

Mark Scheme for January 2013

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It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

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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Annotations

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 <u>should only be used where specified by the PE.</u>
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.

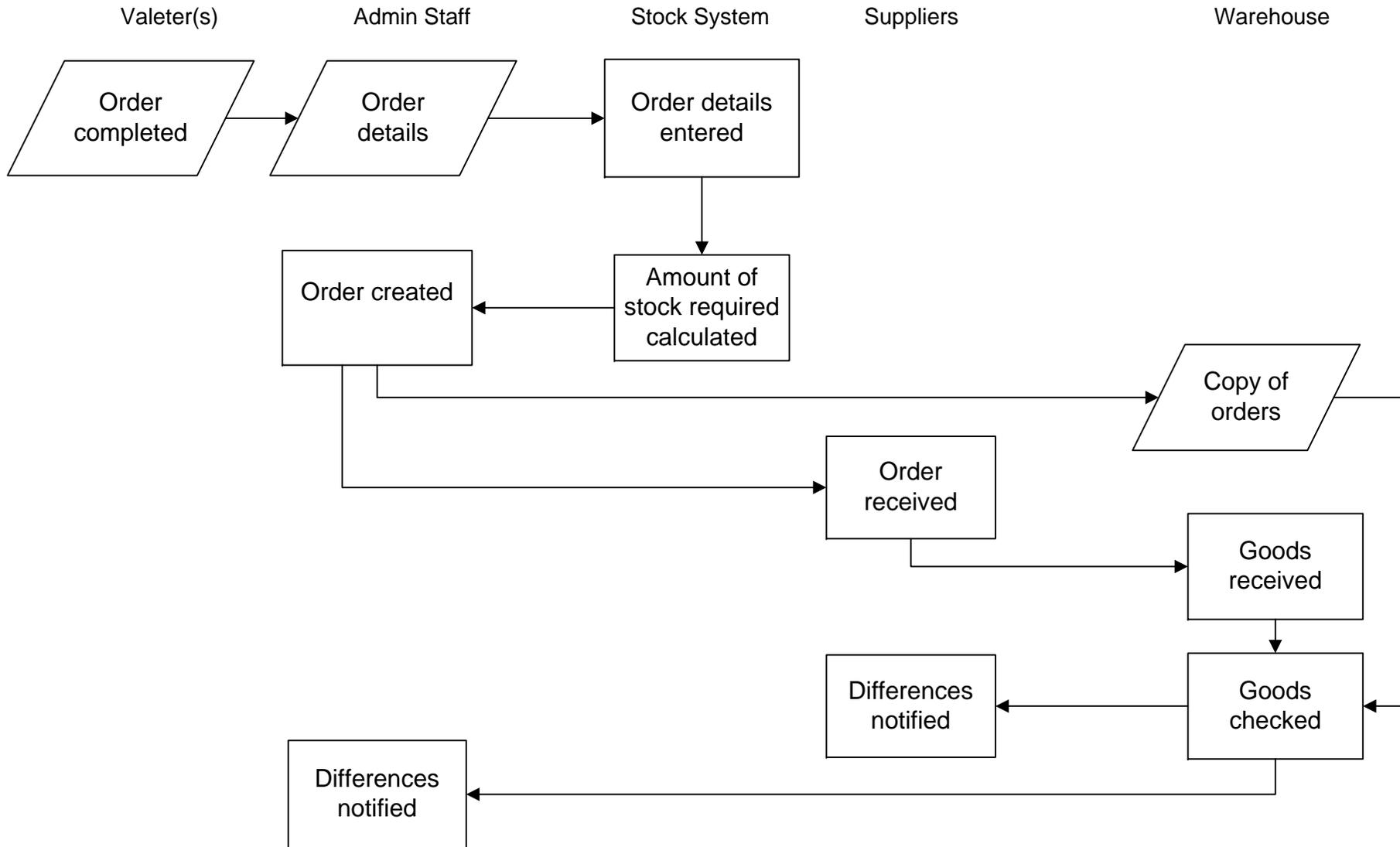
Subject-specific Marking Instructions

There are 100 marks available for this test. They are allocated as follows:

- Tasks 2, 3 and 4 30
- Section A of the test paper 50
- Section B of the test paper 20

