

GCSE MARKING SCHEME

SUMMER 2018

INFORMATION & COMMUNICATION TECHNOLGY UNIT 1: UNDERSTANDING ICT 4331/01

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INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCSE INFORMATION & COMMUNICATION TECHNOLGY

SUMMER 2018 MARK SCHEME

Question	Question Answer			
1 (a)	Award one mark for each correct answer	4		
	B Text box/ AutoShape/ Rectangle shape			
	Not box , not shape C Table			
	D Word Art			
	E Italic font/ Italics			
1 (b)	Award one mark for each correct answer	2		
	Bold Font / Bold text NOT bold or font			
	Change font size / text size			
	Different font styles NOT different fonts			
	Centre text Border art/enhanced border/ (NOT just 'border')			
	Bullet points			
	Colour (must be qualified – coloured font/background etc)			
	Insert scanned photograph, photograph from the Internet Underline			
	Watermark			
	Rotate image			
	Any reasonable DTP feature.			
	NOT Clip Art, Text box, Auto Shape, Table, Word Art, Italic font			
1 (c)	Award One mark for the document and one mark for a different use.	2		
	Signs – e.g. way to the car wash area			
	Labels – To create price labels			
	Newsletter – To send home to parents with information of the sponsored car wash Banners – To hang around the car wash			
	Certificates – For the most amount of money raised			
	Leaflet – Prices			
	Flyers – to advertise the car wash Poster – to highlight the event to students and teachers			
	Price list – To give details of car wash services available			
	Any reasonable answer NOT sponsor form			
2	Award one mark for each correct answer	4		
	3 - Knowledge			
	3 - Knowledge 5 - Information If more than one box is ticked in any row - no			
	7 – Data mark for that row			
	10 - Data			

Question	Answer	Max mark
3 (a)	Award one mark for each correct answer Must be definition not a use	2
	1 mark for electronic message/electronic letter/digital message	
	1 mark for between /computers/mobile phone /across network/ via Internet/online	
	NOT 'messages sent by a computer' NOT 'letter' by itself NOT Electronic mail	
3 (b)	Award one mark File Attachments Sending photos/letters/invites to relatives (Must have a concrete use not just files)	1
3 (c)	Award one mark Auditing Faster searches Keep emails organised Faster back-ups	1
3 (d)	Award one mark for each correct answer up to a maximum of 3 Hacking Viruses / Malware / Trojan Horse Spam/ junk mail Cyber bullying / Abusive emails Identity theft Phishing Trolling Grooming / Paedophiles / Stalking Inappropriate material Must include a description 1 mark for a list.	3
4 (a) (i)	Award one mark Biometric	1
4 (a) (ii)	Award one mark OMR	1
4 (a) (iii)	Award one mark RFID	1
4 (a) (iv)	Award one mark Smart Cards	1
4 (b)	Award one mark for each correct answer up to a maximum of two Reduces truancy Attendance figures worked out automatically / more accurate Easier to update / Edit / Amend Always know where pupils are Can study trends and patterns of attendance/ know if pupils are frequently late and absent Automatic SMS messages to parents Central repository for data / access Environmental issues Instant real time registration	2

Question	Answer	Max mark
5	Award one mark for each correct answer up to a maximum of three Create shortcuts / pinned to taskbar Create folders / move folders / organise folders Adjust volume/ sound settings Screen resolutions Adjust window size / splitscreen	3
6 (a)	Award one mark 35	1
6 (b)	Award one mark B	1
6 (c)	Award one mark =D12-D20 Condone =sum(D5:D11)-D20 or other variants that work	1
6 (d)	Award one mark =IF(D7>=\$G\$3,"Target Hit","Under Target") OR =IF(D7<\$G\$3,"Under Target","Target Hit")	1
6 (e)	Award one mark for each correct answer up to a maximum of two Any two of: Accurate/correct calculations Automatic re-calculation Save formula and data Condone 'what ifs' Must be linked to calculating total profit	2
	NOT just Automatic calculations	
7	Award one mark for each correct answer 1 3 6 7	4

