

**GCSE**

**ICT**

Unit **B061**: ICT in Today's World

General Certificate of Secondary Education

**Mark Scheme for June 2016**

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.





Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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## 1. Annotations

Annotations **MUST** appear on all responses and pages as directed by OCR, the PE and Team leaders.

Annotation	Meaning
	<b>Blank Page</b> – this annotation <b>MUST</b> be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
	Seen: this annotation <b>MUST</b> be used on all responses that are NR (no response), and on parts of question that are NR, and on Level of Response questions.
	<b>Tick:</b> this annotation <b>MUST</b> be used to indicate where credit has been given in a response. NB the number of ticks shown on a response must equal the mark awarded unless clearly stated to the contrary below in Section 11.
	<b>Cross:</b> this annotation is used to indicate where a response is clearly wrong/incorrect or not awarded credit.
Other available annotations:	The annotations toolbar has other available annotations which may be used: TV, BOD and NBOD, Caret (to e.g. indicate that the candidate has omitted a required part of the response), Highlight, REP, NAQ, ?, ^, and the line overlay. These should be used sparingly or as directed by Team Leaders/Supervisors. Note: BOD is <b>NOT</b> a substitute for a tick...BOD is used to indicate that the tick is awarded even though there is some doubt over the validity of the response.

**Subject-specific Marking Instructions**

Ticks and crosses **MUST** be used on all except LOR responses (see below) as instructed by PE and Team Supervisors. BOD is not an acceptable substitute for a tick.

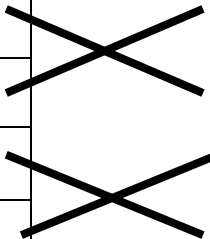
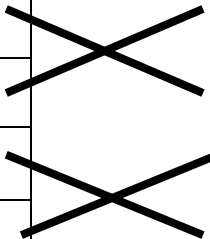
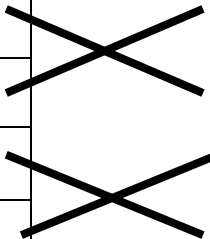
Where ticks are required, the number of ticks shown on a response **MUST** be the same as the mark given for that part of the question. For this reason, where BOD has been used, a tick **MUST** accompany it.

Crosses should be used on responses that are clearly wrong, TV or caret on responses that are not worthy of credit can be used to indicate that the response has been read.

No ticks, crosses or other annotations whatsoever to be placed on the LOR questions. Where RM Assessor has not made L1, L2 and L3 available to indicate the level awarded, SEEN is to be placed on LOR responses.

All responses on Additional Objects or responses elsewhere in the paper **MUST** be linked back to the originating question using the link annotation/link mechanism.

MARK SCHEME

Question	Answers	Marks	Guidance												
1	<p><i>Two from eg:</i>                      Keyboard                      Key pad                      Touchscreen</p>	2													
2	<p><i>Lines as shown:</i></p> <table border="1" data-bbox="389 523 1496 874"> <thead> <tr> <th data-bbox="389 523 987 596">Task</th> <th data-bbox="987 523 1182 874"></th> <th data-bbox="1182 523 1496 596">Software application</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 596 987 663">To combine video, audio, text and images</td> <td data-bbox="987 596 1182 874" rowspan="4" style="text-align: center; vertical-align: middle;">  </td> <td data-bbox="1182 596 1496 663">desktop publishing</td> </tr> <tr> <td data-bbox="389 663 987 730">To create a poster advertising a school play</td> <td data-bbox="1182 663 1496 730">multimedia</td> </tr> <tr> <td data-bbox="389 730 987 798">To record the income and expenses of a small club</td> <td data-bbox="1182 730 1496 798">photo-editing</td> </tr> <tr> <td data-bbox="389 798 987 874">To remove 'red-eye' from a family picture</td> <td data-bbox="1182 798 1496 874">spreadsheet</td> </tr> </tbody> </table>	Task		Software application	To combine video, audio, text and images		desktop publishing	To create a poster advertising a school play	multimedia	To record the income and expenses of a small club	photo-editing	To remove 'red-eye' from a family picture	spreadsheet	4	Use the overlay tool in RM Assessor when marking.
Task		Software application													
To combine video, audio, text and images		desktop publishing													
To create a poster advertising a school play		multimedia													
To record the income and expenses of a small club		photo-editing													
To remove 'red-eye' from a family picture		spreadsheet													
3	<p><i>One example of utility software and appropriate use eg:</i>                      Printer/scanner driver (1) to allow access to/provide printer/scanner functions (1)                      Anti-virus (1) for scanning for/removing e.g. Malware/viruses (1)                      Disk formatter (1) for preparing disks for use (1)                      Disk cleanup (1) to remove unwanted files (1)                      Disk defragmenter (1) for compacting files on disk (1)                      Firewall (1) to control access to computer system (1)</p>	2	Use must be appropriate for example.												

