fit for purpose.

You should:

- store your image(s) using version control
- store your images using an appropriate file type (vector or raster)
- compare file types and consider fitness for purpose (size, resolution, scalability) of the final product
- output final version in an optimised format
- test the file types electronically and digitally to evaluate fitness for purpose
- evaluate your final product against success criteria, identifying possible improvements.

[10]

	AO1	AO2	AO3	Total Marks
AO2	-	4	6	10
Award four marks for evidence of storing the image(s) using effective version control and an appropriate file type. There will be successful output of the final version in an optimised format.				
Award three marks for evidence of storing the image(s) using rational version control and an appropriate file type. There will be successful output of the final version in an optimised format.	е			
Award two marks for evidence of storing the image(s) using version control and a generally appropriate file type. There will b output of the final version in an optimised format.	e			
Award one mark for evidence of storing the image(s) using minimal version control. The image may not be stored in an appropriate file type. There will be some output of the final version.				
AO3				
Award two marks for a detailed testing of the file types to evaluate fitness for purpose.				
Award one mark for a limited testing of the file types to evaluate fitness for purpose.				
Award two marks for a detailed evaluation against the success criteria.				
Award one mark for a limited evaluation against the success criteria.				
Award two marks for detailed suggestions for improvements.				

Mapping of questions to specification content and assessment objectives:

Unit 2

TA	ASK	Topic and Section									Total	AO1	AO2	AO3										
	2.1					2.2								2.3				2.4			Marks	Marks	Marks	
		2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.2.1	2.2.2	2.2.3	2.2.4	2.2.5	2.2.6	2.2.7	2.3.1	2.3.2	2.3.3	2.3.4	2.4.1	2.4.2	2.4.3				
1	(a)	12																			12	4	4	4
	(b)		10																		10	2	4	4
	(c)			4																	4		4	
	(d)				4																4		4	
	(e)					6															6		4	2
2	(a)						6														6	2	2	2
	(b)							6													6	2	4	
	(c)								4												4		4	
	(d)									4											4		4	
	(e)										4										4		4	
	(f)											4									4		4	
	(g)												8								8		4	4
3	(a)													6							6	2	2	2
	(b)														4						4		4	
	(c)															4					4		4	
	(d)																4				4		2	2
4	(a)																	12			12	8	2	2
	(b)																		8		8		6	2
	(c)																			10	10		4	6
Total Se marks	ection	12	10	4	4	6	6	6	4	4	4	4	8	6	4	4	4	12	8	10	120	20	70	30
Total Topic marks		36					36								18				30					