

GCE

ICT

Advanced GCE A2 H517

Advanced Subsidiary GCE AS H117

OCR Report to Centres

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This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

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Any enquiries about publications should be addressed to:

OCR Publications PO Box 5050 Annesley NOTTINGHAM NG15 0DL

Telephone: 0870 770 6622 Facsimile: 01223 552610

E-mail: publications@ocr.org.uk

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Overview

Candidates, in the coursework and the examination, who have been prepared, performed very well.

In the examinations, there was some evidence of candidates not having covered the complete specification as there seemed to be some gaps in their knowledge. There was also some evidence of candidates being entered for too early.

Candidates should be taught examination technique and the application of their knowledge to a context. The essay question was most disappointing – these essay type questions always occur in the examination however many candidates do not appear to know how to answer a discussion question to the depth required at AS and A2.

G061 Information, Systems and Applications

The question paper had a range of questions to enable candidates of all abilities to achieve good marks if they had prepared adequately for the paper. Preparation includes learning the specification and learning the requirements of the keywords. There were many examples of regurgitation of answers, particularly from similar questions on past papers, without looking at the context of the question, or by giving advantages when disadvantages were asked for.

Many candidates had a reasonable foundation of factual knowledge enabling them to answer these questions. A significant number failed to express their answers in a way that demonstrated their knowledge and used very little subject terminology. Overall the knowledge and understanding demonstrated by the candidates was poorer than in previous sessions. The correct use of technical terms is expected and the answer must make sense within the context of the scenario.

- **1a** The majority of candidates were able to successfully describe information.
- **1b** It was pleasing to see that most candidates were able to give an advantage of using pictures.
- Personalization as an advantage was given in the question and as such was unable to be used as an answer. Many candidates gave very imprecise answers and were unable to express their answers with any clarity.
- A large number of candidates gave direct sources that could be used but did not give the advantages. The linking of the advantages of the direct source to the factors affecting the quality of information was good to see but candidates did not take these ideas further to gain the additional marking points.
- This question was very well answered by a large number of candidates. Those that did not gain full marks did not give an example, or did not give enough detail to describe software.
- There was an awareness amongst the candidature of what a WIMP interface was and the examples given, for the most part, were related to actual uses that could be made of it. The descriptions were disappointing, often lacking the detail required to gain full marks.
- These devices were known by the candidates and the uses, when specific, were good. It was unfortunate that, far too frequently, examples of use were too vague.
- The what if questions needed to be able to be answered with a spreadsheet model. Many of them involved a yes/no or simplistic response that the use of the software either was unable or would not be used to answer. Many candidates could state what is changed but failed to include what needed to be looked for as a result of making the change.
- The question focused on the advantages of using a spreadsheet it was unfortunate that many of the responses focused instead on the advantages of what if questions. This meant that very few candidates achieved high marks on this question.
- It was obvious that this section of the specification was not very well known by candidates. The only rules many were aware of were conditional formatting rules. Some gave examples of rules but were unable to explain the use of rules in the model.

- A large proportion of candidates achieved half marks on this question. Their responses lacked the detail required to gain full marks, with identifications of processes only. It was disappointing to see that many candidates confused a timetabling and a booking system, the mention of trains precluded them from reading further into the question and since the only train based system they had studied was timetables, this was the focus of their response. This was a new style of question, focusing on one aspect of the characteristics of the system and very few candidates had difficulty interpreting the requirements; it was the depth of their answers that resulted in a loss of marks.
- It was disappointing to see that the basic definition of a primary key was not known by a significant number of candidates. This is, unfortunately, a case of a few incorrect words being used that change the entire meaning of the response. There are some areas of the specification that need rote learning and database definitions is one of them.
- This was generally done very well. A large proportion of candidates achieved full marks.
- This was a contextualized question and many candidates failed to make use of the context and gave general descriptions of the different type of relationships that exist.
- It was unfortunate that a lot of candidates read this as advantages of normalization.

