
APPLIED INFORMATION & COMMUNICATION TECHNOLOGY

9713/04

Paper 4 Practical Test B

May/June 2016

MARK SCHEME

Maximum Mark: 90

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2016 series for most Cambridge IGCSE[®], Cambridge International A and AS Level components and some Cambridge O Level components.

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| | | | Mark | |
|----------------------------------|--|--|------|-----------|
| Task 1: Calculate Profits | Profit Values printout | Correct values for component profit displayed | 1 | |
| | | Printed on single page. Data and labels all visible. Alignment fit for purpose | 1 | |
| | Component profit Value printout | Correct order-items component_profit values displayed | 1 | |
| | | Print area set as specified | 1 | |
| | | Printed on single page. Data and labels all visible. Alignment fit for purpose | 1 | |
| | Profit per order Values printout | Correct profit per order values displayed | 1 | |
| | | Printed on single page. Data and labels all visible. Alignment fit for purpose | 1 | |
| | All values printouts | All currency values (seen) consistent to 2 dp | 1 | |
| | | 3 cm logo shown on all printouts. Not overlapping data | 1 | |
| | | Candidate details displayed in all headers | 1 | |
| | Components Profit formulae | Correct Profit calculation (sales price–cost price) | 1 | |
| | | Valid replication shown | 1 | |
| | Order-items Component profit formula printout | Efficient/Effective Lookup formula used (e.g. INDEX & MATCH/VLOOKUP) | 1 | |
| | | INDEX(array), VLOOKUP(lookup_value, table_array,) | 1 | |
| | | MATCH(lookup_value, lookup_array), VLOOKUP(...column_index) | 1 | |
| | | match_type (FALSE) | 1 | |
| | | Lookups return value * Quantity | 1 | |
| | | Valid replication shown | 1 | |
| | Orders Profit per prder formula printout | SUMIF or SUMIFS formulae used | 1 | |
| | | Correct Criteria | 1 | |
| | | Correct Criteria_range | 1 | |
| | | Correct Sum_range | 1 | |
| | | Valid replication shown | 1 | |
| | All formulae printouts | All formula printouts – single page wide, data and labels all visible. Alignment is fit for purpose | 1 | |
| | | | | 25 |

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| Task 2: Create a relational database | Orders table | orders table Primary Key | order_number | Number | 1 | |
| | | orders table fields | order_date & date_required | 2 × Date format | 1 | |
| | | orders table field | dispatched | Boolean | 1 | |
| | | orders table field | profit per order | Currency | 1 | |
| | Components table | components table Primary key | component_number | Number | 1 | |
| | | components table fields | cost_price, sales_price, profit | 3 × Currency | 1 | |
| | order_items | order items table field | component profit | Currency | 1 | |
| | Customers table | customer table Primary key | customer_number | Number | 1 | |
| | | customer table field | mailing list | Boolean | 1 | |
| | | customer table field | account | Boolean | 1 | |
| | Correct import | All 4.csv files are imported (with correct fields) | | | | 1 |
| | | ...as individual tables | | | | 1 |
| | Relationships | customers table to orders table (one to many on <i>customer_number</i>) | | | | 1 |
| | | orders table to order_items table (one to many on <i>order_number</i>) | | | | 1 |
| | | order_items table to components table (one to many on <i>component_number</i>) | | | | 1 |
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| Task 3: Print a report of overdue orders | Days Overdue query | Query/selection method is shown | 1 |
| | | The Order table (<i>only</i>) is used in the query | 1 |
| | | order_number, order_date, date-required, dispatched fields (<i>only</i>) are present | 1 |
| | | The dispatched field criterion is set to False/No | 1 |
| | | A Days_Overdue field is added | 1 |
| | | A valid Overdue formula is used (e.g. <i>Datediff("d", [date_required], Now()) - Date() - [date_required]</i>) | 1 |
| | | A valid Overdue criterion is set (e.g. <i>Days Overdue > 0 or date_required < Date()</i>) | 1 |
| | Days Overdue report | A report is created with the correct 5 fields displayed | 1 |
| | | The correct orders are displayed (only) The data and labels are all visible. The alignment is fit for purpose | 1 |
| | | The orders are displayed with the most recent order_date first | 1 |
| | | The correct values for Days_Overdue are displayed | 1 |
| | | The average value for Days_Overdue is correctly calculated and displayed in the footer | 1 |
| | | The average value is displayed as an integer with an explanatory label | 1 |
| | | A suitable title is entered and the logo is displayed (top right) at the correct size | 1 |
| | | The report is printed with candidate details in the report footer | 1 |
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| Task 4: Print an invoice for a selected order number | Invoice query | Evidence of efficient selection method is shown | 1 |
| | | The correct criterion is set on the order_number field | 1 |
| | | A parameter value is added to select order_number (or use of Forms!) | 1 |
| | | The parameter value has a suitable prompt or a suitable Forms label is displayed | 1 |
| | Invoice report | The report for order number 10 is printed | 1 |
| | | The correct customer and order data (plus labels) are displayed (as a group) | 1 |
| | | The correct component field labels are shown | 1 |
| | | Only the correct 5 components are displayed and all the data is correct | 1 |
| | | The layout of report is fit for purpose. The data and labels are all visible | 1 |
| | | The order total is displayed below the data with a suitable label | 1 |
| | | The order total is correctly calculated | 1 |
| | | The order total is formatted as currency and set to 2 dp | 1 |
| | | A suitable title and the order number, (shown as a field) are displayed in the header. The logo is displayed at the correct size on the right in the header | 1 |
| | | The report fits on a single page wide | 1 |
| | | Candidate details are displayed in the report header | 1 |
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| Task 5: Mail merge letters to selected recipients with customised text | Mail merge recipients selection | The method used to select recipients is shown | 1 |
| | | An efficient, non-manual method of selection is used | 1 |
| | | The required fields are present | 1 |
| | | The mailing_list criterion is set to 'True' | 1 |
| | | The number of (different) <i>components</i> is counted | 1 |
| | | The count of component criterion is set to >=4 | 1 |
| | Merge document (data can be from dbase or spreadsheet) | The date is displayed as a field | 1 |
| | | The customer_forename mergefield is displayed | 1 |
| | | The customer_surname mergefield is displayed | 1 |
| | | The forename and surname are displayed on the same line with the correct spacing | 1 |
| | | The CountOf component_number/name (<i>or evidence of equivalent</i>) mergefield is displayed | 1 |
| | | ...with the correct spacing | 1 |
| | | Evidence is seen that a single conditional mergefield is used to display the correct discount | 1 |
| | | The correct conditional merge criterion is seen (account = True) | 1 |
| | ...the correct conditional text options are seen | 1 | |
| | Merged letters | The Logo is inserted in the top right of the header at the correct size | 1 |
| | | Letters to Joy Lu, Malcolm Jones, Pascal Emilie (only) are printed | 1 |
| | | The correct number of orders are displayed for the correct 3 recipients | 1 |
| | | The correct discounts are displayed for the correct 3 recipients | 1 |
| The letters are proofed and fit for purpose with correct punctuation | | 1 | |
| | | | 20 |

Total **90**