

# Mark Scheme November 2008

IGCSE ICT

IGCSE ICT (4385/2H)

## 4385 2H Markscheme

Question Number	Answer	Mark
1(a)	Trackball, touch pad, touch screen, joystick, any other suitable device. <p style="text-align: center;"><b>2 marks</b></p>	<b>(2)</b>
1(b)	Answers may include: <ul style="list-style-type: none"><li>• Caps Lock, allows letters to give upper / lower case. e.g. k and K</li><li>• Num Lock, allows number pad to give numbers / move the cursor. e.g. 8 moves cursor up</li><li>• Ctrl, allows letter keys to perform Functions / non-character actions, e.g. Ctrl + C = copy</li><li>• Alt, allows letter keys to activate menus, e.g. Alt + H = help</li></ul> <p style="text-align: center;"><b>2 x 3 marks</b></p>	<b>(6)</b>
		<b>Total 8 marks</b>

Question Number	Answer	Mark
2(a)	<p>Look for:</p> <ul style="list-style-type: none"> <li>• Title / identification of the form</li> <li>• Staff information    Name</li> <li>• Subject information    Title + code / level</li> <li>• Pupil information.    List</li> <li>• Date / return by date</li> <li>• Signature</li> <li>• Looks like a form (areas for writing, no drop down lists, no radio buttons, etc.)</li> </ul> <p style="text-align: right;"><b>max 6 marks</b></p>	<b>(6)</b>

Question Number	Answer	Mark
2(b)	<p>There are no marks for choosing a data item.</p> <p>For the code description, look for:</p> <ul style="list-style-type: none"> <li>• Description and example match the data item chosen</li> <li>• Code is fixed length</li> <li>• Explanation is understandable / sensible.</li> </ul> <p>e.g.  Staff Name.  2 letters for first name and surname, / Mr. John Smith = JS</p> <p>Subject Name  4 letter abbreviation, / Geography = geog</p> <p style="text-align: right;"><b>3 marks</b></p>	<b>(3)</b>
		<b>Total 9 marks</b>

Question Number	Answer	Mark
3(a)	Filter software / content restriction on browser, Mrs. Smith sets allowed / disallowed sites. Physical method e.g. child's computer in living room. Parents can see.  <b>2 marks</b>	(2)

Question Number	Answer	Mark
3(b)	Encryption of the file, brother would need password to read it.  Password on BIOS / startup, brother would need key to start computer.  Access rights / shares on drives / folders / files, brother cannot access over the network.  Hide file / bury file in an unlikely place e.g. in system directory, harder for brother to find  Disguise file / name file as something misleading e.g. videosys.dll, harder for brother to find  <b>2 x 2 marks</b>	(4)

Question Number	Answer	Mark
3(c)	Reason. WiFi point being used by someone outside of the house. <b>1 mark</b>  Prevention. Enable a security feature  Description of security feature.  e.g. <ul style="list-style-type: none"> <li>• Protect with a password, only computers with password can use WAP.</li> <li>• enable IP / MAC / computer name list, only listed computers can use WAP.</li> </ul> <b>2 marks</b>	(3)
		<b>Total 9 marks</b>

Question Number	Answer	Mark
4(a)	<p>Answers may include:</p> <ul style="list-style-type: none"> <li>• IR / light beam broken by visitor, photocell / light / IR receptor detects change /sends signal.</li> <li>• Mechanical switch / micro-switch, moved / switched by movement of turnstile</li> <li>• Pressure sensor in floor, triggered by visitor's weight.</li> </ul> <p>Any other sensible arrangement. 2 marks</p>	(2)

Question Number	Answer	Mark
4(b)(i)	One is added to the visitor number / one is subtracted from empty spaces	(1)

Question Number	Answer	Mark
4(b)(ii)	One is subtracted from the visitor number / one is added to empty spaces	(1)

Question Number	Answer	Mark
4(c)	Subtract number out from number in	(2)

Question Number	Answer	Mark
4(d)(i)	Time Visitor number / empty spaces / Visitors per time period.	(2)

