2010 Computing Studies

Standard Grade – Credit

Finalised Marking Instructions

Part One: General Marking Principles for Computing Studies Standard Grade - Credit

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.

(a) Marks for each candidate response must <u>always</u> be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question.

(b) Marking should always be positive i.e., marks should be awarded for what is correct and not deducted for errors or omissions.

(c) If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor. You can do this by posting a question on the Marking Team forum or by e-mailing/phoning the e-marker Helpline. Alternatively, you can refer the issue directly to your Team Leader by checking the 'PA Referral' box on the marking screen.

(d) Award **one** mark for each 'bullet' point where stated in the marking instructions.

(e) On the MFI system, if a candidate has not answered or attempted a question a dash '-' must be placed in the mark column instead of a zero '0'.

(f) When converting from Gigabytes/Megabytes/Kilobytes to bytes, '1024' is the only unit acceptable, e.g. 1024 bytes = 1 Kilobyte, 1024 Kilobytes = 1 Megabyte, 1024 Megabytes = 1 Gigabyte.

(g) No piece of work should be ignored without careful checking. Candidates may have scored out an answer then written the correct answer at the back of the question paper. Make sure that every page is checked.

(h) If the first answer has been scored out, but still readable, *and not replaced by another answer*, the question should be marked in the normal way. If you feel that a candidate has been disadvantaged by this action, make it a 'PA Referral'.

(i) On the MFI system, if you come across a paper which is blank, scroll down to the end of the paper in-case the answers have been written on a separate piece of paper which will be scanned and added to the end of the on-screen paper.

(j) Any references to trade names or commercial products, e.g. "Microsoft", "MSN", etc.. should be ignored, and then the rest of the answer should be marked. For example, if you received an answer "Microsoft Spreadsheet" then "Microsoft" would be ignored and "Spreadsheet" accepted, but "Microsoft Excel" would be ignored"

Part Two: Marking Instructions for each Question

Question			Expected Answer/s	Max Mark	Additional Guidance
1	a	i	Locking a cell / putting a password on a cell	1	Accept cannot change data/ contents.
1	a	ii	Any cell containing a formula e.g. D7 to D12, D14 to D16	1	Accept B3 - the invoice number.
1	b		D8:D12 D8 to D12 D8 → D12 D8 … D12	1	D8———— D12 ok D8 – D12 NOT ok.
1	c		**Type of referencing:** Relative [1] **Reason:** The cell references have to change [1] when the formula is replicated down through the different rows	2	May have wrong type but correct reason. Award 1 mark.
1	d		1 mark for each correct part of the function… [1] [1] [1] = IF (D14 > 100 , 0.1 * D14 , <u>0</u>) **OR** = IF(D14 <= 100 , <u>0</u> , 0.1 * D14) Note: 0 is the <u>only acceptable</u> answer.	3	Accept D14 * 0.1 **OR** D14/10 **OR** D14 * 10/100 **NOT** D14 * 10%.
1	e		= D14 – D15 (brackets allowed).	1	No other answer.
2	a		Any **two** from: • Remove headers/footers • change margins • change font • change font size • change font style • reducing line spacing.	2	**NOT reduce amount of text.**
2	b	i	Block/group/menu/section of buttons/icons.	1	No other answer.
2	b	ii	Saves time as she (**one** from :) • doesn't have to go through a lot of menus • doesn't have to take her hands off the keyboard • doesn't have to use mouse.	1	No other answer.

Question			Expected Answer/s	Max Mark	Additional Guidance
2	c		A piece of text which appears at the bottom [1] of every page[1].	2	Accept foot/end of every/each page.
2	d		An attachment.	1	No other answer.
2	e		Any **one** from: • non-standard file format • saved in a different file format • don't have the same program (software) • may have been encrypted.	1	Accept incompatibility issues, e.g. newer package.
3	a		Any **two** from: • use of emails • company Intranet • multi User Databases • centralised Storage.	2	No other answer.
3	b		**Similarity:** similarity between HCIs / ability to transfer information. **Difference:** Integrated packages - scaled down versions as opposed to full featured packages.	2	No other answer.
3	c		Any **two** from: • contrasting/changing colours/backgrounds • larger icons • increase font size • decrease/change resolution • change mouse pointer/space/size • description of voice recognition/output.	2	**NOT increase resolution.**
3	d	i	(Back)strain / neck-ache or RSI or headaches or poor circulation.	1	No other answer.
3	d	ii	Options include: • adjustable chairs • wrist rests • anti glare screens • regular breaks • angle/distance of keyboards/monitors • voice input.	1	**NOT a 'better/suitable' chair.**