Task	Answer	Marks	Guidance								
2	<p>1 mark available for identification of:</p> <ul style="list-style-type: none"> • Valeter • Administration Staff • Stock system (spreadsheet) • Suppliers • Warehouse. <p>1 mark for each correct symbol, in the correct column, with associated flows (Max 7).</p> <p>Evaluation – 3 marks available</p> <table border="1" data-bbox="367 660 1261 858"> <thead> <tr> <th data-bbox="367 660 504 702">Mark</th> <th data-bbox="504 660 1261 702"></th> </tr> </thead> <tbody> <tr> <td data-bbox="367 702 504 778">1</td> <td data-bbox="504 702 1261 778">Some comment on method(s) used to develop systems flowchart</td> </tr> <tr> <td data-bbox="367 778 504 820">2</td> <td data-bbox="504 778 1261 820">A strength/weakness in method(s) used identified</td> </tr> <tr> <td data-bbox="367 820 504 858">3</td> <td data-bbox="504 820 1261 858">A strength and weakness in method(s) used identified</td> </tr> </tbody> </table>	Mark		1	Some comment on method(s) used to develop systems flowchart	2	A strength/weakness in method(s) used identified	3	A strength and weakness in method(s) used identified	15	<p>Max 12 for diagram (Example on the next page) Max 3 for evaluation (AO4).</p> <p>NOTE: TMCW = The Mobile Car Wash</p>
Mark											
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Task 2 Diagram Example



Task	Answer	Marks	Guidance																																																		
3	1 mark for layout of table 1 mark for identification of sections – Rules (conditions) and actions 1 mark for consistent notation 1 mark for correct number of rules 1 mark for all correct conditions 1 mark for all correct actions 1 mark for each correct rule column (Max 4).	10	Example table shown below. <table border="1" data-bbox="1240 277 2051 684"> <thead> <tr> <th data-bbox="1240 277 1597 320">Rules</th> <th data-bbox="1597 277 1709 320">1</th> <th data-bbox="1709 277 1821 320">2</th> <th data-bbox="1821 277 1933 320">3</th> <th data-bbox="1933 277 2051 320">4</th> </tr> </thead> <tbody> <tr> <td data-bbox="1240 320 1597 363">Number of cars = 1</td> <td data-bbox="1597 320 1709 363">Y</td> <td data-bbox="1709 320 1821 363"></td> <td data-bbox="1821 320 1933 363"></td> <td data-bbox="1933 320 2051 363"></td> </tr> <tr> <td data-bbox="1240 363 1597 406">Number of cars = 2</td> <td data-bbox="1597 363 1709 406"></td> <td data-bbox="1709 363 1821 406">Y</td> <td data-bbox="1821 363 1933 406"></td> <td data-bbox="1933 363 2051 406"></td> </tr> <tr> <td data-bbox="1240 406 1597 450">Number of cars = 3</td> <td data-bbox="1597 406 1709 450"></td> <td data-bbox="1709 406 1821 450"></td> <td data-bbox="1821 406 1933 450">Y</td> <td data-bbox="1933 406 2051 450"></td> </tr> <tr> <td data-bbox="1240 450 1597 493">Number of cars = >4</td> <td data-bbox="1597 450 1709 493"></td> <td data-bbox="1709 450 1821 493"></td> <td data-bbox="1821 450 1933 493"></td> <td data-bbox="1933 450 2051 493">Y</td> </tr> <tr> <td data-bbox="1240 493 1597 536">Actions</td> <td data-bbox="1597 493 1709 536"></td> <td data-bbox="1709 493 1821 536"></td> <td data-bbox="1821 493 1933 536"></td> <td data-bbox="1933 493 2051 536"></td> </tr> <tr> <td data-bbox="1240 536 1597 579">No reduction</td> <td data-bbox="1597 536 1709 579">Y</td> <td data-bbox="1709 536 1821 579"></td> <td data-bbox="1821 536 1933 579"></td> <td data-bbox="1933 536 2051 579"></td> </tr> <tr> <td data-bbox="1240 579 1597 622">-£10</td> <td data-bbox="1597 579 1709 622"></td> <td data-bbox="1709 579 1821 622">Y</td> <td data-bbox="1821 579 1933 622"></td> <td data-bbox="1933 579 2051 622"></td> </tr> <tr> <td data-bbox="1240 622 1597 665">-£15</td> <td data-bbox="1597 622 1709 665"></td> <td data-bbox="1709 622 1821 665"></td> <td data-bbox="1821 622 1933 665">Y</td> <td data-bbox="1933 622 2051 665"></td> </tr> <tr> <td data-bbox="1240 665 1597 708">-£20</td> <td data-bbox="1597 665 1709 708"></td> <td data-bbox="1709 665 1821 708"></td> <td data-bbox="1821 665 1933 708"></td> <td data-bbox="1933 665 2051 708">Y</td> </tr> </tbody> </table>	Rules	1	2	3	4	Number of cars = 1	Y				Number of cars = 2		Y			Number of cars = 3			Y		Number of cars = >4				Y	Actions					No reduction	Y				-£10		Y			-£15			Y		-£20				Y
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4	1 mark available for <ul style="list-style-type: none"> • Use of colour/font/white space • Logical order of information • Identification of TMCW/valeters name • Use of validation features such as drop-down list/option buttons • Stock items identified • Stock required • All data/information shown is appropriate with no omissions/extra data required. 	5	1 mark each for (Max 5): Do not accept pre-populated/examples of completed reports.																																																		