 Those that did correctly read the question were able to score marks, but most only gave one disadvantage and were not able to give a second, limiting the marks available.
- The scenario is a straightforward one and common to ERDs. A large proportion of candidates however appeared to have difficulties in answering this question either in defining relationships (a wide variety of diagrams was seen with different methods of linking the entities) or of how to identify/draw an entity. Those that did draw entities and define relationships scored some marks, but very few scored all marks.
- Since this is a question that has a degree of crossover with unit G062 the expectation was that the candidates should be able to apply what they have done. Those that gave detail in their answers did achieve high marks however far too many just identified general items that could appear in a style sheet without being specific.
- There were many descriptions of a house style and how it could be applied. This question was not answered very well.
- Candidates attempted to compare the acetate and projector with a computer and projector, something that was not required by the question. Some candidates gave disadvantages whilst those who did give advantages failed to give the detail required to gain the marks.
- There was some general understanding of the differences amongst the candidature but the level of description was poor. As has been mentioned in previous examiners reports, pixilation in bitmaps only occurs when the image is enlarged.
- 7 It was disappointing to see that many candidates may not have read the question properly before starting their response. As an evaluation, positive and negative reasons were required for full marks.
- As a validation method, there is a difference between lookup and search. Many candidates described queries rather than validation. Check digit, if known, was answered very well although there were a significant number of candidates that incorrectly gave responses related to length validation.
- **8b** Generally, this was done very well. Number as a data type is still cropping up in some responses and there was the occasional mix-up between integer and real.

- This question was not about information requirements in the presentation. It was about the features of the presentation that were needed by visitors with different needs. On the whole, those candidates who gave responses related to features and identified the needs they were linked to scored highly.
- This question was answered fairly well. Candidates demonstrated a good understanding of the Acts with most managing to achieve at least one mark.
- It appeared that some candidates looked at the number of marks available, the number of lines and decided to answer in a discussion style. Whilst this did not preclude them from obtaining marks, it did make it more difficult. It was disappointing that a large proportion of candidates thought that on line shopping was a possible future development. Some candidates did seem to have watched technology programmes and read some of the many magazines and web blogs that are available and had some interesting developments.
- The candidate responses that were seen were more suited to a describe question than a discussion. This question required the candidate, for high marks, to look at the topic under discussion from two different points of view. Candidates frequently wrote in very definite terms from one point of view rather than looking at two. Their answers were superficial and did not reflect a depth of study appropriate to this level of qualification.

G063 ICT Systems, Applications and Implications

To gain high marks on G063, the combination of subject knowledge, examination technique and an awareness of ICT and its applications is required. The subject knowledge comes for bookwork – learning the definitions, learning the terminology and knowing the detail. Examination technique comes from practice, going over past questions and mark schemes and understanding how key words affect the level and detail of the response. An awareness of ICT comes from research, watching television programmes, reading appropriate magazines and books and questioning what is happening around us.

- 1 With its links to the project G064, this should have been a straightforward question, and so it proved to be with the majority of candidates achieving high marks.
- Whilst many candidates were aware of advantages and disadvantages of questionnaires and interviews, very few put them together to give comparisons. A comparison requires the identification of a point and then how this point applies to one and then the other.
- **3a** This question was poorly answered with candidates giving descriptions of RAD or testing.
- **3b** The identifications of the types of test data were done very well with the majority of candidates scoring highly.
- 4 Many candidates were aware of what a Gantt chart was. Responses which focused on tasks and timescales did well although a number gave answers related to development or evaluation of the project rather than the planning.
- There was an understanding shown of what a stock control system does but the explanations of its functions were weak. Most candidates focused on automatic reordering and stated this in many different ways.
- GPS was a very common response but did not consider that once the device knew where the location was, how this information was then passed onto the emergency services. There was an assumption that the services themselves could access the GPS information directly from the satellites.
- Many candidates identified characteristics but did not go on to expand their answer to gain full marks. Many responses repeated the same phrases in a slightly different way and did not gain the second characteristic.
- **7b** Candidates gave general answers that lacked detail. Some candidates failed to give a detailed purpose of the intranet.
- Similar to 7b, there was a lot of generalization in the responses seen. The questions asked for ways the MIS could be used, this required specific details. Candidates that gave these scored highly, often getting full marks.
- **9a** As with question 2, the mechanics of the comparison were poor.
- **9b** Overall this question was not answered well. Cost was a response often given without detailed qualification.
- There was some confusion between the model human processor and mental models. Candidates that were able to give the definition of a mental model, a book learnt response, scored full marks.