Question			Expected Answer/s	Max Mark	Additional Guidance
4	a	i	Any **one** from: • track pad • touchpad • webcam • stick pointer • microphone.	1	No other answer.
4	a	ii	Thin Film Transistor.	1	No other answer.
4	a	iii	1 mark for each correct part of calculation …. 750 * 1024 [1] * 1024 [1] * 8 [1] = 6291456000 bits E.g. 750 * 1048576 [2] * 8 [1] 786432000 [2] * 8 [1].	3	If script shows <u>correct answer</u> without any working or 'strange' calculations – <u>award 3 marks</u>.
4	b		Digital to Analogue Converter.	1	No other answer.
4	c	i	Search Engine.	1	No other answer.
4	c	ii	Complex Search.	1	No other answer.
4	c	iii	"Drama Club(s)" - 1 mark, need quotes (") + Dundee / AND Dundee / Dundee / "Dundee" – 1 mark Note: Don't include Dundee in quotes around Drama Club e.g. Dundee "Drama Club" [2] "Dundee Drama Club"[1].	2	**Note: cannot just copy "Drama clubs in Dundee" straight from question [0 marks].**
4	d	i	Standard Letter.	1	No other answer.
4	d	ii	Mail Merge.	1	No other answer.
5	a	i	Control Language.	1	No other answer.
5	a	ii	It contains <u>specialised keywords</u> e.g. move, turn, forward, stop etc.	1	Accept examples of keywords/ instructions.
5	b		Easily updated, can be changed.	1	**Do NOT accept 'no viruses'.**

Question			Expected Answer/s	Max Mark	Additional Guidance
5	c		Any **two** from: • powerful processors • a large memory • programmed with an expert system • a variety of sensors • notion of vision systems • learns from mistakes / experience / adapts to situations.	2	Accept different examples/named sensors → a variety.
5	d		Any **two** from: • robots fitted with flashing lights / warning sirens, • sensors on robots to detect possible collisions, • padded bumpers.	2	**Do NOT accept ' fenced off area'.**
6	a		(see table below)	3	**Control unit – Do NOT accept 'controlling what happens'. Too vague.**
6	b		Each memory location has a unique [1] address/code [1], Concept of addressability.	2	No other answer.
6	c		ASCII (code).	1	No other answer.
6	d		Any **two** from: • Memory Management, • File Management, • Error Reporting, • Command Interpretation, • (Program) Scheduling, • Input/Output Control.	2	No other answer.
7	a	i	HTML.	1	No other answer.
7	a	ii	Browser.	1	No other answer.

Table for 6 a:

Component	Description
Control Unit	Manages the fetching and executing of instructions
Arithmetic & Logic Unit (ALU)	*Carries out calculations and makes simple comparisons*
Registers	Temporary storage locations

Question			Expected Answer/s	Max Mark	Additional Guidance
7	b	i	Guides them [1] through the process by getting them to answer a series of questions [1].	2	"Step by step" gives notion of guiding. The second mark is for the notion of interaction with the user providing information to the wizard.
7	b	ii	A ready made / pre-saved [1] blank document with the formatting already in place [1].	2	No other answer.
7	c		Added a Hyperlink / hotspot.	1	No other answer.
7	d	i	Any **one** from: • easier to read/compare information • keeping the layout organised (neater) • allowing you to split and merge cells in the table • easy to add extra rows and columns.	1	No other answer.
7	d	ii	Any **one** from: • the shape of the cursor will change as you move the mouse across the hotspot • pointer changes to a hand • get info as you move the mouse over the hotspot.	1	No other answer.
8	a	i	Any **one** from: • data is processed as it is being entered • data is processed straightaway/immediately • like a conversation / dialogue (between user & computer).	1	Accept a description of a situation where interactive processing is used. e.g. ATM machine … you enter card it replies etc.
8	a	ii	**Customer:** Any **one** from: • order processed quickly • receives books sooner • can be told if books are in/out of stock • can be told if price has changed • can be told when books will arrive • can be told about special deals • can be given suggested alternatives. **BookBliss:** Any **one** from: • can suggest alternatives if books are out of stock • easier to keep a high level of customer satisfaction • can deal with more customers (in a set time) • increase productivity • increase profits.	2	No other answer. No other answer.

Question			Expected Answer/s	Max Mark	Additional Guidance
8	**b**		**Backing Storage Medium:** Hard Disk - NOT hard <u>drive</u>. **Justification:** Any **one** from: • fast / random / direct access • large storage/memory (capacity).	**2**	No other answer.
8	**c**		Background Job/Task.	**1**	No other answer.
8	**d**		As the number is entered the computer calculates the check digit [1] and if it doesn't match the check digit an error message appears. [1]	**2**	1 mark for calculation 1 mark for idea of comparison.
8	**e**	**i & ii**	**Name of Job:** Programmer **Job Description:** **One** from: • designs • codes • tests • documents • debugs the software. **OR** **Name of Job:** Engineer **Job Description:** maintains OR repairs the computers **OR** **Name of Job:** Network Manager **Job Description:** **One** from: • responsible for all computers on the network • idea of supervisory role (network running smoothly) • decides each user's level of access • allocates user ids and passwords.	**2**	No other answer. No other answer. No other answer.
8	**f**		Data Protection Act.	**1**	No other answer.

[END OF MARKING INSTRUCTIONS]