



GCE

ICT

Advanced GCE A2 H517

Advanced Subsidiary GCE AS H117

OCR Report to Centres

January 2013

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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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Overview

This is the last January series and the first series of the revised specification. Although there were some good answers there were many that showed evidence that candidates were not prepared. Many candidates showed a lack of knowledge of technical terms or the depth required of specific topics, both at AS and A2. Candidates are still not reading the question correctly and picking up on key words without reading the whole question. There is, however, less regurgitation of mark schemes from previous sessions.

The preparation of candidates for the exam, whether AS or A2 is variable, as is the coverage of the specification. Some candidates have exceptional knowledge of a very specific area but are unaware of other areas of the specification.

G061 Information, Systems and Applications

General comments

Although there were some good answers the number of candidates who are generating learnt responses without contextualising the answer has increased. Candidates need to look at the example and relate their answers to the example to gain full marks. The quality of handwriting has decreased over the last few sessions. It is difficult to award credit for responses if they cannot be deciphered.

As has been mentioned in previous reports, there are three factors that make a good answer – an understanding of the key word and the requirements; the use of the scenario in the response given and the knowledge to underpin the exam technique and the scenario. High marks reflect all three of these.

- Q1(a)** The majority of candidates achieved high marks on the question. There was some duplication and confusion between context and structure.
- Q1(b)** The identification of methods was good and the majority of the advantages given focused on hearing and sight issues. It is worth noting that pictures, graphics and images are the same thing.
- Q2(a)** The characteristics of a booking system were not well known. Many candidates gave very generic answers based around how it could be used rather than its characteristics.
- Q2(b)** Number is not specific enough as a data type and was marked incorrectly in a number of responses. It was pleasing to see that the majority knew Boolean.
- Q2(c)** This was very well answered with the majority of candidates aware that it created a unique value. The second advantage was less well answered.
- Q2(d)** Whilst there was some awareness of the terms, the specifics of the definitions seemed to pass many candidates by. This was a learnt response and it was disappointing to see how many could not regurgitate a standard 'book' definition.
- Q2(e)** There were many general answers given and a recognition of the terms but few gave enough depth required to gain full marks.
- Q3(a)** There was some confusion over the question. The question asked for the advantages of using the internet as a source of information for the leaflet. Some candidates gave answers related to the advantages of placing the leaflet onto the internet for customers to view and download. Those that read the question gave reasonable answers based on volume. It was disappointing that few candidates seemed to appreciate that everything on the internet is not correct.
- Q3(b)** The majority of candidates understood how errors could creep in but did not provide an example. Many referred to 'spelling mistakes'.
- Q3(c)(i)** Few candidates were able to provide distinct descriptions of section and paragraph, with many answers being the same for each. Footnotes and footers were frequently confused with each other.

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- Q3(c)(ii)** Many candidates reused their answers from 3ci – carrying through errors. Examples of how they could be used in the leaflet were lacking. Quite often the answers did not contain specific answers or answers that were related to an art gallery.
- Q3(d)** This was very well answered with the majority of candidates gaining full marks.
- Q4** Whilst the output device was often correct, the justification lacked depth. Often it was a description of the facilities of the device rather than reasons why it should be used for the scenario given. The requirement of high quality was given in the question and it was disappointing to see the large number of responses that focused on this point alone.
- Q5(a)** The majority of candidates achieved half marks but few went on to gain full marks. Candidates often listed unrelated points about either side but struggled to express their responses in the form of a comparison.
- Q5(b)** There was a lot of confusion over non linear and hierarchical. This affected the responses which were often confused and lacked specific advantages. Where the terms were known (and diagrams given) the candidates scored highly.
- Q5(c)** This was answered very well by the majority of candidates. There were some answers that thought acetate was a replacement for paper to be passed around and others relating to them being hand written (even though the question specified printed) but on the whole a high scoring question.
- Q6(a)** This was done poorly with the majority of candidates not able to identify the characteristics. Many gave general features of interfaces.
- Q6(b)** Form controls is an area that was not known by many candidates. The use of the form control was poorly done with those that did give a response giving a general rather than a contextualised use.
- Q6(c)** Whilst the majority of candidates understood the concept of the single piece of software, the justification given was often a description of how it could be used rather than reason why it should be used.
- Q7** The questions asked for the purpose of and not a description of. This difference caused many marks to be lost by candidates.
- Q8(a)** Far too often candidates are giving generic answers and not reading the question. This question in particular is related to the expansion of the business and the advantages of using a model should have been directly related to the scenario. In many cases it was not.
- Q8(b)** The descriptions of variables and functions were weak and the use, related to the spreadsheet given above the question was often incorrect.
- Q9(a)** Of the three methods, encryption was the best known. However it was disappointing to see that it was often confused with passwords and encoding. Firewalls were not very well known and responses given about software patches were often nothing to do with protecting ICT systems.
- Q9(b)** Whilst it was apparent that candidates were familiar with the DPA, the question focused on the rights of the users. Many candidates failed to read the question properly and just regurgitated two of the eight principles of the act resulting in no marks.

