

EXAMINERS' REPORTS

LEVEL 1 / LEVEL 2 VOCATIONAL AWARD IN ICT (TECHNICAL AWARD)

JANUARY 2024

Grade boundary information for this subject is available on the WJEC public website at: <u>https://www.wjecservices.co.uk/MarkToUMS/default.aspx?l=en</u>

Online Results Analysis

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Annual Statistical Report

The annual Statistical Report (issued in the second half of the Autumn Term) gives overall outcomes of all examinations administered by WJEC.

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LEVEL 1/2 VOCATIONAL AWARD ICT (TECHNICAL AWARD)

UNIT 1: ICT IN SOCIETY

January 2024

Item	n	Max. Mark	Mean Mark	Facility Factor	% attempted
1a	700	3	1.2	0.39	99.7
1b	700	5	0.9	0.19	99.7
1c	692	4	0.6	0.14	98.6
1d	701	3	1.2	0.41	99.9
1e	702	3	1.8	0.60	100.0
2a	700	4	1.3	0.33	99.7
2b	700	4	1.1	0.28	99.7
2c	701	8	3.2	0.40	99.9
2d	698	8	2.7	0.34	99.4
3a	701	3	2.0	0.65	99.9
3b	701	2	0.6	0.32	99.9
3c	701	2	0.9	0.44	99.9
3d	700	3	0.5	0.17	99.7
3e	700	7	2.3	0.33	99.7
3f	700	6	0.8	0.13	99.7
4a	701	6	1.9	0.31	99.9
4b	701	3	1.8	0.60	99.9
4c	699	2	0.5	0.27	99.6
4d	699	4	1.4	0.35	99.6

General Comments

The mean total for Unit 1 this series was approximately 25.7 out of 80 marks. This is the first time that the unit has been sat by candidates for this new specification.

The effect of the pandemic continues to remain evident in pupils' literacy skills and their use of technical terminology.

It was pleasing to note that the percentage attempt for questions was 99.4% or higher for all question, with the exception of Q1c, which was still high at 98.6%. This indicates that candidates were able to complete the online examination within the allotted time given, and as such had managed their time effectively in this regard.

Comments on individual questions/sections

Q.1 Fresh Choice

A majority of candidates were able to state the type of network needed to connect all shops to Fresh Choice's headquarters. These candidates were also able to suggest LAN, as a suitable different type of network that may be used by other single store shops. Fewer candidates were able to expand upon this justifying that they connect computers within a short geographical distance.

A minority of candidates were able to correctly identify the error in the diagram. Common incorrect answers seen were that "a device isn't connected". This answer was not awarded credit as the candidate should have been more explicit in identifying that a device wasn't connected to the switch. Fewer candidates were able to give two advantages and two disadvantages of a star network topology over a ring network topology. This was the fourth worst answered question of the paper.

Only a few candidates were able to outline the purpose of two protocols that the network may use for communication. This was the second worst answered question of the paper.

A minority of candidates were able to match each device with the most appropriate description.

A majority of candidates were able to select the benefits of cloud computing over inhouse servers. This was the joint second best answered question of the paper.

Q.2 Globe Bank

A majority of candidates were able to list services that may be offered by Globe Bank's online banking service. Popular answers included account balance and transaction history review.

Around half of candidates were able to give one advantage of working from home for the employees of Globe Bank. A few were able to give a second advantage and describe one advantage for Globe Bank of teleworking.

Around half of candidates were able to suggest one way that legislation would protect customer data. A significant number of candidates incorrectly just stated a law, e.g. Data Protection Act, which didn't address the questions asked. Many candidates were able to explain some of the impacts that data loss might have on Globe Bank, such as financial loss and a loss in reputation.

Fewer candidates were able to give in depth answers that gained more than half marks.

A minority of candidates were able to explain the different types of malicious software that pose a risk to the computers used by the staff at Globe Bank. Many gave a list of, such as viruses, trojans and worms.

Q.3 AI Bionics

A majority of candidates were able to match each technology with the most appropriate description. This was the best answered question of the paper. A minority of candidates were able to give two advantages and two disadvantages of robotics. Popular answers included robots working 24 hours a day and in dangerous places.

A few candidates were able to describe how a 3D printer works, with only a very few suggesting a risk of offering a 3D printing service for AI Bionics. This was the third worst answered question of the paper.

A minority of candidates were able to determine the type of attack on the customers. We accepted "scam" this series, but in future, candidates should be more explicit by stating phishing or scamming email. A minority of candidates were able to identify the Act that has been broken during the cybersecurity incident and explain the impact of an attack like this on Al Bionics and its customers.

A few candidates were able to discuss the impact of using lithium-ion batteries to power the humanoid robots. They were only able to do this superficially stating that lithium is a rare earth element or that its extraction is bad for the environment. This was the worst answered question of the paper.

Q.4 Crafty Cards

Around half of candidates were able to describe the use of a computing device that Amanda may use to produce digital images for the products. Fewer were able to describe the use of two or three computing devices.

A majority of candidates were able to match each device to the most appropriate description. This was the joint second best answered question of the paper.

