



GCE

Applied ICT

Unit **G041**: How Organisations Use ICT

Advanced Subsidiary GCE

Mark Scheme for June 2015

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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.

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1. These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

Annotation	Meaning
^	Something vital to the mark point has been omitted.
BOD	Benefit of the doubt given.
NBOD	Benefit of the doubt not given.
CON	Candidate contradicts him/herself.
NAQ	Candidate has not answered the question as set.
MTP	Candidate has missed the point of the question.
W	Candidate is working towards a mark but has not given enough to receive credit at this point.
NE	Not enough for the candidate to receive credit.
TV	Answer is too vague to receive credit.
FTC	Follow-through credit. When an earlier wrong answer has been penalised, this may be used to show that credit can now be given to a part of the script which depends on that earlier wrong answer. This avoids penalising a candidate twice for the same error, but should only be used where specified by the PE.
MAX	Shows that the maximum number of marks for a part-question or question has been awarded (even though the answer may contain further correct points).
R	The point repeats one already awarded credit.
JE	Candidate has <i>just</i> given enough to be awarded a mark.

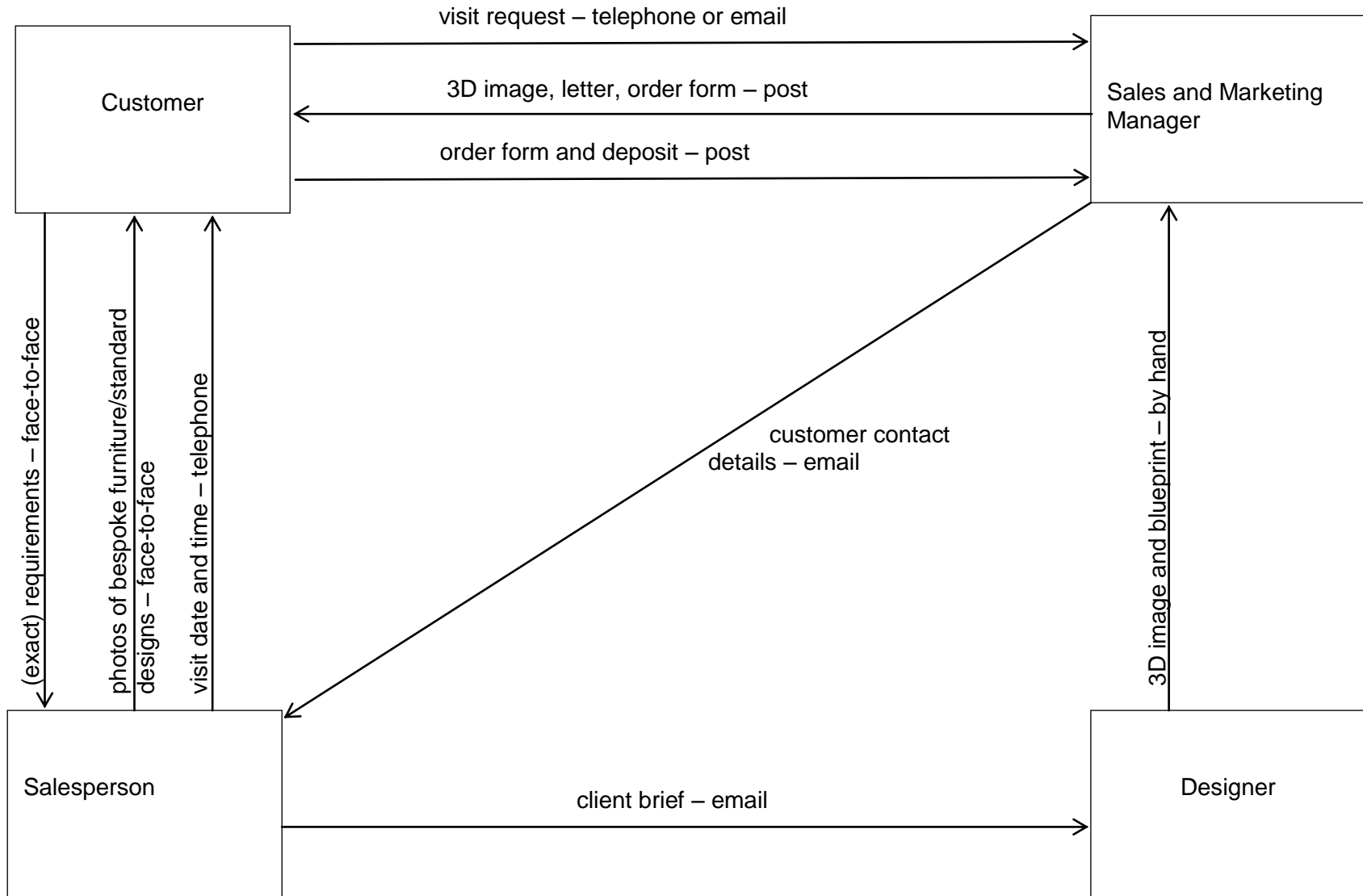
2. Here are the subject specific instructions for this question paper
There are 100 marks available for this test. They are allocated as follows:

