



2013 Computing Studies

Standard Grade Foundation

Finalised Marking Instructions

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Part One: General Marking Principles for Computing Studies Standard Grade – Foundation

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 always 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 'NR' 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.

Question			Expected Answer/s	Max Mark	Additional Guidance
2	a		10	1 (PS)	
2	b	i	Engine Size	1 (PS)	
2	b	ii	Any one from: <ul style="list-style-type: none"> • Owner • Town • Make • Colour 	1 (PS)	
2	c		Any two from: <ul style="list-style-type: none"> • Owner • Address • Town • Postcode 	2 (PS)	
2	d	i	sort	1 (PS)	
2	d	ii	search	1 (PS)	
2	d	iii	search	1 (PS)	
2	e		Any two from: <ul style="list-style-type: none"> • Fast searching • Fast sorting • Paper easily lost/damaged • Less physical storage (paper/cabinets) • Can get multiple printouts • Can alter input/output format • Make backups • Easy to edit • Can do calculations quickly • Multiple access 	2 (KU)	

Question			Expected Answer/s	Max Mark	Additional Guidance
3	a		spreadsheet	1 (PS)	
3	b	i	column	1 (KU)	
3	b	ii	row	1 (KU)	
3	c	i	value	1 (PS)	
3	c	ii	formula	1 (PS)	
3	c	iii	text	1 (PS)	
3	d	i	centred	1 (PS)	Not "In the middle"
3	d	ii	italics	1 (PS)	
3	d	iii	bold	1 (PS)	
3	e			1 (PS)	
		= D2 * D7			
		= D2 + D3 + D4 + D5 + D6			
		= SUM (D2:D7)	✓		
		= D2/D7			

Question			Expected Answer/s	Max Mark	Additional Guidance												
4	a	i	Local Area Network <input checked="" type="checkbox"/>	1 (PS)													
4	a	ii	Any two from: <ul style="list-style-type: none"> • Sharing Peripherals • Share files • Email/Communication • Store files/data in centrally 	2 (KU)													
4	b	i	palmtop	1 (PS)													
	b	ii	laptop	1 (PS)													
	b	iii	desktop	1 (PS)													
4	c		Any two from: <ul style="list-style-type: none"> • No need to leave home • No travel expenses • Maybe cheaper • More selection • Compare prices • Stock levels shown • No need to queue • 24/7 	2 (KU)	Not quicker/easier/faster on its own Not quicker than going to shops												
4	d		Any two from: <ul style="list-style-type: none"> • Fast processing (notion of fast processor) • Can cope with large volume of data • Can do repetitive tasks • Fast access • Large amount of memory • Large storage 	2 (PS)													
4	e		E - commerce	1 (KU)													
4	f		<table border="1"> <thead> <tr> <th>Order</th> <th>Stages</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>data collection</td> </tr> <tr> <td>2</td> <td>data preparation</td> </tr> <tr> <td>3</td> <td>data input</td> </tr> <tr> <td>4</td> <td>data processing and storage</td> </tr> <tr> <td>5</td> <td>data output</td> </tr> </tbody> </table>	Order	Stages	1	data collection	2	data preparation	3	data input	4	data processing and storage	5	data output	4 (PS)	
Order	Stages																
1	data collection																
2	data preparation																
3	data input																
4	data processing and storage																
5	data output																
4	g		Any two from: <ul style="list-style-type: none"> • Quality of printouts (resolution)/dpi • Speed of printing (ppm) • Low running costs 	2 (KU)	Not less ink												

Question		Expected Answer/s	Max Mark	Additional Guidance	
5	a	<ul style="list-style-type: none"> • Tool will need to be changed • Reprogrammed/Instructions changed 	2 (PS)		
5	b	It is controlled by a palmtop computer	1 (PS)		
		It is fitted with sensors			✓
		It uses a high level language			
5	c	Any two from: <ul style="list-style-type: none"> • Accuracy • Can do repetitive tasks • More efficient • Can work in hazardous environment • Can work in sterile environment • Don't need paid • Don't need breaks/holidays • 24/7 	2 (KU)		
5	d	Taught how to do a different job	1 (KU)	Must imply a different job or skill	

Question		Expected Answer/s	Max Mark	Additional Guidance								
6	a	<pre> graph LR Input[Input] --> CPU[CPU] CPU --> Output[Output] CPU <--> BackingStorage[Backing storage] </pre>	4 (KU)									
6	b	Graphical User Interface	3 (KU)	Must be graphical								
6	c	<table border="1"> <tr> <td>A hard disk has direct/random access</td> <td>✓</td> </tr> <tr> <td>A hard disk is easily damaged</td> <td></td> </tr> <tr> <td>A hard disk can store large quantities of data</td> <td>✓</td> </tr> <tr> <td>A hard disk is slow to access</td> <td></td> </tr> </table>	A hard disk has direct/random access	✓	A hard disk is easily damaged		A hard disk can store large quantities of data	✓	A hard disk is slow to access		2 (KU)	
A hard disk has direct/random access	✓											
A hard disk is easily damaged												
A hard disk can store large quantities of data	✓											
A hard disk is slow to access												
6	d	Random Access Memory 1 mark for two parts correct 0 marks for 1 part correct	2 (KU)									
6	e	RAM	1 (PS)									
6	f	1. bit 2. byte 3. kilobyte 4. megabyte 5. gigabyte	4 (KU)									

[END OF MARKING INSTRUCTIONS]