

## COMPUTER SCIENCE

### Overall grade boundaries

#### Higher level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 12	13 - 25	26 - 39	40 - 51	52 - 63	64 - 74	75 - 100

#### Standard level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 15	16 - 31	32 - 41	42 - 51	52 - 62	63 - 72	73 - 100

### Internal assessment

#### Component grade boundaries

##### Higher level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 5	6 - 10	11 - 17	18 - 25	26 - 33	34 - 41	42 - 50

##### Standard level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 6	7 - 13	14 - 20	21 - 27	28 - 35	36 - 42	43 - 50

Most of the dossiers sent by the candidates were suitable for the subject; unfortunately the documentation was not as precise as expected.

- A few schools sent dossiers organized as described by the previous subject guide. Teachers should be careful to use the current subject guide and teacher support materials.
- As in the May session, Criterion A3 has proven to be crucial for candidates' success. Teachers should advise students about its importance.
- Mastery of an aspect requires the candidate to show it in a non-trivial application. Teachers should remind candidates to carefully document each mastery item included in the dossiers.
- Teachers' attendance at IB workshops is highly recommended for all teachers, especially novice ones.

## Higher level paper one

### Component grade boundaries

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 13	14 - 27	28 - 44	45 - 53	54 - 63	64 - 72	73 - 100

### General comments

The quality of the candidates was extremely high – there were few poor students.

### The strengths and weaknesses of the candidates in the treatment of individual questions

**Section A** provided a good coverage of the SL/HL syllabus, and the students seemed to have covered the syllabus well.

#### Section B

##### Qu.12 Systems Analysis

Many of the system flowcharts gained full marks, which is unusual. Students have, in the past, confused system flowcharts with program flowcharts.

##### Qu.13 Algorithm

Good traces were produced, many using the correct format for recursive algorithms. Difficulties with defining local variables.

##### Qu.14 Logic Circuits

This was rather an easy question and many full marks were gained.

##### Qu. 15 Processor

Straightforward question. Not all *explained* in part (a). they *described*.

##### Qu. 16 Stacks

Good question – answered well.

## Higher level paper two

### Component grade boundaries

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 14	15 - 28	29 - 41	42 - 50	51 - 59	60 - 68	69 - 100

### General comments

As indicated above, the few students taking HL were particularly good this session, and generally dealt well with the 2 algorithm questions.

## **The strengths and weaknesses of the candidates in the treatment of individual questions**

**Qu. 3** the Case Study, was answered reasonably well.

### **Standard level**

The number of candidates remains at the 2005 level.

As always, the few candidates from Australia did reasonably well, but overall the standard is not particular high. Few of the schools seem to have completed the syllabus and even fewer seem to be competent when dealing with algorithms.

There was a translation problem in the Case Study Question. The word *driver* was translated as *controlador* (controller), when it should have been left as the same word, as it was in the Spanish translation of the Case Study (many technical words remain the same in Spanish). The Spanish answers were therefore completely different but were marked accordingly, so no candidate was disadvantaged.

There was also an adjective missed out of another question in the Spanish translation.

### **Standard level paper one**

#### **Component grade boundaries**

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 12	13 - 24	25 - 29	30 - 35	36 - 40	41 - 46	47 - 70

#### **General comments**

The paper seemed to be well balanced, with good coverage of the syllabus.

## **The strengths and weaknesses of the candidates in the treatment of individual questions**

### **Section A**

There were many gaps in the students' knowledge

#### **Qu. 4 Data Structures**

Many candidates seem to confuse data structures with data types.

### **Section B**

#### **Qu. 13 Networks**

Students were comfortable with the different topologies being able to see these at first hand in their own school

Not all students compared the topologies as asked (they described them instead).

### Qu. 14 Algorithms

This turned out to be surprisingly difficult, with only half identifying the initial expression to be a Boolean one. Few were able to show how the use of parentheses would change the order of operation.

### Qu. 15 Systems Design

Quite well done. Again, the problem with the word compare.

Some interesting points in the discussion point – not all paid attention to the stem, which clearly referred to a *developing country*.

### Qu. 16 Graphics Files

Most candidates were able to answer at least part of this question, although perhaps more from their own experiences of their personal computer systems.

## Standard level paper two

### Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 11	12 - 23	24 - 29	30 - 35	36 - 41	42 - 47	48 - 70

### The strengths and weaknesses of the candidates in the treatment of individual questions

Qu 1(a) showed that students/schools are starting to get used to the Java / Object Oriented language, as quite a few were able to define the class *Relative*, but the general weakness in the treatment of algorithms was again shown in parts (d) and (e), where the candidates had to write algorithms.

#### Qu. 2

Students need to pay attention to the wording in the questions, as shown in the last 2 parts in which many students mis-read.

#### Qu. 3

The Case Study question was fine (apart from (b) – the driver / controlador problem).