Question Number	Answer	Mark
4(d)(ii)	Database, easy to search / other sensible reason. OR Spreadsheet, easy to make graphs / other sensible reason.	(2)
		<b>Total 10 marks</b>

Question Number	Answer	Mark
5(a)	<p>Look for the following points:</p> <ul style="list-style-type: none"> <li>• no need to learn HTML</li> <li>• package is WYSIWYG / no need to swap (from HTML view to browser) views</li> <li>• complex layouts are simple to set up</li> <li>• packages contain pre-made templates / examples to follow</li> <li>• packages have pre-made artwork / animations / effects.</li> </ul> <p>Ignore references to features which would be inappropriate for an IGCSE ICT project,</p> <p style="text-align: center;"><b>Max 3 marks</b></p>	(3)

Question Number	Answer	Mark
5(b)	<p>Look for the following points:</p> <ul style="list-style-type: none"> <li>• Open picture in a graphics package</li> <li>• re-size to thumbnail / smaller / correct size</li> <li>• re-insert / re-save picture</li> </ul> <p style="text-align: center;"><b>3 marks</b></p>	(3)
		<b>Total 6 marks</b>

Question Number	Answer	Mark
6(a)(i)	A single binary digit (either a 1 or a 0)	(2)

Question Number	Answer	Mark
6(a)(ii)	8 bits	(1)

Question Number	Answer	Mark
6(a)(iii)	1024 bytes	(1)

Question Number	Answer	Mark
6(b)	<p>Answers may include:</p> <ul style="list-style-type: none"> <li>• Video</li> <li>• Pictures</li> <li>• control signals.</li> </ul> <p style="text-align: right;"><b>2 marks</b></p>	(2)

Question Number	Answer	Mark
6(c)(i)	16 bits / 2 bytes	(1)

Question Number	Answer	Mark
6(c)(ii)	Can use more than 255 characters / more than ASCII / 65025 characters / multiple alphabets, etc.	(1)
		<b>Total 8 marks</b>

Question Number	Answer	Mark
7(a)	<p>In a graphical user interface.</p> <ul style="list-style-type: none"> <li>• Drop down / pop-up list</li> <li>• clickable / selectable</li> <li>• at any time</li> </ul> <p>In a menu driven interface.</p> <ul style="list-style-type: none"> <li>• Not drop down / pop up</li> <li>• Keyboard entry</li> <li>• Selection required before program continues</li> </ul> <p>In both. shows / allows selection of possible actions</p> <p style="text-align: center;"><b>5 marks</b></p>	<b>(5)</b>

Question Number	Answer	Mark
7(b)	<p>Look for the following points.</p> <p>Suitable example. e.g. file... run / in an icon's properties What happens. Command line runs when enter is pressed / icon is clicked</p> <p style="text-align: center;"><b>2 marks</b></p>	<b>(2)</b>
		<b>Total 7 marks</b>



Question Number	Answer	Mark
<b>8(a)</b>	<p>Validation.</p> <ul style="list-style-type: none"> <li>• Check on data input</li> <li>• By computer / software</li> <li>• For acceptable / allowable data</li> </ul> <p>Example of validation check:</p> <ul style="list-style-type: none"> <li>• field</li> <li>• type of check</li> <li>• description of check.</li> </ul> <p>Verification.</p> <ul style="list-style-type: none"> <li>• Check that data is correct</li> <li>• Reasonable method: double entry, manual check of entry.</li> </ul> <p>Example of verification check:</p> <ul style="list-style-type: none"> <li>• Appropriate field</li> </ul> <p style="text-align: right;"><b>9 marks</b></p>	<b>(9)</b>

Question Number	Answer	Mark
<b>8(b)(i)</b>	Mileage	<b>(1)</b>

Question Number	Answer	Mark
<b>8(b)(ii)</b>	So that correct mileage is charged / next customer has correct starting mileage / legal / for servicing / anything reasonable.	<b>(1)</b>

Question Number	Answer	Mark
<b>8(b)(iii)</b>	Verify	<b>(1)</b>
		<b>Total 12 marks</b>