Question		Answers	Marks	Guidance
4		<p><i>Two descriptions, max 2 marks per description, from eg:</i></p> <p>Sticky keys (1) allows user to release one key e.g. Alt and press another (1) to give action of both keys pressed together (1)</p> <p>Zoom area (1) to enlarge areas for easy viewing (1)</p> <p>Text to speech (1) to convert words on screen to sounds (1)</p> <p>Use of sound-processing software (1) to amplify words only/filter out background noise (1)</p> <p>Speech to text (1) to convert (spoken) words to text (on screen) (1)</p> <p>Adjust colours/use 'daltoniser'-type algorithms to change colours (1) to those suitable for visually impaired/'red-green' deficient/'blue-yellow' deficient/total colour-'blind/deficient' persons</p> <p>Use of software to interpret 'muscle' messages (1) to input data into computer (1)</p>	4	<p>Do not allow hardware.</p> <p>Accept item + who/what disability it helps in use of computers .e.g. speech to text (1) to help those who cannot use arms (1)</p>
5	(a)	<p><i>Max 3 descriptions, max 2 per description e.g.:</i></p> <p>Import/transfer/upload all (three) clips (into editing software)(1) using cable/suitable connection/connect camera/insert memory card into computer (1) from video camera storage (1) in appropriate order/format (1)</p> <p>Trim (1) each video clip to appropriate length (1)</p> <p>Crop (1) to remove unwanted parts/areas/objects from video (1)</p> <p>Join/combine (1) into one timeline (1)</p> <p>Select transitions (1) between video sections (1)</p> <p>Adjust levels of video/audio (1) to ensure smooth change from one clip to next (1)</p> <p>Add audio (1) e.g. background music/voiceover (1)</p> <p>Adjust colours (1) add effects (1) for visual/artistic effect/impact (1)</p> <p>Add titles/comments/credits/subtitles (1) to e.g. describe contents (1)</p> <p>Add layering/multi-tracking to video (1) to add picture-in-picture/effects (1)</p>	6	
	(b)	<p><i>One from eg:</i></p> <p>MPEG</p> <p>MPEG-1</p> <p>MPEG-2</p> <p>MPEG-4</p> <p>OGG</p> <p>AVI</p>	1	<p>Allow suitable valid file formats for a finished video file. Do not allow file names/extensions for projects.</p> <p>Allow file extension abbreviations e.g. .mp4 .mov. .wma</p>

Question		Answers	Marks	Guidance
	(c)	<p><i>One from eg:</i>  MPEG-3/MP3  M4a  WAVE/WAV  Advanced Audio Coding</p>	1	<p>There are many types of suitable file formats – allow any valid file format that would be suitable.</p> <p>Allow file extension abbreviations e.g. .mp3 .ac3 .aac</p>
6		<p><i>Two reasons from eg:</i>  No sensible names for files (1) so contents cannot easily be determined (1)  Files not stored in folders (1) so location of file not easily determined (1)</p>	2	
7		<p><i>Two from:</i>  (Printing that places) layers of material onto other layers (1) to create solid/physical object (1)</p>	2	
8		<p><i>One reason from eg:</i>  Illegal/breaking laws/may be subject to prosecution (1) of copyright (law) (1)  Author does not get paid (1) as royalties are not collected (1)  Does not have permission (1) from the author/copyright owner (1)</p>	2	<p>Answers may refer to 'Jake' or friends.</p>