- There were a lot of responses that were based on perception, attention, memory and learning and whilst they gave a good account of those items, they failed to link it to mental models or the design of the user interface. The second type of response gave some examples of mental models but did not apply them talking about how red and green should be used but not applying it to the design.
- **10c** A good proportion of candidates gave some good responses.
- Most candidates were able to identify the two types of changeover and gave a description of direct. Descriptions of parallel were not done as well. However the advantage of parallel was done very well.
- 11a This question was answered fairly well.
- There was a lot of repetition of answers given in (a) with very few candidates able to move their answers to the level of explanation that was required.
- This was very well answered with candidates gaining high marks. The identifications and explanations covered different areas and were of the level required.
- This was not done well with many candidates giving advantages of CBT. Some candidates gave some thought to their responses and gained full marks.
- This was, generally, very well done by the majority of candidates, accents, background noise and illness being the most common answers.
- **12ci** Backing up was better understood than archiving. As a synoptic area of the paper it was expected that this should have been well done.
- **12cii** This was well done with most candidates gaining full marks.
- Discussion questions are now common, both on this paper and at AS on G061. It is therefore disappointing to see that pupils are not answering these question to the required level of depth.
- The essays demonstrated a lack of knowledge about ICT. Many responses included use of the internet to book appointments, chip and pin to pay the bill and robots to cut hair. There were some original ideas about how ICT could be used.

G064 ICT Project

General comments

This session saw an increased number of candidates produce a project which required a web element. It was pleasing to see that many of these were more robust and workable than previous website projects have been. Candidates were more adventurous in applying the use of backend databases to enhance the data processing of their systems.

There was more variance between the marks awarded by the centre and the moderated marks, than in the last few sessions, with some centres being quite generous in their allowance of benefit of doubt. Those marking the projects should remember that only that evidence which is provided in the project can be marked.

It is clear that the best projects which follow through in the most logical order are those where the candidate has a real client. Although this it is not always easy for candidates to find a client who needs a solution, ensuring they have a person to give feedback on their designs and development really does help the candidates in their write up.

Again there were a number of errors in the entry codes used by centres. It is now possible to enter coursework via the online OCR repository. Centre administrators should note that there are now different entry codes for postal (G064/02) and repository (G064/01) entries. It is important, to the smooth running of moderation, that centres use the correct entry code. In addition, using sensible naming conventions for files is also helpful to moderators. Ensuring the candidate number is part of the file name(s) is an essential as is ensuring the administrative paperwork (Centre Authentication Form and Mark Sheets) are included. Several centres failed to submit their marks using either the official MS1 form or via Interchange. Failure to correctly submit marks can lead to delays in the moderation.

Section A

It was pleasing to see that candidates have begun to write more detailed requirements specifications which contain much more specific details. In addition, the questions planned for the interviews were, in some cases, suitably detailed and carefully considered to cover all areas of the current system.

Some errors in omitting vital pieces of hardware or software in the final part of this section were evident.

Section B

Although candidates tend to be very good at producing designs for a standard database, they are less able to produce them for a website and it was very noticeable that spreadsheet designs were lacking vital details or formulas and links.

Despite this being a comment in all previous Principal Moderator reports for this unit, it is still the case that candidates are not developing effective Project Plans on the whole. The project plan is a tool for the software developer to ensure tasks are allocated a suitable time frame, taking into consideration predecessor and successor tasks. Iteration, customer feedback and lead and lag time are vital components and candidates need to be taught how to do this. The project plan is not a plan for the candidate for their project from start to finish.

Section C

This section was more fairly marked by centres than in previous sessions with a greater understanding of the difference between linear and non-linear solutions being shown.

Centres are reminded that the marks for testing during development must show clearly that elements of the system (eg links or queries) have been run with test data and where problems are found, they have been fixed.

Section D

As in last summer's session, user guides were often very comprehensive and candidates on the whole knew how to present these effectively. There were a number of creatively presented guides – some had been very creative and made a professional job of them. Use of screenshots was excellent and candidates tended to use accurate contents pages, page numbering and/or indexes.

Section E

Evaluations were again much more complete and the best ones tended to make good use of client feedback.

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998 Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

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OCR (Oxford Cambridge and RSA Examinations) Head office

Telephone: 01223 552552 Facsimile: 01223 552553



