

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the November 2004 question paper

9691 COMPUTING

9691/02

Paper 2 (Practical Tasks), maximum raw mark 60

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the November 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.



Grade thresholds taken for Syllabus 9691/02 (Computing) in the November 2004 examination.

	maximum mark available	minimum mark required for grade:		
		A	B	E
Component 2	60	56	52	39

The thresholds (minimum marks) for Grades C and D are normally set by dividing the mark range between the B and the E thresholds into three. For example, if the difference between the B and the E threshold is 24 marks, the C threshold is set 8 marks below the B threshold and the D threshold is set another 8 marks down. If dividing the interval by three results in a fraction of a mark, then the threshold is normally rounded down.

November 2004

A AND AS LEVEL

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 9691/02

COMPUTING
Paper 2 (Practical Tasks)



Page 1	Mark Scheme	Syllabus	Paper
	A AND AS LEVEL – NOVEMBER 2004	9691	2

- 1 (a) (i)** Customer ID – a unique field
 Numeric type
 Customer name to be able to write to the person
 Text/alphanumeric/string type
 Street address to hold the street part of the address
 Text/alphanumeric/string type
 Town to hold the name of the town
 Text/alphanumeric/string type
 Zip code for the post code
 Text/alphanumeric/string type
 Telephone number
 Text/alphanumeric/string type **Maximum 8 marks**
- (ii)** Customer ID **Maximum 1 mark**
- (b) (i)** Component ID - a unique field
 Numeric type
 Description - to know the component
 Text/character/string type
 Unit cost - used to create bills
 Currency type
 Number in stock - to see if order can be filled
 Integer type
 Supplier ID
 Numeric/text/character/string type **Maximum 6 marks**
- (ii)** Component ID **Maximum 1 mark**
- (c)** Customer table has at least 20 entries
 All CustomerIDs are different
 Component table has at least 15 entries
 Every ComponentID is different
 CustComp table has at least one component for each customer
 CustComp table has at least one customer for each component
 There is at least one customer that has ordered more than one component
 There is at least one component that has been ordered by more than one customer
 All CustomerIDs in CustComp table exist in Customer table
 All ComponentIDs in CustComp table exist in Component table **Maximum 7 marks**

Page 2	Mark Scheme	Syllabus	Paper
	A AND AS LEVEL – NOVEMBER 2004	9691	2

- (d) The user can only enter a valid Component ID
The report has a clear and meaningful heading
The report gives details of the Component
The report gives details of all the customers that bought the component together with the dates **Maximum 3 marks**
- (e) The user can only enter a valid Customer ID
The report has a clear and meaningful heading
The report gives details of the Customer
The report gives details of all the components that the customer has bought together with the dates **Maximum 3 marks**

Page 3	Mark Scheme	Syllabus	Paper
	A AND AS LEVEL – NOVEMBER 2004	9691	2

2

Top	P	S(1)	S(2)	Output
1		1		
	1			
0				email
1		2		
	3			a
2			7	
	0			
	7			
1				communicating
	0			
	2			
0				is
1		4		
	0			
	4			
0				quick
1		5		
	6			of
	0			
	5			
0				way
	0			

Give ½ mark per row, after the first two, in the table.

Round the total up to the nearest whole number

Maximum 10 marks

Page 4	Mark Scheme	Syllabus	Paper
	A AND AS LEVEL – NOVEMBER 2004	9691	2

- 3 (a) It is possible to enter any of the ten digits 0 to 9
It is possible to enter a decimal point
It is possible to enter any of the operations +, -, x, /
It is possible to enter an = sign
It is possible to clear the contents of the display and set it to zero
There is a display for the results
It is possible to turn the calculator on/off **Maximum 5 marks**
- (b) (i) *For annotation of code give:*
2 marks if it is fully annotated
1 mark for some annotation
0 marks if there is no annotation or very little
- For the code give 1 mark each to a maximum of 3:*
user can enter positive numbers
user can enter negative numbers
system accepts integer and decimal fractions
user can correctly add and subtract numbers
user can correctly multiply and divide numbers
user can clear display
result is correct when = sign is entered **Maximum 5 marks**
- (ii) *Table shows testing:*
addition of two positive numbers
addition of one positive and one negative number
addition of two negative numbers
subtraction of two positive numbers
subtraction of one positive and one negative number
subtraction of two negative numbers
multiplication of two positive numbers
multiplication of one positive and one negative number
multiplication of two negative numbers
division of two positive numbers
division of one positive and one negative number
division of two negative numbers
choosing the = sign
choosing the clear operation **Maximum 6 marks**

Page 5	Mark Scheme	Syllabus	Paper
	A AND AS LEVEL – NOVEMBER 2004	9691	2

(iii) Give 1 mark for each of the following tests, providing they show the data entered and the result:

addition of two positive numbers

addition of one positive and one negative number

addition of two negative numbers

subtraction of two positive numbers

subtraction of one positive and one negative number

subtraction of two negative numbers

multiplication of two positive numbers

multiplication of one positive and one negative number

multiplication of two negative numbers

division of two positive numbers

division of one positive and one negative number

division of two negative numbers

choosing the = sign

choosing the clear operation

Maximum 5 Marks

Total (max 60)