Question		Answer	Marks	Guidance	
				Content	Levels of response
9*		<p>This question to be marked as levels of response:</p> <p><i>Answers may refer to e.g:</i></p> <p>GPS technologies to monitor the location of buses            Geographical Information Services to track/record routes            Satellite navigation technology to track progress/distance travelled/locations visited by cars            Automatic tracking devices installed in the buses            Mobile phone triangulation            ...to locate bus/driver            CCTV in buses/cars to monitor drivers/passengers/traffic            Mobile phone technologies to keep in contact with the drivers...            ....call monitoring/recording of driver conversations Automatic number plate recognition            Feedback on driver/bus performance e.g. online reviews            Software to monitor e.g. fuel consumption.</p>			<p><b>Level 3 (7 – 8 marks)</b>            Candidates will describe range of uses of ICT to monitor both buses and drivers.            The descriptions will be balanced between buses and drivers.            The information will be relevant, clear, organised and presented in a structured and coherent format.            Specialist terms will be used correctly and appropriately.            There will be few, if any, errors in grammar, punctuation and spelling.</p> <p><b>Level 2 (4 – 6 marks)</b>            Candidates will describe uses of ICT to monitor buses and/or drivers. Examples used will be for the most part relevant. The descriptions used may lack balance between buses and drivers.            For the most part, the information will be relevant and presented in a structured and coherent format.            Specialist terms will be used appropriately and for the most part correctly.            There may be occasional errors in grammar, punctuation and spelling.</p> <p><b>Level 1 (1 – 3 marks)</b>            Candidates will describe some use of ICT to monitor buses and/or drivers.            Examples, if used, may lack relevance.            Answers may be in the form of a list.            There will be little or no use of specialist terms.            Errors of grammar, punctuation and spelling may be intrusive.</p> <p><b>0 marks:</b> No valid response</p>

Question		Answers	Marks	Guidance	
10	(a)	<p><i>Three features from eg:</i>  Icons (1) images that represent applications/shortcuts (1)  Onscreen keyboard (1) showing characters used for typing/entering data (1)  Menus (1) showing choices (1)  Swipe actions (1) following finger movements on screen (1)  Valid feature(s) of software GUI e.g. form (1) to create e.g. combo box/validation routine/radio box/table (1)</p>	6		
	(b)	(i)	<p><i>One description from:</i>  Sort (1) on date of birth field (1) in descending order (1)</p>	3	
		(ii)	<p><i>One description from:</i>  Search/query/find/filter (1) for Gender (1) = "F" / Gender &lt;&gt; "M"/Gender != "M" (1)</p>	3	Not Male or Female
	(c)	<p><i>Two from:</i>  Set password (1)  Encrypt (the database file) (1)  Use removable storage/USB memory stick and keep it secure/lock it away from computer (1)  Lock the computer away (1)</p>	2	Allow screen saver and file password as different responses.	



Question		Answer	Marks	Guidance	
				Content	Levels of response
11*		<p>This question to be marked as levels of response:</p> <p>Answers may refer to e.g:</p> <p>ICT use in student assessments to e.g. track progress/give feedback.            ICT use in teaching and teacher preparation            ICT use in management, administration of the education system            CAL            CBT            ICT use to increase the access to education and training in in rural and remote areas            ICT used to help to overcome geographical and social barriers to communication and exchange of information            ICT used for VLEs            ICT used for online courses/tutorials            ICT hardware used to enhance teaching/learning.</p>			<p><b>Level 3 (7 – 8 marks)</b>            Candidates will explain a range of uses of ICT in education/ training to enhance learning.            The explanations will be relevant, clear, organised and presented in a structured and coherent format.            Specialist terms will be used correctly and appropriately.            There will be few, if any, errors in grammar, punctuation and spelling.</p> <p><b>Level 2 (4 – 6 marks)</b>            Candidates will briefly explain or describe the use of ICT in education and training to enhance learning. Examples used will be for the most part relevant. The descriptions used may lack balance.            For the most part, the information will be relevant and presented in a structured and coherent format.            Specialist terms will be used appropriately and for the most part correctly.            There may be occasional errors in grammar, punctuation and spelling.</p> <p><b>Level 1 (1 – 3 marks)</b>            Candidates will describe some use of in education and training to enhance learning.            Examples, if used, may lack relevance.            Answers may be in the form of a list.            There will be little or no use of specialist terms.            Errors of grammar, punctuation and spelling may be intrusive.</p> <p><b>0 marks:</b> No valid response</p>

Question		Answers	Marks	Guidance
12	(a)	<i>Two from:</i> <u>Computer data</u> (1) created from/measurements of (1) valid example of physical/personal features/ DNA/fingerprints/samples/names/ such as photograph/ demographics (1)	2	
	(b)	<i>Two from:</i> (Apparent) intelligence of machines/computer system (1) which perceives the environment (1) and simulates actions of humans (1) in learning and making decisions (1) in trying to maximize its success (1)	2	
			<b>Total</b>	<b>60</b>

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