- Tasks 2 and 3 30
- Section A of the test paper 50
- Section B of the test paper 20

BoW = Best of Wood

Task 2	Answer	Mark	Guidance
	<p>1 mark each for boxes labelled</p> <ul style="list-style-type: none"> • Customer • Sales and Marketing Manager • Salesperson • Designer <p>plus labelled arrows to show the following information flows (1 mark each) and methods (1 mark each) Max 15 marks.</p> <p>Note:</p> <ul style="list-style-type: none"> • Arrows should only be awarded points if they are drawn to and from the correct boxes. • Marks may be awarded for unconventional diagrams provided they isolate the senders and receivers of information. • Do not award marks for flow diagrams or series of text boxes linked by arrows. • Marks cannot be awarded for 'How' if the information is not identified/is incorrect but can be awarded if information is essentially correct but vague or incomplete. • Labels should not be awarded marks if they are contained within the description of a process. • If lines cross, mark labels as long as it is clear where each arrow goes • Marks should only be awarded for labels that can be unambiguously linked to a single arrow. 	15	Accept 'face-to-face' or 'in person' for 'by hand' but not vice versa.

Task 2			Answer	Mark	Guidance



Task 3	Answer	Marks	Guidance									
			Content	Levels of response								
	<p>AO4 is assessed through this task.</p> <table border="1" data-bbox="293 347 956 660"> <thead> <tr> <th data-bbox="293 347 488 379">AO4 Marks</th> <th data-bbox="488 347 956 379">Guidance</th> </tr> </thead> <tbody> <tr> <td data-bbox="293 379 488 523">3</td> <td data-bbox="488 379 956 523">A strength and a weakness in the method(s) used identified or suggestions for improving own performance.</td> </tr> <tr> <td data-bbox="293 523 488 587">2</td> <td data-bbox="488 523 956 587">A strength <u>or</u> a weakness in the method(s) used identified.</td> </tr> <tr> <td data-bbox="293 587 488 660">1</td> <td data-bbox="488 587 956 660">Some comment made on the method(s) used.</td> </tr> </tbody> </table> <p>The quality of written communication is assessed through this task.</p> <p>Answers may include:</p> <p>Benefits to BoW</p> <ul style="list-style-type: none"> • possible reduction in number of skilled carpenters needed, reducing wage bill • greater consistency in furniture produced using standard designs • greater precision in cutting wood, so joints fit better • furniture may be produced more quickly than by hand <p>Limitations for BoW</p> <ul style="list-style-type: none"> • would require a large investment to buy and install • skilled craftspeople may still be needed to assemble the furniture • may not be cost effective for producing bespoke designs 	AO4 Marks	Guidance	3	A strength and a weakness in the method(s) used identified or suggestions for improving own performance.	2	A strength <u>or</u> a weakness in the method(s) used identified.	1	Some comment made on the method(s) used.	15		<p>Tiered response based on:</p> <p>H 9-12 Candidates will show a clear understanding of the task and include a detailed explanation of both benefits and limitations of introducing CAD-CAM and a detailed evaluation that includes both positive and negative impacts on employees.</p> <p>Examples are clearly applied to BoW and its staff.</p> <p>The information will be presented in a structured and coherent form. There will be few if any errors in spelling, grammar and punctuation. Any technical terms will be used appropriately and correctly.</p> <p>M 5-8 Candidates will show some understanding of the task and include some explanation of benefit(s) and limitation(s) of introducing CAD-CAM and some evaluation that includes positive and negative impacts on employees. Their evaluation may be one-sided.</p> <p>Some examples are applied to BoW and its staff.</p> <p>The information will be presented in a structured format. There may be occasional errors in spelling, grammar and punctuation. Any technical terms will be mainly correct.</p>
AO4 Marks	Guidance											
3	A strength and a weakness in the method(s) used identified or suggestions for improving own performance.											
2	A strength <u>or</u> a weakness in the method(s) used identified.											
1	Some comment made on the method(s) used.											

