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AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Secondary Education

Information and Communication Technology 3522 Full Course

Specification B

3522/F   Foundation 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.

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.

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1	(a)		These points The style of text has been changed to bold The font has been changed The text has been resized	3 marks
1	(b)	(i)	This point word art Allow misspellings	1 mark
1	(b)	(ii)	This point an autoshape Allow misspellings	1 mark
1	(b)	(iii)	This point clip art Allow misspellings	1 mark
1	(c)		These points Avoid too much fussiness caused by overuse of the software features Make use of the features of the software to make the menu more interesting The font should be easy to read	3 marks
1	(d)	(i)	These points Hard disk Flash memory stick DVD-RW	3 marks
1	(d)	(ii)	This point .doc	1 mark
1	(d)	(iii)	These points The new menu has a larger file size than the old menu The new menu loads more slowly than the old menu	2 marks

Total 15 marks

2	(a)		This point	1 mark
			Spreadsheet	
2	(b)		These points	2 marks
			4 paint brushes are needed at a cost of £5.50 each	
			3 cans of gloss paint are needed at a cost of £10.00 each	
2	(c)	(i)	These points, max 1m	1 mark
			A1, allow B1 and C1	
			A3, B3, C3, D3	
			A4, A5, A7, A8	
			C10, allow A10 and B10	
			NOT A6	
2	(c)	(ii)	These points, max 1m	1 mark
			B4, B5, B6, B7, B8	
			C4, C5, C6, C7, C8	
2	(d)	(i)	B (=B6*C6)	1 mark
2	(d)	(ii)	This point	1 mark
			A (=SUM(D4:D8))	
2	(e)		These points	3 marks
			The decorator can rely on the software to do accurate calculations if it has been set up correctly	
			The software can be reused for other clients saving the decorator time and effort	
			The client can be given a neatly printed estimate	
2	(f)		These points	2 marks
			Tablet	
			Laptop	
2	(g)	(i)	These points	2 marks
			A (touch screen), C (touch pad), D(scanner), max 2m	
2	(g)	(ii)	This point	1 mark
			G (printer), A (touch screen), max 1m	

Total 15 marks

3	(a)		This point 6	1 mark
3	(b)		This point 5	1 mark
3	(c)	(i)	Any reasonable, for example The key field must be unique Because it is the same as Wolf's	1 mark
3	(c)	(ii)	These points The database should generate the Patient Numbers The database should automatically check that the Patient Numbers are correct	2 marks
3	(d)		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	(e)	(i)	This point Gender	1 mark
3	(e)	(ii)	These points It is faster to enter the data Less space is needed to store the data on backing storage	2 marks
3	(e)	(iii)	These points The code is easy to understand and easy to remember The length of the code is much shorter than the original data	2 marks
3	(f)	(i)	This point Baty	1 mark
3	(f)	(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	(f)	(iii)	Any reasonable, for example $1<=MM<=12$ or $0<MM<13$ or valid combinations, 2m Mentions one of 0, 1 or 12, 13 as a limit, 1m	2 marks
			Total	15 marks

4	(a)	(i)	This point Tahoma – must be in correct position and spelt correctly	1 mark
4	(a)	(ii)	These points Edited html: Willow Cottage Correct syntax, 2m Deduct 1m per error but allow misspelling of Willow Cottage	2 marks
4	(a)	(iii)	These points Edited html: <title>Willow Cottage</title> Correct syntax, 2m Deduct 1m per error but allow misspelling of Willow Cottage	2 marks
4	(a)	(iv)	These points Number of line to be edited: 13 Edited html:<img src="willowcottage.jpg"> Correct line number, 1m Correct syntax, 2m Deduct 1 mark per error. Allow imgsrc, willow cottage.jpg DO NOT allow misspellings of willowcottage.jpg	3 marks
4	(b)	(i)	This point The web page for Willow Cottage would be saved as hazelcottage.htm	1 mark
4	(b)	(ii)	This point Save As	1 mark
4	(c)		These points Number of people If pets are welcome Date of holiday	3 marks
4	(d)	(i)	This point C:\Holidays\Self-Catering\willowcottage.htm	1 mark
4	(d)	(ii)	This point C:\Holidays\Self-Catering\Images\willowcottage.jpg	1 mark

