

### **General Certificate of Education**

## Computing 5511/6511

CPT3 Practical Systems Development

# Mark Scheme

#### 2005 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

#### **Instructions to examiners**

The following forms of notation should be used on candidates' scripts:

- Ticks To indicate what is accepted as correct or creditworthy, placed in the body of the answer, and on diagrams;
- Underscoring To identify errors/irrelevance in written answers;
- Crosses to indicate a wrong answer;
- Very brief comments placed in at suitable points in the body of the text to amplify the marking;
- BOD means benefit of the doubt and is used where the candidate's answer has been given a mark on the balance of probabilities that the candidate's answer has met the requirements of the mark scheme even though it could be interpreted differently;
- NE means not enough and is applied to an answer that falls short of what is required; NB if NE is given for evidence then the dependent marks can be awarded
- O/S means outside the mark scheme. The candidate's answer is creditworthy but the answer does not match any of the answers on the mark scheme for the particular question. Nevertheless a mark is awarded;
- C/F means carried forward. This arises when a candidate offers an answer, which is not creditworthy in one question but is creditworthy in a later question. The mark is carried forward to the question, which is creditworthy;
- C/B means carried back. This is similar to a carry forward but the mark is carried back to an earlier question.
- T/O means talked out. The candidate's answer is contradictory.
- F/T means followed through. If the candidate made a mistake in the earlier part of an answer, mark the answer using the correct method on their answer from the earlier part.
- P1 means penalise once, if the candidate makes the same mistake more than once, only one mark may be taken off in certain questions.

The following notation is used in the mark scheme

- ; means a single mark;
- //- means alternative response;
- / alternative word or phrase;
- A means acceptable creditworthy answer;
- R means reject answer as not creditworthy;
- I means ignore;
- \* means the marks are dependent upon the reference to evidence.

1.	(a)	(i) (ii)	<ul> <li>turkey number</li> <li>Page reference for number;</li> <li>set as primary key/auto-number/set to no duplicates/code checks</li> <li>A Terry checks ;</li> </ul>	1 1*
	(b)		Page reference of allocation of order number A Design with reference to order number;	1
	(c)	(i)	Page reference for turkey order; Record/order record;	1 1*
	(d)	(i)	Data type: text/string/alpha/char; why: leading zeros/no calcs required/other characters other solns possible ALLOW well argued response;	2
		(ii)	<ul> <li>Data type: real/fixed point/float/floating point/single/decimal;</li> <li>A double</li> <li>A integer/long integer if candidate mentions grams</li> </ul>	
			<ul><li>Why: need decimal part/has fractional part/ not a whole number;</li><li>A whole numbers/integers are sufficiently accurate if using grams</li></ul>	2
			Total	9
2.	(a)	(i)	Page reference for coding/SQL/QBE/Report/table/macro;	1
		(ii)	Use of query/report/ loop to produce; Hard copy of list/report containing; Heading; Extract from each record; Customer Name and order number//relevant details; A relevant information;	3*
	(b)	(i)	Sorted/ordered by customer surname/order number; Page reference for hard copy of turkey list;	max 1
		(ii)	Use of query/report/ loop to produce <i>if not mentioned in (a)</i> ; List/report containing <i>if not mentioned in (a)</i> ; Turkey number and weight; Customer name and order id; sorted/ordered (by weight);	2* max
	(c)	(i)	Page reference for coding/SQL/QBE for final total;	1
		(ii)	£2.50 preparation per turkey; Cost per kilo x weight for each bird; Applying a discount where necessary; Look for each invoice; Use total for each invoice; Method for adding up all elements e.g. keep running total;	4 max
			include for usering up un elements e.g. Reep fulling total,	шал

			Output final tatal	
			Output final total; Other relevant details e.g. initialise, production of final total;	
	(d)	(i)	Page reference for cancelled order//coding/ QBE to cancel order;	1
		(ii)	identification of order; field to indicate if current or cancelled; marking as cancelled/delete record; putting turkeys back as available;	3 max
			Τα	otal 16
3.	(a)	(i)	count turkeys per customer /record count/set no. of spaces; validation rule // message//only space for 5// locked out ;	2
		(ii)	Page reference for test/ code;	1
	(b)	(i)	validation rule (on turkey required weight)/ combo box/list box/spinner >(=)5 and <(=)10 /list of weights 5, 5.5 10;	; 2
		(ii)	test data 10 kg and above//N/A if Combo box// only correct choices available;	1
		(iii)	Page reference for test;	1
		(iv)	test data 5 kg or less must be $> 0 / N/A$ if combo box// only correct	
			choices available;	1
		(v)	Page reference for test;	1
			Τα	otal 9
4.	(a)	(i)	Page reference for hard copy no discount; R- more than one customer on one page;	1
		(ii)	Page reference for hard copy with discount (penalise once); R- more than one customer on one page;	1
		(iii)	compare weights; if difference greater than 1 kilo; then deduct 5% from turkey bought weight; else do nothing;	3* max
	(b)	(i)	Criterion 1 for good design;	1*

			Method of achieving this; Criterion 2 for good design; Method of achieving this; e.g. spacing of information; clear font/appropriate font size; clear layout; specific contents as specified in brief; other if appropriate;		1* 1* 1*
		(ii)	Page reference design criterion 1; Page reference design criterion 2;		1 1
				Total	11
5.	(a)		relationship one customer to many turkeys;		1
	(b)		observation/interview/ document search/ survey or questionnaire; how appropriate to turkey case study; e.g. study of matching process/to find out what Terry's requirements are/ etc;		2
	(c)		Address//e-mail address; to use in mail merge//set up e-mail group; to send same/standard letter to all customers//send one e-mail to all/many customers;		3
				Total	6
6.	(a)		The Data Protection Act;		1
	(b)		Needs to be kept secure; And processed fairly and lawfully; Held for specified and lawful purpose; Data held should be adequate and relevant not excessive; Data kept should be accurate and up to date Not kept for longer than necessary; Individuals have right to see a copy and if appropriate change/erase the data; Should not be sent to another country that has less stringent data protection laws;		3
	(c)		Description of security process: e.g. password protection/ <u>regular</u> backup/UPS; R - Firewall Expansion/Explanation: e.g. password changed regularly/ backups kept in fireproof safe;		max 2

7.	(a)	Procedure/subroutine/form/event; allows entry of new values; in a variable/field; for price per kilo;		4
	(b)	Identification of orders with no of turkeys >5; Removal of preparation charge per turkey; Addition of fixed cost		3
	(c)	Orders of 5 turkeys pay over £10 prep		1
			Total	8
			Grand Total	65