Task 3	Answer	Marks	Guidance	
			Content	Levels of response
	<ul style="list-style-type: none"> • may lose customers who want a hand-crafted piece of furniture <p>Negative impacts on staff</p> <ul style="list-style-type: none"> • some carpenters may lose their jobs • fitters and carpenters may require training to work alongside the CAD-CAM • more pressure put on designers to get design right as CAM will produce exactly what they design/skilled carpenters can make adjustments if necessary • carpenters may feel their skills are not being used <p>Positive impacts on staff</p> <ul style="list-style-type: none"> • carpenters and fitters may learn new ICT skills, which they can use elsewhere • fitters may be given greater responsibility to assemble the furniture • safer working environment for carpenters as they do not need to use dangerous equipment, such as circular saws 			<p>L 1-4 Candidates will demonstrate a limited understanding of the task.</p> <p>Information may be a list of points, with little or no explanations or application to BoW.</p> <p>Information will be poorly expressed and there will be limited, if any, use of technical terms.</p> <p>Errors of grammar, punctuation and spelling may be intrusive.</p> <p>0 marks Candidate has provided nothing worthy of credit.</p>

SECTION A

Question		Answer/Indicative content	Mark	Guidance												
1		<ul style="list-style-type: none"> Research (1) plus two from: <ul style="list-style-type: none"> look for different types of wood look for new techniques test different woods try out new techniques 	3	<p>If job title given, i.e. research staff, mark as TV but award marks for correct tasks</p> <p>1 mark for job function plus 1 mark per point to max 2 for matching tasks.</p>												
2		<p>A description including:</p> <ul style="list-style-type: none"> receives blueprint from Sales and Marketing Manager assigns a carpenter and fitter to make piece of furniture checks finished furniture matches design requirements accesses order-processing system/selects Y from Completed drop-down list 	4	<p>1 mark per point to max of 4</p> <p>Accept Sales and Marketing Manager hands blueprint to Workshop Supervisor.</p>												
3	a	<ul style="list-style-type: none"> to record/specify the customer's requirements (1) so that the designer can create a <u>design</u> to match them (1) 	2	Do not accept description of design brief.												
	b	<table border="1"> <thead> <tr> <th>Type of information</th> <th>Example</th> </tr> </thead> <tbody> <tr> <td>Dimensions</td> <td><i>Height (120 cm), Width (90 cm), Depth (60 cm)</i></td> </tr> <tr> <td>Type of furniture</td> <td>e.g. table, wardrobe</td> </tr> <tr> <td>Type of wood</td> <td>e.g. ash, beech</td> </tr> <tr> <td>Type of finish</td> <td>e.g. stained, limed</td> </tr> <tr> <td>Specific design requirements</td> <td>e.g. hinges, handles</td> </tr> </tbody> </table>	Type of information	Example	Dimensions	<i>Height (120 cm), Width (90 cm), Depth (60 cm)</i>	Type of furniture	e.g. table, wardrobe	Type of wood	e.g. ash, beech	Type of finish	e.g. stained, limed	Specific design requirements	e.g. hinges, handles	4	<p>1 mark per point to max 4</p> <p>Examples given for Type of wood and Type of finish must be one of those listed in the case study. Accept any sensible response for Type of furniture and Specific design requirements. Accept 'none' for specific design requirements.</p> <p>For finish accept lacquer, varnish, polished, oil, wax</p>
Type of information	Example															
Dimensions	<i>Height (120 cm), Width (90 cm), Depth (60 cm)</i>															
Type of furniture	e.g. table, wardrobe															
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Specific design requirements	e.g. hinges, handles															