Question	Answer	Max mark
8 (a)	Award one mark 8	1
8 (b)	Award one mark 4	1
8 (c)	Award one mark for each correct answer up to a maximum of two Car Registration Number To uniquely identify each car / to make each record unique / unique identifier	2
8 (d)	Award one mark Car Wash Date	1
8 (e)	Award one mark Report Graph / Chart Table Mail merge Calculations	1
8 (f)	Award one mark for each correct answer up to a maximum of two Consistency of data. Saves typing in the whole word/ quicker to type / Faster to enter data. Saves memory/ storage space. Not 'space' by itself. Less chance of error/fewer transcription errors. Easier to check codes using validation checks. Faster access to data / Faster to transfer data.	2

Question	Answer		Max mark
9 (a)	Award one mark 2		1
9 (b)	Hotspots Hyperlinks Drop down menus / Drop Navigation bar Using the menus to navig	/ Search Tab to enter key word search	es 2
9 (c)	Field Email address Password Date of delivery Quantity Telephone number Card/ payment details Security code	ch correct answer up to a maximum of Verification Method Accepted Double entry keying / Type it in twice Read before submit/proofread Double entry keying / Type it in twice Read before submit/proofread Read before submit/proofread Read before submit/proofread Read before submit/proofread Read before submit/proofread Read before submit/proofread Read before submit/proofread	
	For full marks must have methods	two different fields and two different ver	ification

Question	Answer	Max mark
Question 9 (d)	 Answer Award one mark for each correct answer up to a maximum of three Any three of the following: Cost savings are passed to customers with cheaper goods /online deals Allows disabled people to do their own shopping / Less stressful for parents / elderly Saves travel time Saves travel costs 	Max marl
	 Greater choice of goods (from a global marketplace) Price comparisons Read reviews Can listen to samples before you buy / virtual reality displays Get goods delivered / don't have to carry back from shops / click and collect Instant downloads of videos/books/music/games/apps Online tracking of orders Reminder emails when goods in stock Can get suggested/alternative items Can return items within 14 days (mail order legislation) Checking stock availability 	
	NOT the ability to order goods 24/7 or multiple devices.	

	Max mark
10 (a) Award one mark for each correct answer One mark for each different sensor X3 One mark for each different output device X3 One mark for each different description of use X3 Indicative content Burglar Alarm Sensor = Pressure / Passive infrared / Light beam / Motion / Sound Output device = Speaker / Light / Screen Description of use = At night a pressure sensor could be placed under a mat windows to raise awareness of a burglar and sound the alarm. Smart Meter Sensor: • Magnetic Resistance • Current / Voltage measurement (Ammeter / Voltmeter) • Thermistor (heat) • flow sensors (gas measurement) Output device: • App on mobile device screen or computer screen • Meter readout screen • Utility company server • Meter readout screen • Speaker (for alarm) • LED Description of use: • Automatic meat-readings • Room temperature measurement • Usage alarms • Cost indications	3X3

Question	Answer			Max mar
	Electronic Toy			
	Sensor	Description	Output	1
	Microphone (in the context of detecting sound)	Voice commands to toy dog to jump Voice commands to games console to switch on	Motor (makes dog jump) Console switches on (power)	
	Infrared sensor	Toy Dinosaur moves when detects object in front	Motor (makes it move)	
	Pressure switch / push switch / push button	Toy car reverses and turns when hits an object	Motor	
		Doll stops crying when fed by bottle	Speaker turned off	
	Motion sensor	When ball is rolled it changes colour / makes a noise	Speaker/lights	
	Light sensor	When gets dark child security light glows	Light bulb	
	Touch sensor	Dolls/bears talk when tummy pressed	Speaker	
	Temperature sensor	Childs bath toy warns if too hot	Speaker	
	Accelerometer	Remote control cars Detects speed of motion on device e.g. swing on controller to hit on screen ball	Motors Speaker, Monitor (on screen movement)	
	Spatial sensor	Car when it hits objects changes direction	Motor (turns wheel)	
	Biometric sensor e.g. fingerprint	Digital diary for a child with a security lock	Motor / switch to unlock	
	GPS	Used to detect where a drone is and map where it is	Motors (changes position)	
	Gyroscope	Detects tilt on device e.g. swing on controller to hit on screen ball	Speaker, Monitor (on screen movement)	

