



General Certificate of Secondary Education

**Information and Communication
Technology 3528 Short Course**

Specification B

3528/H Higher Tier

Mark Scheme

2009 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.

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1	(a)	Any reasonable, for example The style of text has been changed to bold The font has been changed The text has been resized	2 marks
1	(b) (i)	This point word art Allow misspellings	1 mark
1	(b) (ii)	This point an autoshape Allow misspellings	1 mark
1	(c)	This point Avoid too much fussiness caused by overuse of the software features	1 mark
1	(d)	Any reasonable, for example Flash memory stick CD-RW; NOT CD, CD-ROM, etc. Must be rewritable DVD-RW; NOT DVD, etc. Must be rewritable NOT Hard disk	1 mark
1	(e) (i)	These points The new menu has a larger file size than the old menu	1 mark
1	(e) (ii)	Any reasonable, for example The new menu includes pictures and other graphics	1 mark
			Total 8 marks

2	(a)	This point Spreadsheet Allow named spreadsheets, e.g. Excel	1 mark
2	(b)	These points, max 1m B4, B5, B6, B7, B8 C4, C5, C6, C7, C8	1 mark
2	(c)	(i) B (=B6*C6)	1 mark
2	(c)	(ii) This point A (=SUM(D4:D8))	1 mark
2	(d)	(i) This point The decorator can rely on the software to do accurate calculations if it has been set up correctly	1 mark
2	(d)	(ii) Any reasonable The software can be reused for other clients saving the decorator time and effort The client can be given a neatly printed estimate	1 mark
2	(e)	(i) This point Laptop	1 mark
2	(e)	(ii) Any reasonable, for example Tablet, PDA, netbook, palmtop	1 mark
			Total 8 marks

3	(a)	Any reasonable, for example The key field must be unique Because it is the same as Wolf's	1 mark
3	(b)	Any reasonable, for example They were both born on the same day It doesn't matter if two dates of birth are the same as it's not the key field.	1 mark
3	(c)	(i) This point Baty	1 mark
3	(c)	(ii) Any reasonable, for example The month cannot be 13 as there are only 12 months in a year (date is shown as 13/13/1972)	1 mark
3	(c)	(iii) Any reasonable, for example Check what is written on the questionnaire against the screen, 1m NOT double key verification	1 mark
3	(c)	(iv) Any reasonable, for example $1 \leq MM \leq 12$ or $0 < MM < 13$ or valid combinations, 2m Mentions one of 0, 1 or 12, 13 as a limit, 1m	2 marks
Total			7 marks

4	(a)	(i)	This point The web page for Willow Cottage would be saved as hazelcottage.htm	1 mark
4	(a)	(ii)	This point Save As	1 mark
4	(b)		Any reasonable, for example Number of people If pets are welcome Start day or date of holiday Duration or departure date Price range Location Specific features of rooms, e.g. balcony, en suite Specific activities available, e.g. horse riding	3 marks
4	(c)		These points Within the Holidays folder there are at least two folders called something like Hotel, Bed & Breakfast, etc., 1m Within at least one of the folders for Hotel, etc. there is an Images folder, 1m Within the Holidays folder there are web pages all together and an Images folder, 1m Within the Holidays folder there are at least two folders called something like Hotel, Bed & Breakfast, etc. and at the same level there is an Images folder, 1m Accept different but meaningful names for the Images folder There is a folder for each unit of accommodation with the web page and associated pictures in it, 1m	2 marks

Total 7 marks

5	(a)	Any reasonable, for example You should not watch someone entering their password You should change your password frequently The password should include numbers and letters	1 mark
5	(b) (i)	Any reasonable, for example To prevent students maliciously deleting others' files To help prevent students copying each others' work You may have private files in your user area	1 mark
5	(b) (ii)	Any reasonable, for example To prevent students accessing inappropriate material, e.g. pornography To prevent students attempting to download music or software NOT a reason given elsewhere in 5b)	1 mark
5	(c)	Any reasonable, for example Reason: Students attempting to download files, 1m + Solution: Block the downloads, 1m Reason: Some element of network hardware too slow/lacks capacity, 1m + Solution: Upgrade the hardware, 1m Reason: Firewalls and filtering, 1m + Solution: purchase dedicated hardware; educate users and remove some filters, 1m Allow: Reason: a large number of students using the network Solution: upgrade the network; have more than one LAN NOT Solution: stop students using the network	2 marks
5	(d)	These points. Correct topology (line/bus or star, not ring), including at least three networked computers and a file server (allow: CPU, main computer), 1m Networked hardware: e.g. printer or printer server, scanner, hub, wireless access point, etc., 1 each, max 2m Local hardware: printer, scanner, etc., 1 each, max 2m Connection to other networks, 1m	3 marks

Total 8 marks

6 (a) These points 2 marks

Label	
D	All in correct order, 2m Four in correct order, 1m
C	
E	
A	
B	

6 (b) These points 3 marks

E	1m	
F D	1m	
B		
C	1m	
A		

6 (c) (i) This point 1 mark

Systems Analysis and Design	B
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6 (c) (ii) This point 1 mark

Testing	A
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Total 7 marks

7	(a)	This point Magnetic stripe	1 mark
7	(b) (i)	This point Absent pupils gave their identification cards to other pupils who registered for them	1 mark
7	(b) (ii)	Any reasonable, for example Some pupils are present in school but not in class as they are rehearsing for a school play Some pupils registered using their identification cards then went home	1 mark
7	(c)	These points The ICT system automatically contacts parents or carers to let them know if their children are absent A record of a pupil's attendance is kept on the ICT system	2 marks
7	(d)	Any reasonable, for example Enable pupils to buy food in the school cafeteria instead of using cash Produce reports showing what pupils eat in the cafeteria Allow pupils to travel on the school bus without using cash Provide pupils with proof of their age Produce individual attendance reports Use biometrics to register pupils Remind pupils of their timetable for the day Access control, e.g. to rooms or computers Report pupils' whereabouts in school	2 marks

Total 7 marks

8	<p>Any reasonable way, for example, 1m each</p> <ul style="list-style-type: none"> NOT identification cards Use of bank/credit card or similar Use of public services recorded Video of individuals, e.g. CCTV or monitoring using webcams Tracking vehicles, e.g. speed cameras, congestion charging Mobile phone tracking Tagging of prisoners IP address NOT email, social networking sites, chip every citizen <p>Any reasonable advantage, for example, 1m each</p> <ul style="list-style-type: none"> Allow advantages related to having an ID card, e.g. to prove who they are. Only one card needed instead of several bank and credit cards Entitlement to use health and welfare services is quickly determined Those committing crimes video recorded and more likely to be convicted Motorists less likely to speed Congestion charging collected automatically Parents/police can find lost children A prisoner can get used to living at home again before being released There is a shortage of accommodation in prisons and tagging allows prisoners to be released early which frees up accommodation <p>Any reasonable disadvantage, for example, 1m each</p> <ul style="list-style-type: none"> Allow disadvantages related to having an ID card Must carry identity card all the time Punishment if they don't have the ID card May have to pay for a replacement card Lack of privacy Legal citizens exploited by those outside the system, for example, <ul style="list-style-type: none"> No restraint on speeding for motorists in stolen cars No congestion charging for motorists in stolen cars Children under constant surveillance If the tag is removed, etc., the computer will not know the whereabouts of the criminal 	8 marks
		Total 8 marks