Question		Answer/Indicative content	Mark	Guidance	
4	a	<p>Method</p> <p>One from:</p> <ul style="list-style-type: none"> • check box/button • radio button • drop-down list <p>Plus matching data from:</p> <ul style="list-style-type: none"> • check box – delivery address same as customer address • radio button – bespoke or standard design • drop-down list – design number <u>for standard designs</u>/furniture completed 	2	<p>1 mark each to max 2</p> <p>Data can only be awarded if method is correct.</p>	
	b	i	<ul style="list-style-type: none"> • mileage is found using the delivery address postcode <u>and</u> mapping software • (mileage) multiplied by £1.50 	2	1 mark each to max 2
		ii	<ul style="list-style-type: none"> • VAT on price is calculated • VAT on the delivery charge is calculated • price, VAT on price, delivery charge, VAT on delivery charge are added together to give total amount of deposit paid deducted from the total 	4	<p>1 mark per point to max 4</p> <p>There must be a distinction between VAT on price and VAT on delivery charge, i.e. one or other must be qualified.</p> <p>Read whole answer. If price, VAT on price, delivery charge and VAT on delivery charge are all mentioned accept 'these are added together' for bullet point 3.</p>
	c	i	<ul style="list-style-type: none"> • invoice 	1	
		ii	<ul style="list-style-type: none"> • To inform the customer that their furniture is finished (1) and that they need to pay the balance / how much they have to pay (1) 	2	<p>Only mark if c(i) correct.</p> <p>To request payment (1)</p>

Question		Answer/Indicative content	Mark	Guidance
5		Hardware: One from: <ul style="list-style-type: none"> high specification computer (1st) with a large monitor (1) flat-bed plotter (1st) connected as a local printer (1) 	2	
		Software: <ul style="list-style-type: none"> CAD software (1st) installed on computers used <u>by designers/used</u> (by designers) to create designs (1) 	2	
		Input data: <ul style="list-style-type: none"> type of wood and finish required (1st) using drop-down list (1) 	2	
		Processing: One from: <ul style="list-style-type: none"> converts drawing (1st) to 3D wireframe (1) renders wireframe (1st) using selected wood and finish (1) 	2	
		Output: One from: <ul style="list-style-type: none"> blueprint (1st) used by Sales and Marketing Manager to calculate the price for making the piece of furniture / followed by carpenter and fitter to make piece of furniture / produced on flat bed plotter (1) 3D image (1st) of what the finished piece of furniture will look like / displayed on screen (1) 	2	

Question		Answer/Indicative content	Mark	Guidance
6	a	<p>Two from:</p> <p>e.g.:</p> <ul style="list-style-type: none"> • stock levels out-of-date/inaccurate (1) because new stock must be manually recorded (1) • wood and other items removed without being recorded (1) because carpenters/fitters need them urgently (1) • stock levels not updated when stock removed (1) because carpenters/fitters take it without telling warehouse staff (1) 	4	<p>Up to 2 marks each to max of 4</p> <p>Must be a weakness of the system and not a consequence.</p>
	b	<p>An explanation that includes:</p> <p>e.g.: ensure suppliers attach bar codes to all wood and other items (1) attach barcode readers to computers in the warehouse (1) so that barcodes can be scanned when new stock is received (1) to update the stock database automatically (1) place computer with barcode reader near the door from warehouse to workshop (1) so that carpenters/fitters scan barcodes on stock they remove (1)</p>	6	<p>Up to 6 marks for any suitable explanation. Must include both details of hardware and how it is used in BoW to gain maximum marks.</p> <p>Do not accept Just-in-time system unless it is explained based on how the stock level is recorded.</p> <p>Do not accept automatic re-ordering systems.</p>

