



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme January 2004

GCE

Computing

Unit CPT2

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Computing: Unit CPT2

The following notation is used in the mark scheme

- ; - means a single mark;
- / - means alternative word or subphrase;
- // - means alternative answer
- A – means acceptable creditworthy answer;
- R – means reject answer as not creditworthy;
- I – means ignore.

1. (a) Yes: can search a database of customers for those who would be interested in this offer;
mail merge will fill in personal details automatically;
- (b) Yes: e-mail can be picked up anywhere;
Yes: time zone differences not relevant;
Compared with phone /mail better in some specified way;
- (c) No: presentation package would enable ‘slides’ and hand-outs
- 1 mark for a reasoned decision to max 3*
Conclusion must be clear for mark
Can disagree with given responses if well justified 3
- Total 3**

2.	(a)	A directory is a list of file names, together with information; That enables a computer to retrieve those files from backing storage / access rights / file size / other valid;		
		OR		
		A node in a hierarchical file system; Which contains files or other directories;		
		A A folder which contains files; of a particular group;		
		<i>1 mark per point to maximum</i>		2
	(b)	(i) C:\Production\Bricks\hand-made.xls;		1
		(ii) They will have different pathnames; They will be in different directories;		1
	(c)	(i) All off-line storage all removable media; R devices / portable		1
		(ii) no longer needed on a regular basis; kept in case of queries; to free up on-line storage space; <i>1 mark for each of 2 points to max</i>		2
			Total	7
3.	(a)	10+30+25+200=265;	1	
		A 11+31+26+201=269 (Pascal);		
		265*100=26500;	1	
		A 26900;		
		correct working & wrong answer; (F/T)	1	
		correct answer & no answer;	1	
		to max		2
	(b)	ISBN;	1	
		<u>unique</u> identifier;	1	
		R unique to books		2
	(c)	Advantage: saves storage space;	1	
		A Memory		
		Disadvantage: processing more complicated / not so easy to access a particular record / field;	1	
		Can't re-use space from deleted record / difficult to update 'in situ';		2
			Total	6

4.	(a)	Unauthorised access to } computer programs or data; Unauthorised modification of } computer material; Unauthorised access with criminal intent; <i>1 mark for each to max</i> <i>Wording must be close</i>	2
	(b)	Guidelines / policy on choosing passwords which are not easily guessed; Keeping a log of all movements on confidential files; System should disable keyboard after 3 wrong passwords have been entered; Additional passwords should be required to access / alter important files; Encrypt sensitive files; CCTV used as a deterrent; Swipe / smart card for access; Biometric logon (A once); Some software only available on certain computers; <i>1 mark for each to max</i>	3
		Total	5
5.	(a)	Individual – not welcomed - intrusion of privacy; A Welcome – increased security;	1
	(b)	Corporation – not welcomed - fear of lack of privacy / ‘industrial spying’;	1
	(c)	Government - welcomed - help in detecting terrorist / paedophiliac / drug activity;	1
		<i>1 mark for each valid reason to max</i> <i>conclusion must be clear for the mark.</i>	
		Total	3

6. (a) (i) An attribute/field which uniquely identifies a record; 1
(ii) LecturerID; 1
(b) (i) A attribute/field in one table which is the primary key in another table; 1
(ii) LecturerID; 1
(c) To speed up searching / access; 1

Subject	Day	Name	PhoneNumber
Drawing	Tuesday	Mrs J Evans	01254566278
French	Tuesday	Mr K Stone	01254688192
Yoga	Thursday	Ms T Luvly	01254713489

*Only 3 correct records with correct field names
sorted
Time not shown*

1
1
1

Field	Name	Subject	Day	Time
Table	Lecturer	Class	Class	Class
Sort				
Show			✓	✓
Criteria	Mrs J Evans	Embroidery		

*All correct
Subtract 1 for each of the following errors to max 4*

4

Criterion Monday

Criterion 10.30

Mrs J Evans not used as criterion/ LecturerID 10245 instead of Name

Embroidery not used as criterion

Day field not included

Day not displayed

Time not Included

Time not displayed

Field name incorrectly spelt (penalise once with part d)

Tables not included

Total

12

7.	(a)	(i)	cells merged / text centered (across cells);	1
		(ii)	text wrapped; Embolden; Alignment/some right aligned;	1
	(b)	(i)	=F6/B13 R SUM()	1
		(ii)	number formatted to 2 dp / use decrease decimal button on toolbar; A Round, Trunc; R Rounded Up / Down;	1
	(c)		C18, C20	1
	(d)		<p>F5<=10000 criterion / condition / test / Boolean expression; if total miles this tax year is not greater than / less than or equal to 10000;</p> <p>It evaluates to True or False</p> <p>0 result if criterion true; all mileage paid @ 40p, / none at 25p;</p> <p>displays 0; A Prints 0;</p> <p>F5-10000 result if false; The excess over 10000 miles to be paid at 25p</p> <p>A formula incorrect . error in logic;</p> <p><i>1 mark for each correct purpose</i> <i>1 mark for each correct interpretation of expression</i> <i>Look for evidence of understanding process</i> to max</p>	6
			Total	11

8.	(a)	(i)	magnetic strip/ embedded chip / smart card / memory card / flash memory;	1
		(ii)	embedded photograph / biometric check, e.g. fingerprint;	1
		(iii)	Employee ID; Time; Clock in or out; A day , date , site; <i>1 mark for up to 3 fields</i>	3
		(iv)	DAT tape / mag disk;	1
	(b)		Open Employee file Open a new Employee file Read retiring employee's ID number; Copy employee file to new employee file until employee's record reached; Do not copy this record; Copy rest of file; Close both files. Replace Employees file; <i>Statements must be in logical place marks for points noted to max</i>	5
	(c)		Modem / D-A converter / digital link; R A-D converter	1
	(d)	(i)	Employees;	1
		(ii)	clock_week_number_n;	1
		(iii)	employee ID no. order; must be in same order as Master File;	2
	(e)		Process continues from beginning to end with no interaction between user and computer; Data entered off line; Processes (jobs) put in queue and processed in turn; Processing delayed until all data entered; Process controlled by instructions written in JCL; <i>1 mark per point to max</i>	2
			Total	18
			Grand Total	65