A minority of candidates were able to describe the difference between lossy and lossless data compression. Candidates should take care here not to just state that lossy loses data and lossless keeps it. They should give a fuller description; e.g. original data is lost from the file and cannot be recovered and original data in the file can be restored entirely to its original form.

A minority of candidates were able to consider the risks of using an existing personal social media profile to advertise products. Few candidates were able to gain more than half marks.

Summary of key points

Candidates had a reasonably good understanding of questions 1e, 3a and 4b. They performed best in these questions.

Candidates found questions 1b,1c, 3d and 3f difficult. This was reflected in the low facility factor for these questions.

LEVEL 1/2 VOCATIONAL AWARD ICT (TECHNICAL AWARD)

UNIT 2 ICT IN CONTEXT

January 2024

General Comments

The report will summarise the general feedback for this series and then comment on the assessment evidence requirements, the accuracy of marking and administration.

The WJEC board brief "Coco's Cocoa" was accessible through the WJEC's secure website. Centres are to be commended for the presentation of their evidence of candidates' work. Some centres provided the candidates' evidence in one PDF document, and this made the moderation process more straightforward.

Most centres have a good understanding of the requirements of the controlled test and most assessed accurately. Most centres made very good use of the assessor's comments section of the mark sheet that greatly aided in the accurate moderation of the work. Thank you.

We continued with the use of the upload system on IAMIS the secure WJEC system. The WJEC will be continuing with this system to submit NEA work for the foreseeable future. Moving forward we would like this system to become more streamlined for the use and the moderation process. The suggested areas to develop future submissions are:

- Save each candidate's work (documentation) as one pdf; there should be one file only for each candidate (*This can be achieved by merging all files and naming them with candidates' information*)
- Each file should contain the relative paperwork documents stated in the specification (Mark Record sheet (from the Assessor Pack – pages 29 - 33), Candidate Declaration sheet (from the Candidate Pack – pages 16 – 17) and the Candidate time record sheet (from the Candidate Pack – page 18).
- Centres should compile all artefacts / documentation in a single folder and then ZIP that folder. A single ZIP file should then be uploaded to IAMIS for moderation.
- Annotation can be added to the original document digitally (using the 'review' and add 'mark-up') or added to work before it is compiled digitally.
- Understandable some centres struggle with facilities to scan; a scanning app can be accessed on mobile devices; this will allow pages to be scanned and collated into one PDF file.
- The WJEC has a help desk for centres to guide centres with this process.

Thank you to the centres who uploaded their coursework before the deadline date this was appreciated and helped the moderation process. If a centre has foreseen delays, they should contact the WJEC before the deadline date to discuss solutions. Please be reminded that the deadline date for the coursework to arrive with the moderator is the 10th of December; this date will not change.

Overall, the evidence submitted was well presented and organised.

Annotation of the work or the marksheet should be evident; It is appreciated that this can be time-consuming however, this is key in justifying to the moderator where and why grades have been awarded. Many centres made use of the "Assessor comments" section of the Assessor Pack which greatly aided in the moderation process.

Comments on individual questions/sections

2.1 Planning, creating, modifying, and using databases

Many candidates performed well on this task, with most addressing the requirements of the brief. Most candidates produced good database systems, including a series of related tables, effective data entry forms and the required outputs. Many implementations included macros which improved the HCI. Most candidates made effective use of testing strategies and testing to refine their databases, it is only necessary to test one example of valid, extreme, and erroneous data rather than all three for every data input field.

2.2 Planning, creating, modifying, and using spreadsheets

Most candidates produced a spreadsheet solution that met the requirements of the scenario. Many candidates made effective use of the more basic aspects of spreadsheet software such as the use of layout tools. A significant minority of candidates limited their marks as implementations restricted the automation of saving new data to their sheets via use of macros. Many candidates made good use of the data and formed meaningful charts to display the results.

2.3 Planning, creating, and modifying an automated document

Many candidates were able to create drafts of an automated letter to customers. More precise adherence to the required outcomes would enable candidates to achieve improved marks in this section as well as aiding in the moderation process. It is worth noting that there are two methods of filtering the data to produce the mail merged document, either by making use of the query in the database task or via filtering the data in the spreadsheet task (via filters or pivot tables).

2.4 Planning, creating, manipulating, and storing images Planning, creating, and modifying an automated document

Most candidates successfully created a design for a logo that met the client brief. Many candidates selected canvas sizes based on the document type (Raster/SVG) dependent on their software choice, however, attention to the brief specifics would have guided the candidates to select a canvas size in the 100s of pixels rather than 1000s as the largest item that the logo would be added to was packaging materials. Some centres made use of mood boards and colour pallets as well as research into similar company logos to aide in the design process of the clients' new logo.

Summary of key points

- Creation of the logo in task 2.4 is the first task to be addressed / attempted by the candidates, this would assist them whilst attempting task 2.1/2.2/2.3.
- Testing should be thorough but not overly extensive / repetitive.
- If a password has been added for security reasons to a database, please provide a README file with the database's password.
- The assessment should be attempted in a block of 40 hours after having been taught the relevant skills in the centres choice of Database, Spreadsheet, Word Processing and Photo Editing software.



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