Question		Answer	Marks	Guidance	
7				Content	Levels of response
		<p>Answers may include:</p> <p>Benefits</p> <ul style="list-style-type: none"> customers could make orders for <u>standard designs</u> directly via website sales from a wider geographical area <u>where there are no salespeople</u> <p>Limitations</p> <ul style="list-style-type: none"> difficult to order bespoke designs online customers may not provide required detail in client brief customers lack expertise of salesperson to know what is needed high cost of delivery for long distances may restrict orders to current area 	6	Bands M and H should only be considered for benefits and limitations that relate directly to the scenario not general benefits and limitations of e-commerce	<p>H 5-6 Candidates will show a clear understanding of the question and include a detailed and balanced discussion of both the specific benefits and limitations of BoW introducing e-commerce. A fully justified recommendation is made.</p> <p>M 3-4 Candidates will show some understanding of the question and include some discussion of the specific benefit(s) and limitation(s) of BoW introducing e-commerce. The discussion lacks detail and may be unbalanced. A justified recommendation is attempted.</p> <p>L 1-2 Candidates will demonstrate a limited understanding of the question.</p> <p>Information will be a list of points with little or no discussion. Any recommendation will be a statement with no attempt to justify it.</p> <p>0 marks Candidate has provided nothing worthy of credit.</p>

Section B

Question		Answer	Mark	Guidance
8		Two from: e.g.: <ul style="list-style-type: none"> • product code • description • quantity 	2	Accept date of order/despatch but NOT date of delivery. Thank you note / returns document are NOT items of information.
9	a	<ul style="list-style-type: none"> • because it <u>is illegal</u> to gain unauthorised access to computer material (hacking) (1) and to carry out unauthorised modification of computer material (viruses) (1) 	2	Do not accept prevents Beware rewording question
	b	<ul style="list-style-type: none"> • because the person could be anywhere in the world when they commit the offence (1) so may be difficult to find them / country they are in may not co-operate (1) 	2	Accept any reasonable explanation providing it recognises that these can be long-distance crimes or dark net.

Question		Answer	Marks	Guidance	
10				Content	Levels of response
		<p>Answers may include consideration of</p> <ul style="list-style-type: none"> • <u>recruitment</u> <ul style="list-style-type: none"> • advertising vacancies • sending out/receiving application forms • collating responses • shortlisting applicants (in liaison with senior staff) • organise interviews • be part of interview panel • send letters to successful/unsuccessful applicants • check references • produce and send out contracts • <u>staff welfare</u> <ul style="list-style-type: none"> • handling requests for leave • dealing with disciplinary matters • arranging cover for staff absence • keeping record of hours/wages • organising pension contributions • dealing with trade unions and staff organisations • dealing with redundancies • <u>training</u> <ul style="list-style-type: none"> • organise staff appraisals • maintain staff development plans • keep records of staff training • keep records of qualifications • arrange for staff to attend training • organise in-house training 	6		<p>H 5-6 Candidates will show a clear understanding of the question and provide a detailed description of the role of the HR department that includes a balanced coverage of the three main aspects.</p> <p>M 3-4 Candidates will show some understanding of the question and provide some description of the role of the HR department, which will focus on two or more aspects OR a detailed description of one aspect.</p> <p>L 1-2 Candidates will demonstrate a limited understanding of the question. Their answer may be a list of points with little or no description.</p> <p>0 marks Candidate has provided nothing worthy of credit.</p>

Question		Answer/Indicative content	Mark	Guidance
11	a	<p>Any two mobile devices identified e.g.</p> <ul style="list-style-type: none"> • mobile/smart phone • tablet • GPS <p>Any two matching benefits explained e.g.</p> <ul style="list-style-type: none"> • can keep customer informed if they are going to be late (1) because they can call/send SMS <u>from anywhere</u> (1) • can access most up-to-date prices/availability of products (1) because can access company server/VPN using 3G/wireless (1) • can find customers' premises more easily (1) because post code can be entered to find directions (1) 	6	<p>Need to take account of devices available at time of examination.</p> <p>Convergence of technology means that benefits may apply to more than one device but two different benefits must be given.</p> <p>Accept device name e.g. iPad</p> <p>Accept storage of data</p>
	b	<p>Any one disadvantage explained e.g.</p> <ul style="list-style-type: none"> • may find it difficult to take a break (1) because always contactable (1) • may have concerns over security of devices (1) because they may contain company sensitive data (1) 	2	<p>Other possible disadvantages may include theft, damage and loss of signal/power.</p>

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