Question Number	Answer	Mark
9(a)	<p>Answers may include:</p> <p>A. contacting / booking with hotels / transport companies / tourist attractions.</p> <p>B. finding details of hotels/ airlines / tourist attractions.</p> <p>C. buying tickets for flights/ trains/ tourist attractions.</p> <p>D. arranging details for something which he has already purchased / is already a customer. e.g. flight times / meals / hotel rooms / excursions.</p> <p style="text-align: center;"><b>4 marks</b></p>	<b>(4)</b>

Question Number	Answer	Mark
9(b)	<p>Answers may include:</p> <ul style="list-style-type: none"> <li>• Web ring, e.g. linking tourist attraction sites, making it easier for him to find information.</li> <li>• Bulletin board. e.g. on a government site / foreign ministry / health ministry, e.g. for advice on visas / inoculations/ security</li> <li>• News group. e.g. to get information / opinions about a particular topic, such as train travel / local events / local food.</li> <li>• Chat room. e.g. to contact forum / newsgroup members, for further information.</li> </ul> <p style="text-align: center;"><b>2 x 2 marks</b></p>	<b>(4)</b>
		<b>Total 8 marks</b>

Question Number	Answer	Mark
10(a)	fibre optic copper cable radio any other sensible method <p style="text-align: right;"><b>2 marks</b></p>	<b>(2)</b>

Question Number	Answer	Mark
10(b)	<p>Method, any given in (a).</p> <p>The marks are for a sensible explanation which matches the method chosen.</p> <p>Look for arguments for the chosen method and arguments against the other one.            max of 3 marks for            max of 3 marks against.            Max 4 marks overall.</p> <p>Explanation may include:</p> <p>Copper cable.</p> <ul style="list-style-type: none"> <li>• Extension of current system / no new technology needed.</li> <li>• More secure than radio. + reason</li> <li>• Less liable to interference, + reason</li> <li>• Cheaper than fibre optic, + reason</li> </ul> <p>Fibre optic cable.</p> <ul style="list-style-type: none"> <li>• Faster speed / higher bandwidth than others.</li> <li>• More secure than radio. + reason</li> <li>• Can connect over longer distance than others.</li> </ul> <p>Radio.</p> <ul style="list-style-type: none"> <li>• No cable laying between buildings.</li> <li>• More flexible than others. + reason</li> <li>• Faster to set up than others. + reason</li> </ul> <p>Look for reverse arguments.</p>	<b>(4)</b>
		<b>Total 6 marks</b>

Question Number	Answer	Mark
11	<p>Includes test data Includes expected results</p> <p style="text-align: center;"><b>2 marks</b></p> <p><b>Responses must include a reason</b></p> <p>Responses may include:</p> <p>Test of birthday feature using relevant data, to check it gives the correct answer.</p> <p>Spell check, to ensure no spelling mistakes.</p> <p>Content check / proof read, to ensure content makes sense / is what is needed.</p> <p>Colours / screen resolution / display check, to see that script displays correctly on different settings / on different computers.</p> <p>Run test, to check that script runs when clicked / invoked / goes to next screen on data entry.</p> <p>Any other sensible run-time testing, with a reason.</p> <p>Browser check, to see if script displays correctly in different web browsers.</p> <p>Any other sensible test, with a reason.</p> <p style="text-align: right;"><b>Max 5 marks</b></p>	<b>(7)</b>
		<b>Total 7 marks</b>

Question Number	Answer	Mark
12(a)	RR / LL      FFFFF U      FFFF      D  1 mark for turn RR/LL 1 mark for forward twice FFFFF and FFFF 1 mark for U 1 mark for D  <b>4 marks</b>	<b>(4)</b>

Question Number	Answer	Mark
12(b)	M =    FU    T / RR / LL            FFD or M =    FU    T / RR / LL            FD  <b>3 marks</b>	<b>(3)</b>

Question Number	Answer	Mark
12(c)	K = loop F until edge    R / L    loop F until edge <b>3 marks</b>	<b>(3)</b>
		<b>Total 10 marks</b>

**TOTAL FOR PAPER: 100 MARKS**