CONFERENCE VERSION – **01/01/15**

<u>**CONFIDENTIAL**</u>

GCSE MARK SCHEME

January 2015

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

Date of Examination:	**Tuesday, 13 January 2015 (p.m.)**
Date of Examiners' Conference:	**N/A**
Final Date for Return of Scripts:	**Monday, 9 February 2015**

Question	Answer	Max mark
1(a)	**One mark for each for each correct answer** Word Art ClipArt / picture / image Bold Font Italic Font (**NOT** bold, italic or font by itself) Accept Bold text / italic text BUT **NOT** text by itself) **NOT** Different fonts Underlined Centre text Border art (**NOT** Borders on its own) Font size / text size Bullet points Table Watermark Tabs and indents Line spacing Colour (Background or text) Only allow one Condone Grammar Check Accept any reasonable DTP feature	4
1(b)	Spellcheck / spellchecker	1

2(a)	**One mark for:** Idea of better <u>quality</u> pictures/photographs e.g. more clearly defined photos / if blown up to a large size won't be as blurred/ clearer images	1
2(b)	Tablet B It has more storage space / it has a memory capacity of 32GB Allow second correct answer if first is incorrect.	2
2(c)	WiFi (802.11) Tethering Broadband GPRS/3G/4G Wired connection **No brand names (FaceTime, Skype etc.)**	2
2(d)	**One mark for each of two uses from:** Can select / plan the shortest route from A-Z / real time guidance of route Can share position with others Can see bird's eye view of your house Can be found by others if lost/in an emergency Can track / be tracked / locates where you are Can find places of interest / petrol stations, etc. Can locate exactly where your photos have been taken Locate your tablet Can locate weather for your particular area / Can predict weather more accurately Online mapping / look at maps Walking tours Any reasonable answer	2
3(i)	2 Retina scanning 3 Fingerprint scanning If 3 boxes ticked, only accept one correct answer If all boxes ticked, no marks	2
3(ii)	**Advantages (Any two)** Unique to each student / No-one else can register for you Cannot forget like a card /cannot lose a finger <u>as you can a swipe card</u> Real time registration/know immediately where pupils are/can track pupils Frees up teacher time Less human error **NOT** faster to register on its own **Disadvantage** Expensive to install Privacy issues / DPA Hygiene issues Faulty equipment causes delays (e.g. dirty camera) Calibration / Time consuming to collect biometric data from people Training for staff and students	4
4(a)	**Any three of the following:** Contact details (generic answer, which precludes anything else related to contact details) Address / Postcode Telephone number / mobile number Title Cost	3

	Method of payment / credit or debit card details	
	Discount code / concessions	
	Login details	
	Time of film	
	VIP seats/ choose seats	
	Number of seats / number of tickets	
	Disabled access	
	Any reasonable answer	
4(b)	2 3 5 8	**4**
4(c)	**Two marks for advantages to customer:** *Do NOT accept anything which could be done by phone* Avoids double booking Can book 24/7 Can choose seat Compare prices to get best deal Easier for disabled who don't have to leave home to book / can see if disabled seats are available Read online reviews before booking Watch trailers online Can check availability before booking Save on travel costs (must be qualified) e.g. of going to the cinema to book Save travel time (must be qualified) e.g. rather than going to the cinema to book On-line discounts Can select alternative showings E-tickets **NOT** just 'easier to book' **NOT** just 'faster to book' **NOT** saves time queuing **One mark for disadvantage to customer:** Entering credit card/debit card details might not be safe / fake site / hacking No personal service / less face to face interaction Entering incorrect details and booking the wrong film Not everyone has the Internet/ debit card to be able to book the tickets online Prevents booking of seats if it leaves one isolated, unbooked seat on its own Certain discounts cannot be used online (don't allow if given for advantages) **NOT** Booking fee	**3**
5(a)	To uniquely identify the player / to make each record unique / unique identifier	**1**
5(b)	Smith F / F Smith	**1**
5(c)	2	**1**

5(d)	Autonumber / Number / Integer Date Boolean / Yes/No	**2**
5(e)	**Any two of the following:** **Password protection** to stop unauthorised access **Password protocols** – changing passwords regularly / don't write down passwords / not using easily guessable passwords **Access rights** – read only / read/write / create records / delete records **Saved off site** – saved in a fire proof safe. **Physical** security – lock doors, biometrics, security guards, **Firewall –** Prevents accessing data **Antivirus –** Prevents malicious programs from damaging data **Encryption –** Makes intercepted data unreadable Regular saving of the database **NOT** Printing a paper copy, **NOT** saving to a USB	**2**
5(f)	Student ID – Presence check, Type check (integer) **NOT** Length Name – Type check (string), Presence check Gender – Type check (character), Drop down list, Look Up method, Presence check Year – Range check, Presence check, Type check Position – Type check (string), Presence check, Drop down list, Look Up method Date First Played – Range check, Presence check, Format check, Date Picker Plays For County – Type check (Boolean), Drop down list, Look Up method, Presence check Must specifically name the validation method.	**2**
6(a)	**Any three of the following:** The Internet CD Roms / DVDs / <u>Electronic</u> encyclopedias Databases Bulletin boards Emailing an expert VLE / Intranet Weather / Global warming apps E-books Podcast	**3**
6(b) (i)	1,2,6	**3**
6(b) (ii)	**Any three of the following:** Adjust window size Mouse settings - speed, cursor shape and colour Screen resolution Desktop fonts / colour / size Change Background / background colour / background image Positioning items / placing icons Contrast Brightness Volume / Sound / Speech On-screen help Folder operations- move / copy / delete Task bar customisation Password protection Widgets / Gadgets Onscreen keyboard	**3**

