Examiners' Report Summer 2007

GCE O Level Computing (7105)

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PAPER 01

General Comments

As in previous years the standard of the answers given by candidates was centre specific which again gives a strong indication that where centres prepare candidates well for the examination good results are obtained. It was apparent from some responses seen that candidates are not taking time to fully read the questions set.

The space provided on the examination paper indicates how much the candidate is expected to write. Should the candidate need to use more space, extra paper is made available but the candidate should clearly indicate which answers it refers to. Candidates should be reminded that it is quality and not quantity of the response which gains the marks.

Section A

Question 1
(a) Generally well answered by all candidates. All seemed to be well aware of the storage abilities and capacities of both these storage devices.

(b) Good answers here too. Some candidates confused zip drives and zip compression software – candidates must be made aware if the differences in these technologies and how they might be used.

Question 2
(a), (b) This question caused needless problems for candidates. Candidates Mostly offered software solutions to the problem when the question asked for hardware solutions and therefore lost marks.

Other candidates suggested replacing the computer when the question indicated it was an upgrade to the existing system. Some also suggested the use of a scanner when the stem of the question indicated a digital camera was to be used.

Question 3
(a) Many candidates stated WIMP without and explanation of what this means- a description of this was expected here so some candidates lost marks
(b) Poor answers here – few candidates could explain how cursor keys were utilised in selection of menu choices and also relate this to the fact that less computing overheads would be utilised in the process.

(c) Very few candidates produced satisfactory answers. Many repeated the fact that it was a system reliant on commands. Few students explained how these commands could be entered in the system and the fact that the syntax of the commands had to be exact for the system to recognise them. This system again uses less system overheads than a GUI.

Question 4
(a) (i) (II) All candidates were well versed in the use of e-mail. The candidates offered all the relevant features and all were familiar with problems that could be encountered with the use of e-mail.

(b) (i) (ii) Generally sound answers. Candidates indicated that they had knowledge of spreadsheet functions and were these could be applied to good use.

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Question 5

(a), (b). Poor answers from the majority of candidates. Most candidates were under the impression that the network manager was responsible for the maintenance of the computer system. This is the responsibility of a technician or engineer. The network manager role is specifically linked to the design and development of the network as well as the configuration and system security of the network and its uses. Few candidates were familiar with the role of system analyst.

Question 6

(a), (b), (c) Well answered in all sections by most candidates. Centres had prepared students well in this section of the syllabus. The many good answers were able to give examples of use of log in IDs and password protection as well as file encryption.

Validation and verification checks were evident as answers in b and backup methods or use of anti virus software was well represented in c. There was some confusion from a minority of centres between data security and data privacy.

Question 7

Again most candidates gained full marks for the design of a data capture screen Students must be told to read questions carefully as some were penalised for not providing a screen capture form as they included a field for signature.

Question 8

(a) few candidates could give a valid explanation of the difference between a digital and analogue input.

(b) Most candidates gained 2 out of the 3 available marks here for an explanation on how the heater could be controlled.

(c) The concept of feedback was very much down to how well a centre had covered this topic. Examiners gained the impression that feedback had been taught but the candidates did not fully understand the process.

Section B

Question 9

(a), (b) Many centres had prepared the students well for this question with most gaining full marks for this part of the question. The concept of a Key Field was clearly understood and the ability to link it to a use in part b was also evident.

(c) Generally well answered - this has proved to be a popular style of question with candidates. To get the most out of this question centres must prepare the candidates well by getting them to understand the structure of the database file from the case study. Some candidates lost marks for this reason. Age Group was one example in question – in the case study this was fully explained but some candidates called this a number field and course lost marks for this.

Question 10

(b)(i) Most candidates gave satisfactory answers to this part of the question – all were aware of what was meant by a hyperlink.

(ii) Few candidates could give a good explanation of a hypermedia link. Most were guessing wrongly that it was a way of navigating around a CDROM.

(c) Again good responses from the majority of candidates. All were quite clear about the need for User names and passwords to access the database. Few candidates however were able to make the link between a password being entered and a check made against a password file to verify the password.

Question 11

(a) Good responses from most candidates. The majority of candidates were fully aware of the three stages following analysis in system design.

(b) Responses were poor here. Many candidates gave textbook answers that were technically correct but did not fit the Soft-Education scenario requested. Candidates must take time to read and understand the question.

Question 12

Candidates should have been able to gain all available 6 marks here but most missed the fact that they had to relate the answers to the Softeducation case study and not general use as given in most answers. Candidates must read the question carefully.

Question 13

(a)Poorly answered by most candidates not many knew about composite primary keys for use in the software table or the use of primary and foreign keys in the version table.

(b) Better responses were given here by some centres but the majority of candidates failed to realise how the table structure could be suitably modified to overcome the problems given.