Question	Answer		Max mark
11	Band	Max 15 Marks	
	3	 11-15 Marks The candidate has: Shown clear understanding of the requirements of the question and a clear knowledge of the indicative content. Clear knowledge is defined as a response that provides eleven to fifteen relevant detailed points, which relate to an extensive amount of the indicative content. Addressed the question appropriately with minimal repetition and no irrelevant material. Used appropriate terminology and accurate spelling, punctuation and grammar. 	
	2	 6-10 Marks The candidate has: Shown adequate understanding of the requirements of the question and a satisfactory knowledge of the indicative content. Satisfactory knowledge is defined as a response that provides six to ten points as signalled in the indicative content. Given a response where there are a few errors in spelling, punctuation and grammar. 	
	1	 1-5 Marks The candidate has: Attempted to address the question but has demonstrated superficial knowledge of the content specified in the indicative content. Superficial knowledge is defined as a response that provides one to five points on the indicative content Given a response that lacks clarity and there are significant errors in spelling, punctuation and grammar. 	
	0	0 MarksResponse not credit worthy or not attempted,	
	Guidance		
	One mark	for each development in technology (Max 5) for describing an advantage of social networking (Max 4) for describing three disadvantages and one mark for how each can be . (Max 6)	

Question	Answer	Max mark
11 (a)	Indicative contentDevelopments in technology that have facilitated the use of social networking• Hardware such as more powerful smart phones enabling gaming via social media • Developments in camera technology • Software apps • Communication technology / PAN • 4G technology allowing quality video calling • Wi-fi / MAN • Embedded GIS technology allowing you to show your location	5

11 (b) Social Networking Advantages Can use anywhere there's a signal Can use 24/7 Can use of many different devices Can let large groups know about events quickly (e.g. birth of a child) 4 1 mark for each advantage X4 Can use of many different devices Can acture up with world news, events and trending topics Can wake new friends based on interest groups Can vote on products/services to let others know your opinion and influence choices 4 Social Can use e others opinions on products/services to help with choice Can save money on phone calls by using chat Police using social networking to catch Community groups making you aware of local events Keeping in touch with people (requires context) 5et access rights Set passwords 1 mark for disadvantage X3 and matching prevention X3 Paedophiles can stalk/ groom people - they may gain access to individual's location(s) Set access rights Set passwords Set access rights Set passwords Polen usingsal Paedophiles can stalk/ groom people - they may gain access to personal data /gain access to personal data /gain access to presonal data /gain access to presonal data /gain access to profile can affect job prospects Set up privacy settings Disabel location services Divale locker Set up privacy settings Divale core heaving updates and track empty housses identity theft Time limin onioring/Parental controls/ Set privacy settings Divale care kietory Biok sites - use a filter on certain sites Internet security software Advantage Disabel access to private data /gaing without permission Advantage Not Hacking NOT Junk Mail NOT Viruses	Question	Answer			Max mark
Fake news NOT Hacking NOT Junk Mail NOT Viruses No repeated preventions		Social Networking Advantages 1 mark for each advantage X4 Social Networking Disadvantages 1 mark for disadvantage X3 and matching	Can use 24/7 Can use on many different devices Can let large groups know about child) Can catch up with world news, ever Can make new friends based on inte Can vote on products/services to let influence choices Can see others opinions on product Can save money on phone calls by Police using social networking to ca Community groups making you awa Keeping in touch with people (requine Disadvantage Paedophiles can stalk/ groom people - they may gain access to personal data /gain access to personal data /gain access to individual's location(s) Employers can view your comments and could lead to a dismissal Potential employer checking profile can affect job prospects Burglars can see Holiday status updates and track empty houses Identity theft Unwanted advertising Exercising undue influence Cyberbullying e.g. to cause upset by posting inappropriate comments and photos Trolling to incite upset/argument Sharing of inappropriate content e.g. violent images Unwanted tagging without permission Addiction to social media – school work can suffer	nts and trending topics terest groups t others know your opinion and ts/services to help with choice using chat atch are of local events res context) Prevention Set access rights Set passwords Set up privacy settings Disable location services Only accept known friends Jse net nanny software Pop up blocker Report cyber bullying Time limit on social network Parental monitoring/Parental controls/ ocks Monitor use/ keep computer n living room Check history Block sites - use a filter on certain sites	4
			Fake news NOT Hacking NOT Junk Mail NOT	Viruses	
				lvantage.	

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