Total 15 marks

5	(a)		These points. You should not watch someone entering their password You should change your password frequently You should keep your password secret	3 marks
5	(b)		You cannot have the same username as someone else You can have the same password as someone else You can change your own password	3 marks
5	(c)	(i)	This point A, current	1 mark
5	(c)	(ii)	This point E, new	1 mark
5	(c)	(iii)	This point E, new	1 mark
5	(d)	(i)	Any reasonable, for example Many students downloading music slows down the network Students are at school in order to be educated not so they can download music NOT It's illegal unless you pay for it	1 mark
5	(d)	(ii)	Any reasonable, for example Downloaded software may contain viruses Installing the software may cause the network to malfunction To stop pupils downloading software which is not relevant to their education NOT a reason given elsewhere in 5d)	1 mark
5	(d)	(iii)	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 NOT a reason given elsewhere in 5d)	1 mark
5	(d)	(iv)	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 5d)	1 mark
5	(e)		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 NOT Solution: stop students using the network	2 marks

Total 15 marks

6	(a)		These points	3 marks
			The cost of running an ICT system is cheaper than using the current manual system	
			Information on the availability of parking spaces can be displayed automatically	
			All the car parks ParkSafely own are run in very similar ways	

6	(b)		These points	3 marks
			Interview car park workers to find out if there are any problems with the current way in which the car parks are managed	
			Estimate the cost of new software and hardware	
			Briefly describe what the proposed ICT system could be used for	

6 (c)   These points   2 marks

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

6 (d)   These points   3 marks

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

6 (e) (i)   This point   1 mark

Systems Analysis and Design	B

6 (e) (ii)   This point   1 mark

Documentation	E

6 (e) (iii)   This point   1 mark

Testing	A

6 (e) (iv)   This point   1 mark

Monitoring	D

Total   15 marks

7	(a)		These points Bar code Magnetic stripe		2 marks
7	(b)		These points Absent pupils gave their identification cards to other pupils who registered for them Some pupils registered using their identification cards then went home Some pupils are present in school but not in class as they are rehearsing for a school play		3 marks
7	(c)	(i)	These points Ensure pupils can only enter and leave school through turnstiles which are operated using their identification cards Have only one entrance to the school Teachers should closely supervise pupils who are registering using their identification cards		3 marks
7	(c)	(ii)	Any reasonable, for example It could take too long to do at the start of the lesson or at other times and disrupt teaching and learning It's too unreliable, for example, some pupils may not do it and are marked absent when they are present It might be too expensive to put this technology in every classroom		1 mark
7	(d)		These points The ICT system automatically contacts parents or carers to let them know if their children are absent A picture of the pupil is printed on the identification card so that teachers can check it belongs to the pupil using it A record of a pupil's attendance is kept on the ICT system		3 marks
7	(e)		These points Enable pupils to buy food in the school cafeteria instead of using cash Allow pupils to travel on the school bus without using cash Provide pupils with proof of their age		3 marks

Total 15 marks

8	(a)	(i)	These points There is a shortage of accommodation in prisons The police can spend more time on other tasks A criminal can get used to living at home again before their prison sentence is complete	3 marks
8	(a)	(ii)	These points If the tag is removed, the police computer will not know the location of the criminal If the tag is out of range of the wireless network, the police computer will not know its location If the Wide Area Network (WAN) crashes, the police computer will not know the location of the tag	3 marks
8	(b)	(i)	Any reasonable, for example If the dog is lost, the chip can be scanned, the owner identified and the dog returned to its owner	1 mark
8	(b)	(ii)	Any reasonable, for example Can return dogs to their owners Can identify dogs causing damage and charge costs. NOT a reason given in 8b)i.	1 mark
8	(c)	(i)	Any reasonable, for example Can access food and shelter if farmer uses access control programme Improved health care because the vet can access the medical record for a specific animal NOT if the animal escapes it can be returned to the correct owner without a reason, e.g. so the animal can access food or water	1 mark
8	(c)	(ii)	Any reasonable, for example Can monitor animal's food intake, weight, age, etc. If animal is lost it is returned more quickly NOT a reason given in 8c)i.	1 mark
8	(d)		Any reasonable, for example Use of a credit card Speed cameras Use of a mobile phone IP address NOT tagging, email, social networking site, chip every citizen	3 marks
8	(e)	(i)	Any reasonable, for example To prove who they are Entitlement to use health and welfare services is quickly determined Only one card needed instead of several bank and credit cards	1 mark
8	(e)	(ii)	Any reasonable, for example Lack of privacy as location can be tracked. Must carry identity card all the time. Punished if don't carry an ID card May have to pay for a replacement if lost	1 mark

Total 15 marks