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- Q9(c)** Descriptions of rules that companies should follow abounded in responses to this question but few focused on problems individuals could encounter. There were a small number of candidates who did know and understand the DPA in sufficient detail to appreciate the questions and gain high marks.
- Q10(a)** The majority of candidates scored both marks in this question.
- Q10(b)** The majority of the candidates did draw, or attempt to draw an ERD. This is an improvement on previous sessions. In many cases however, whilst it demonstrated an understanding of entities and that they need to be linked, it did not show that candidates had a good grasp of relationships.
- Q11** The addition of impacts and consequences to the question stem had the effect of focusing the responses to include them. This led to an overall increase in the average marks obtained for this question. There are still too many responses that fall into one of two categories – those that describe hardware and software that would be useful to disabled visitors without going into detail about its use or its impacts and consequences and those candidates who gave general responses that were unrelated to the art gallery.

G063 ICT Systems, Applications and Implications

General comments

The performance of candidates was broadly in line with previous sessions. It was evident that whilst some candidates had been adequately prepared for the examination, others had not. A significant number of candidates failed to provide answers at the required level for an A2 paper.

It was pleasing to see that most candidates were managing to fit their answers in the space provided. As with the previous series, candidate's handwriting continues to be problematic.

- Q1(a)** Most candidates gained marks on this question. Candidates scored well when they understood the actions that took part in the relevant stages, rather than simply where in the lifecycle the stage occurred.
- Q1(b)** Poor examination technique restricted some candidates from scoring full marks as they did not always provide an adequate description to be awarded full marks.
- Q2** This question was not answered well. Many candidates did not understand the difference between real time and interactive processing. Those that did lacked the depth of understanding to be able to adequately compare the two. A small number of candidates had simply learnt the response from a similar question in the previous series and wrote it here.
- Q3** The quality of answer for this question varied enormously. Most candidates were able to describe hardware that would be used in a school.
- Q4(a)** Again, poor examination technique let some candidates down. Most were able to score some marks, but the explanations lacked the depth to gain full marks.
- Q4(b)** This question was answered well with the majority of candidates able to explain a feature of an HCI. Some candidates though, simply listed features of an HCI without any explanation as to how these features would make the interface easier to learn how to use.
- Q5** Poor examination technique prevented some candidates from gaining full marks for this question. The question asked for advantages, plural, of using an expert system to diagnose faults on a central heating system. Many candidates explained a single advantage, or explained the component parts of an expert system.
- Q6** Some candidates lacked the subject knowledge to be able to describe advantages of using observation during the analysis and investigation.
- Q7** Many candidates failed to explain two advantages of a Critical Path Analysis. Some simply described the purpose of a CPA.
- Q8** Those candidates that read the question answered it well. A number of candidates explained things employees should do rather than the responsibilities of an organisation. A small number of candidates focussed on safety issues, rather than the requested health issues.
- Q9(a)(i)** Generally answered well.
- Q9(a)(ii)** Generally answered well.

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- Q9(b)** Very few candidates understood the purpose of a virtual network. Of those that did, only a small number were able to describe two ways the estate agency could use one.
- Q9(c)(i)** Some candidates lacked sufficient knowledge of satellite broadband to answer this question well. There was a misconception that satellite broadband provided a slow connection.
- Q9(c)(ii)** A significant number of candidates were not familiar with the broadband technologies listed in the specification; ADSL, cable, wireless, leased line and satellite.
- Q10(a)** Some candidates were able to compare email and fax well. Others provided only vague points about each with no real comparison.
- Q10(b)** Generally answered well.
- Q11** A significant number of candidates had only limited understanding of how GPS works. Many candidates thought that the GPS receiver sent a signal to a satellite in space.
- Q12(a)** Many candidates did not have the knowledge required to answer this question. Candidates frequently drew a simple flow chart rather than the required Data Flow Diagram.
- Q12(b)** Poorly answered, with many candidates not knowing the difference between information and knowledge. Many candidates described the difference between information and data rather than comparing information and knowledge.
- Q12(c)** Some candidates did well on this question, although a significant number simply described the features of a WIMP interface.
- Q13** Candidates were able to answer this question well, although a significant number failed to recognise that the question was asking about planning a review meeting. Many candidates described how to plan.
- Q14** This question was answered well with most candidates able to identify and describe two different types of maintenance.
- Q15** It is pleasing to see that candidates have been prepared well to answer this style of question. Most candidates were able to explain why it is important to manage change in an organisation to the level required in an A2 paper. The explanations were generally balanced, well-structured and used technical terms correctly.
- Q16** Again, this question was answered well by a number of candidates. They were able to discuss hardware and software developments. A significant number realised that hardware AND software needed to be discussed.

G064 ICT Project

General comments

It was pleasing to see a wide variety of projects this session and an increasing number of candidates making use of real clients and realistic situations which ensured they enjoyed their project and got more out of it.

There was a fair amount of variance in the marking by centres and a number of centres erred on the lenient side. This could possibly be due to issues in interpreting the new mark scheme, although there is support and exemplification documentation on the OCR website. However, there were also centres who have not taken on-board advice in previous reports and therefore are still marking some sections incorrectly.

Section a

Candidates have continued to understand what is needed in the Requirements Specification and some of these were excellent and very detailed. 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.

There was confusion, in some cases, over the need to do the investigation in two parts; one for the old system and one looking at the needs of the new system. This is very clear in the mark scheme which centres are advised to revisit.

Section b

Although candidates tend to be very good at producing designs for a standard database, they are still 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 showing the development of an aspect of the system 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 variable and marks, which have now been split into specific categories, often generously awarded for very limited ideas of extensions or explanations of shortfalls.

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