	NOT Creating shortcuts Renaming folders Data logging Videoconferencing Creating autoshapes Adjusting icon size	
6(c)(i)	Automatic marking - Giving instant feedback Games to teach maths Video tutorials/ videos showing a science experiment Audio tutorials/ sound - in music to hear the notes Simulations/demonstrations of weather patterns Animation to show different aspects of design Email/ chat room/blogs/forums Communication between teachers and students - discussion Interactive quiz/tests- ICT revision / History revision / See progress in a French topic Walkthrough - online papers	**2 x 2**
6(c)(ii)	**Advantage (1 mark)** Individualised learning – tailor own work pattern Students can work at own pace - pause and play Can access from any device with Internet anywhere Learning can take place at any time learn 24/7 Can be done away from school/distance learning – at home Teacher does not have to be there/they provide extra support when the teacher is not available Wide variety of online resources can be used Keep students interested/ More interactive than pen and paper/variety of multimedia formats can be used(sound/video/animation) Self-assessment / Immediate results/ feedback/ Analyse/view where you went wrong Frees up teachers time Don't have to incur extra costs of extra tuition outside school Not as embarrassing if they get it wrong/improves confidence	1
7(a)	Tie	**1**
7(b)	☐1 Absolute If more than one box is ticked – no marks	**1**
7(c)	C	**1**
7(d)	=B10+1 =SUM(B10+1) = does not have to be present **NOT** =B10+£1	**1**
7(e)	=IF(F3<50,"Order more stock","Stock level okay") =IF(F3>=50,"Stock level okay","Order more stock") If quotation marks missing or spelling errors, award mark = does not have to be present	**1**

8(a)	**Three marks for any of:** Sending/ receiving text messages Taking photographs Recording videos Surfing the Internet Playing games / Using apps Sending emails Uploading / downloading / streaming video Social networking GPS / GIS Playing music Watching TV Video calls **Accept any suitable answer**	**3**
8(b)	**Two marks for advantages from:** A fast download speed can mean music is received almost instantly Can select which tracks to download so cheaper than downloading whole album Can access / get files 24/7 Can read online reviews before purchasing Preview the song before buying Use price comparison websites to save money Saves time/money as do not have to go to shops to buy Increased access to a wider range e.g. the number of websites or variety of music styles **NOT** can be used on multiple devices **One mark for a disadvantage from:** Viruses can be introduced File content may be different from stated name Illegal downloads harm the music and film industries Breaking the Copyright Act More powerful computers needed due to large file sizes May lead to shop closure Security issues online e.g. hacking, phishing **No marks for hardware problems**	**2** **1**

9(a)	Temperature sensor (not Heat) Light sensor Sunshine hours Humidity Rainfall sensor Wind speed Wind direction Atmospheric pressure sensor / Air pressure (Not just pressure sensor on its own)		**2**
9(b)	**One mark each for two of:** Using icons / graphics / weather symbols Video / animations / simulations / games Text / messages about the weather Numbers Maps / satellite Graphs / charts **NOT** database, spreadsheet, table		**2**
9(c)	**Any two of the following advantages:** One mark each for two of: Collected at exactly correct time / collected accurately Data can be collected from remote and dangerous places Data can be recorded accurately Data can be transmitted by radio/satellite communication Monitor 24/7 / Humans don't need to be there / Data collected / updated automatically Can process large amounts of data **DO NOT ACCEPT ONE WORD ANSWERS**		**2**
10	**9-12 marks**	Candidates give a clear, coherent answer fully and accurately describe the advantages of email and give three misuses of email and the appropriate prevention methods to email misuse. They use appropriate terminology and accurate spelling, punctuation and grammar.	**12**
	5-8 marks	Candidates describe some advantages of email, and a few misuses and matching preventions of misuse, but responses lack clarity. There are a few errors in spelling, punctuation and grammar	
	1-4 marks	Candidates simply give a few advantages and misuses of email. The response lacks clarity and there are significant errors in spelling, punctuation and grammar.	
	0 marks	No valid response.	
	Guidance **One mark for each point relating to advantages of email (Max 6). Up to three marks for describing misuses of email and then a mark for each prevention of the misuse (max 3). To get full marks must have six advantages, three misuses and three matching preventions of email misuse.** **Any six advantages from:** Cut down on mailing costs, stamps / free to send across the globe Quicker responses Faster to send / faster to receive / quicker to deliver than post Record when sent / received Can be edited / collaborative working Group emails/ CC – save rewriting the same message Can pick it up anytime / anywhere Can keep in touch with friends and family across the world Attachments can be sent Ask for read receipt / notification of delivery Can use an address book to quickly contact people Privacy - Can password protect Saves paper Can be accessed from a wide variety of devices Environmentally friendly, reduces carbon emissions as not physically transported		

NOT cheaper
NOT Free on its own
NOT 'Quicker / faster' by itself
NOT 'instantly' by itself

Any three misuses from: **Any three matching preventions from:**

Misuse	Preventions of Misuse
Cyberbullying	Parental lock / report bullying
Viruses / malware	Anti-virus software
Phishing scams	Be aware of phishing, do not respond, report it
Spam / Junk mail	Spam filter/ block sender
Security / Hacking	Secure passwords, firewalls, encryption
Abusive language	Workplace filters
Wasting company time	Monitoring email usage

Must state or clearly describe the misuse – cannot award prevention if no misuse.
Not general disadvantages (e.g. not network crashes) – must be a misuse

| | | **TOTAL** | **80** |