OCR
Oxford Cambridge and RSA

GCE

ICT

Unit **G061:** Information, Systems and Applications

Advanced Subsidiary GCE

Mark Scheme for June 2016

Question			Answer/Indicative content	Mark	Guidance
1	a		2 from, 2 marks each: Context: Setting/environment/scenario (1) Example eg: Where the clothing is going to be used / country of sale/UK Pounds / UK Date (1) Structure: Data pattern / construction / format (1) Example eg: (£)00.00 / (£)nn.nn (1)	4	Accept background information Accept example, e.g. £5.00
	b		Unprocessed (1) Raw facts/figures (1)	2	
	c		2 from, 2 marks each eg: Volume of data (1) large number of reviews available from different people (1) Variety of sources (1) lots of different sources that can be used (1) Immediacy of information/readily available (1) reviews immediately available to go on the website (1) Speed of data collection (1) no need to wait to collect it (1) Analysis is already complete (1) saves time/money getting it into format to use(1) lack of bias (1) online store does not know where the data has come from so cannot place their own slant on it (1)	4	
2	a		3 from, 2 marks each eg: To record the amount of stock it has (1) so that they know when to reorder (1) To record the supplier for each item of stock (1) so that an order can be placed (1) To reduce the amount in stock (1) each time an item is sold (1) To record a reorder level for each item of stock (1) so that when it reaches it an order can be automatically placed (1)	6	Stock control can also be linked to Suppliers, Orders/Purchasing, Reordering, overall sales of items Analysis of data for popular products/demands Produce reports (1) to do something example (1) Not Invoicing

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	b	i	2 from, matched pairs eg: Drop down boxes (1) to allow selection of product (1) Image (1) of product in stock (1) Buttons (1) to reorder stock (1)	4	Expansion must be contextualised to stock control system
	b	ii	3 from: Natural language (1) Dialogue (1) Command line/based interface (1) WIMP (1) GUI (1)	3	Not form Not menu
3			2 from, 2 each: Input Getting data into the system (1) Entering person details / entering username/password (1) Processing Performing an action on the data/using the data (1) Checking to see if username is unique / sending process back to beginning (1)	4	Input – allow user typing in Must include link to example in question for full marks Second mark not dependent on getting the first
4	a		2 from matched pairs eg: Allows variables to be changed/what if questions (1) different scenarios can be tested/only one model required (1) Different worksheets can be used (1) different values on each / input on one output on another (1) Use of calculations/function/formulas/(allow example) (1) reducing errors (1) Automatic recalculation (1) can change variables and automatically change linked cells to see results (1) Graphs can be created (1) visually show the sales over the year/easier to understand the data (1) Cells can be protected (1) preserving the functions from being changed (1)	4	Not quicker/backup/familiar/training

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	b		3 from matched pairs eg: Visual representation of the store (1) to see if everything will fit (1) Changes to the plan can be made/what if questions asked (1) to see the impact of moving the till to a different position/without having to redraw from scratch (1) Can be backed up (1) in case of fire/theft (1) Can see in 3D (1) giving a real life idea of what the store will look like (1) Can see the store from different perspectives (1) child/adult to see how the placement of products works (1)	6	Must be related to the store
5			**High [5 – 6 marks]:** Candidate has given reasons why a concept keyboard should be used. Subject specific terminology will be used accurately and appropriately. **Medium [3 – 4 marks]:** Candidate has described advantages of using a concept keyboard for given situation. Some subject specific terminology will be used. **Low [1 – 2 marks]:** Candidate has identified advantages of using a concept keyboard/described concept keyboard for given situation. Subject specific terminology may be limited or missing. **0 Marks** No content worthy of credit Answers may include: Employees do not need to know the names of the items as they can use pictures Employees can use text for actions such as refund Keyboard can be reprogrammed and new functions added without buying a new one	6	Advantages ONLY Ignore any disadvantages

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6	a	i	2 from, matched pairs eg: Brand recognition (1) allows customers to recognise the company from the house style (1) Ensures all items included (1) can have placeholders for different elements as reminders (1) No choices to be made by employees (1) all the formatting is given to them (1)	4	Mark consistency of layout under same marking point as brand layout Not professional
		ii	2 from eg: Font style (1) Font size (1) Margin width (1) Logo (1)	2	Not font on its own No content – e.g. Company name Not colour on its own Allow positioning of items on page
	b		2 from, matched pairs eg: Limited choice (1) may not be suitable for the presentation (1) May not contain the image you want (1) no point using image library/have to look elsewhere (1) Cannot see quality of image (1) from thumbnail (1) If size of library is large (1) can take time to load/scroll (1)	4	Not copyright Not cost Not collection of images Not disability Not unique
	c		2 from, matched pairs eg: Made up of coordinates (1) and line thickness (1) Geometric data (1) that links points together (1) Can be enlarged (1) without losing quality (1) Device independent (1) does not rely on the graphics card in the machine to display (1) Small file size (1) does not store each pixel/made up of geometric data (1)	4	There is a crossover between the characteristics and advantages of use Do not award marks for resize