Paper 02

General comments.

As in previous years, the majority of projects were done using MS Access but it was good to see a number of other software types being used as well. Project topics were varied, but as in previous years there was a strong tendency towards stock control or membership systems.

Once again, a few candidates submitted projects based on hardware or networking problems. While this is not forbidden, it is extremely difficult for candidates to produce the evidence required by the mark scheme when doing this sort of work. Supervisors should probably advise against the attempt and should certainly make it clear to candidates that they may run into difficulties.

A number of candidates submitted projects where all the effort had been put into researching the problem and designing a solution, with no evidence of anything actually being produced. It was clear that a great deal of work had been put into these projects but very little of it could be allocated marks from the mark scheme.

Page numbering and project order were good in most cases but there are still centres which are letting their candidates send in work without a contents page or page numbering. The markers do their best but some candidates insist on writing their reports in a most illogical fashion, e.g. hiding important bits of their work, unmentioned, in the middle of an unrelated appendix. A contents page and page numbers would go a long way to helping markers find the marks. It would at least let them know where the candidate thinks they have done each section.

As in previous years, a number of centres have provided their candidates with a project template. There are still several poor templates being used, in that they do not cover all the sections of the project specification. As a result, candidates using such templates cannot access some of the marks available. Candidates should be encouraged to look at the specification and the Coursework Guide for Students. The guide is available from: http://www.edexcel-international.org/VirtualContent/49165/Coursework_guide_for_students.pdf
It was good to see that the number of candidates who were using templates that gave too much content appears to have reduced once again this year. There is still quite a lot of generic padding material about software packages, success criteria, validation techniques and testing methods. This sort of work is not worthy of any credit and simply wastes printing and postage costs.

Identify.
Most candidates were able to identify suitable projects, but a significant proportion were unrealistic in terms of the organisation that they claimed to be working with. Large hotels, government departments, international companies, etc. are unlikely to be still operating on purely manual systems. It is accepted that many projects will be role played rather than real but in such cases, supervisors might suggest that something smaller be attempted.
As last year, the most common problem in Identify was that candidates failed to give testable objectives or success criteria. Typical examples are:
- be able to find a record in 30 seconds
- to be able to reduce staff
- to improve security
- to be able to enter data within 15 seconds.
Since there are marks in other sections which rely on candidates demonstrating that they have met the objectives and fulfilled the success criteria, candidates who do not have something testable will be disadvantaged.

Design.
When discussing software alternatives, candidates should be discouraged from listing packages which they have obviously never used and quite possibly never seen. Such work is rarely worthy of credit.

When designing a test plan, candidates should be reminded that validations alone are not sufficient for a full testing of the application. The plan must test the desired outcomes and success criteria from identify, as well as showing that the application works.

A number of candidates submitted projects where the design merged with Implementation. Most of these projects were done using Access, with design views being mixed in with sketches and screenshots from a completed database. Supervisors who have candidates who take this approach are recommended to look at:http://www.edexcel-international.org/VirtualContent/49165/
Computing_7105_Exemplar_Material_3___A_prototyping_approach_to_coursework.pdf

Implementation.
Although most candidates could show that they had some sort of final product but very few gave any information about amendments and problems with the implementation. It is rare for the process of making an application to have no problems at all and candidates would gain more marks by acknowledging this.

A lot of the marks in this section are for demonstrating that the design has been followed and proving that the candidate made the application. This requires evidence of the production process. Presentation of a completed database with nothing about how it was made does not allow access to the higher mark bands.

Testing.
As has been mentioned in the Design section, testing must show that the objectives and success criteria have been met. Validations are not enough to do this. Candidates should also ensure that all of their planned tests are carried out and that evidence is given of the results. Where the evidence is not shown with the test details, e.g. where the results are in an appendix, care should be taken to cross reference the tests to the results. There were again several cases this year where candidates lost marks because the results could not be matched to the tests.

Where testing is carried out as part of the production process, e.g. Testing each macro as it is made, this should be described in Implementation.

For testing of applications other than databases, e.g. web sites or desk top publishing, it is still important that a complete and appropriate test plan be produced. Several candidates failed to gain marks for testing because they only had the most rudimentary of test plans.

Evaluation.
This was often very weak, saying little more than: it worked and my user was very happy with it.

User comments should not just be reported or typed in as part of the evaluation. A real company or organisation would almost certainly have it's own headed paper.

A good evaluation must refer back to the objectives and success criteria and clearly demonstrate that they have been met. There should be evidence of this, either by page references or by reprinting appropriate parts of the project in the evaluation. It should also look at the parts that have not worked and explain how problems might be solved in the future.

Statistics

Option 1 & 2	Max	A	B	C	D	E
Lower Limit		53	40	28	23	17

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