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	d	i	2 from, matched pairs eg: Technical knowledge required (1) to set up and use presentation software (1) Animations/effects can distract the audience (1) making them less likely to listen to the content (1) Skipping slides can be seen by the audience (1) who then know they are missing something (1) Computer/projector can go wrong (1) stopping presentation (1)	4	Not cost Not power Not content of slides as acetate can be a printed powerpoint slide Not printouts as can print/handout acetate Change order MP MUST be unseen by audience Not file corruption
		ii	2 from, matched pairs eg: Allows different paths through the presentation (1) can be adapted to the needs of the audience (1) Presentation can be adapted (1) questions from the audience can be answered there and then (1) Allows presenter choice (1) can move through presentation in a unique way (1)	4	Allow examples of situations that will need the presentation to be adapted, e.g. running out of time.
	e		2 marks each eg: Hotspots Area of the screen/picture/shape (1) that can link to another slide/website (1) Video Series of still images (1) run together with short gap between them (1) moving image and sound (1) Allow example of each – max 1 for each	4	Not button for hotspot
	f		3 from eg: Electrocution/preventing shock (1) Computer falling off/unstable surface (1) Overloaded sockets (1) Tripping over cables (1) Not located near water/drink (1) No ventilation around equipment (1)	3	Must be related to setting up and delivering and not generic safety problems Not health

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7	a		Real: Number with decimal places (1) Example eg: Price of item (1) Boolean: One of two possible values (1) Example eg: Item on order / new customer (1)	4	Use related to stock control / customers For use, allow example
	b		Number in stock: integer (1) Description of item: string/alphanumeric/text (1)	2	Number in stock – NOT number or Autonumber
	c		2 marks each: Table: Contains all the data about a collection of things (1) eg stock (1) Set of data items (1) collection of records (1) Implementation of an entity (1) Record: Contains all the data about one item in a table (1) eg one product in a stock table (1) Made up of fields (1) Row of data/row in a table (1) with one value for each field (1) Field: Made up of characters (1) Contains one data value/item (1) Fields have their properties (1) e.g. validation/length (1)	6	Allow relevant example of each – max 1 for each.
	d		PRODUCT and SUPPLIER: M:1/1:M/M:M/1:1(1) CUSTOMER and ORDER: M:1/1:M/M:M (1) ORDER and PRODUCT: M:1/1:M/M:M (1)	3	
	e	i	1 from: Each non key attribute in the relation must be functionally dependent upon the primary key (1) non key attributes must depend on the entire primary key(1)	1	

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		ii	1 from: All of the columns must be fully dependent upon the primary key (1) Contains no transitive functional dependencies (1) There are no non-key attributes that depend on another non-key attribute (1)	1	
8	a		2 from, matched pairs eg: Buttons added (1) to navigate between records (1) Drop down lists added (1) to limit selection to list (1) Macro (1) to run a report (1) Labels (1) to add instructions (1)	4	What the customisation is and what it does Must be specific – not generic e.g. change colours If they do not mention the item but it is implicit – e.g. instructions to tell the user what to add in the field – then award marks
	b		2 from, matched pairs eg: Training is required (1) as the interface is not standard and new employees might not know how to use it (1) Can introduce errors (1) if the customisation is not fully tested (1) Limits what the database can do (1) advanced features may have been removed (1) May not be compatible with upgrades (1) customisations can be lost (1)	4	Not cost
9	a		2 from: Item being searched for (1) A variable/criteria/value (1) Can be hardcoded / input at runtime (1) Example (1)	2	Do NOT allow static/dynamic
9	b		1 from, both parts required: Static – parameter does not change with dynamic the parameter changes (1) Static hardcoded, dynamic – not hardcoded/added by user (1)	1	BOTH sides required

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10			2 from, matched pairs eg: Access to network of individuals in similar jobs (1) allows them to get help and support (1) Access to specific qualifications (1) to improve their knowledge/career opportunities (1) Recognised validation of skills through letters after name (1) gives respect for qualifications/position (1) Training courses (1) to improve knowledge in specific areas (1) Runs conferences on specific issues (1) to improve the NM's knowledge (1)	4	Not BCS can solve problems BCS is NOT a union – no union related activities Must be for Network Manager, not company
11			3 from, matched pairs eg: Monitoring (1) tasks they are doing can be viewed by employer / emails read/ visited websites looked at (1) Infection from virus (1) can spread through network deleting their work (1) Reliant on central computers/servers working (1) if they fail they cannot work (1) Limited functionality (1) options locked down (1) Shared peripherals (1) may have to walk a distance to the printer/wait for others to finish using it (1) Computer updates (1) can occur whilst working interrupting tasks (1) Large numbers of employees on the network (1) can slow it down (1)	6	Second marking point must be a disadvantage to the employee Not training
12	a		2 from e.g: Security Guards (1) patrol the area and prevent access (1) Access rights (1) if not correct userID and password cannot get to the data (1) Encryption (1) data is unintelligible without the key (1) Firewall (1) inspects data to block/allow (1)	4	Do not accept passwords or locked doors Not encode Allow biometric

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12 b	3 from e.g: Data is accurate (1) send the data to the individual every year for checking (1) Employees know responsibilities (1) train the employees in DPA (1) Information is not excessive (1) review the data held annually (1) No send outside EU unless DPA equivalent is in place (1) check where the information is being sent and laws are in place / permission obtained from customer to send data (1) Data is up to date / correct (1) changing the data when notified of any changes (1)	6	Do not accept keep data secure Measure must be a specific action that company can take and not a repeat of the requirement If they do not get the requirement, they cannot have the measure Do NOT give rights as requirements, it is the principles.

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