SECTION A

Question		Answer	Marks	Guidance
1		To increase the security of information (1 st) held on the computers (1) Reduce errors (1 st) by validation of inputs (1) Solve the problems of the current system (1 st) example given (1) To upgrade applications software (1 st) using the same vendors (1).	4	Two from; max 2 marks per purpose.
2	(a)	Pre-populated fields should be included in the order form (1) Date should be automatically changed by the software (1) User errors limited through validation/drop down lists (1) Contain helpful error messages (1).	4	Any 4.
	(b)	New system has a total of 10 computers (1 st) linked in a network (1) Each computer (1 st) is connected to a black and white printer (1) Computers in the main office (1 st) have shared access to a colour laser printer (1) Portable tablet computer (1 st) for each valet/25 required (1).	4	2 from; max 2 per requirement.
3	(a)	Implemented over a weekend (1 st) when TMCW is closed (1) to minimise disruption (1).	3	
	(b) (i)	Budget (1).	1	Correct answer only.
	(ii)	£15000 (1) to cover hardware, software and installation costs (1).	2	To be awarded marks for this part of the question b(i) must be correct.

Question	Answer	Marks	Guidance
4	<p>Explanation User requirements are what are required from the system (1) Defined by the end-user(s) of the system (1) Can be generic/specific (1).</p> <p>Examples To produce reports (1) Example of reports to be produced (1) For orders to be submitted electronically (1) Use an order form template for valeters stock orders (1) To keep a database of customers/suppliers(1) For suppliers/customers to be identified by a unique number (1) To keep a record of appointments/orders (1) system to show appointments for the day/stock system shows re-order levels (1).</p>	6	Max 3 for explanation Max 4 for examples provided.

Question		Answer	Marks	Guidance										
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5		<p>Answers may include:</p> <p>The new system completely replaces the old on a given day.</p> <p>Advantages Quickest implementation method Reduced costs in terms of budget and time.</p> <p>Disadvantages Implementation must be fully planned Any problems found in the system lead to data loss and/or failure of TMCW Can cause extra work/stress on staff if a problem occurs Training may not have covered all aspects of system required to do job Can be difficult to fully and completely test the new system prior to implementation.</p> <p>Examples TMCW need to implement system at a weekend All data files will need to be backed up and kept safe May be implemented at end of month to reduce risks of impact to TMCW.</p>	12		<table border="1"> <thead> <tr> <th>Band</th> <th>Mark Range</th> <th></th> </tr> </thead> <tbody> <tr> <td>H</td> <td>9–12</td> <td> <p>Candidates will show a clear understanding of the question and include detailed evaluation including the advantages and disadvantages of the use of the direct implementation method.</p> <p>Candidates provide a conclusion clearly justifying the use/or not of the direct implementation method.</p> <p>Examples will relate to TMCW</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. Technical terms will be used appropriately and correctly.</p> </td> </tr> <tr> <td>M</td> <td>5–8</td> <td> <p>Candidates will show an understanding of the question and include an evaluation including the advantages and disadvantages of the use of the direct implementation method or answers may be limited or one-sided.</p> <p>Candidates provide a conclusion relating to the use/or not of the direct implementation method This may be limited in scope or implied.</p> <p>The information will be presented in a structured format.</p> <p>There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.</p> </td> </tr> </tbody> </table>	Band	Mark Range		H	9–12	<p>Candidates will show a clear understanding of the question and include detailed evaluation including the advantages and disadvantages of the use of the direct implementation method.</p> <p>Candidates provide a conclusion clearly justifying the use/or not of the direct implementation method.</p> <p>Examples will relate to TMCW</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. Technical terms will be used appropriately and correctly.</p>	M	5–8	<p>Candidates will show an understanding of the question and include an evaluation including the advantages and disadvantages of the use of the direct implementation method or answers may be limited or one-sided.</p> <p>Candidates provide a conclusion relating to the use/or not of the direct implementation method This may be limited in scope or implied.</p> <p>The information will be presented in a structured format.</p> <p>There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.</p>
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						L	0-4	<p>Candidates will demonstrate a limited understanding of the question. Information may be a list of points, with little explanation.</p> <p>Examples may not relate to TMCW.</p> <p>Information will be poorly expressed and there will be a limited, if any, use of technical terms. Errors of grammar, punctuation and spelling may be intrusive.</p>

Question		Answer	Marks	Guidance
6	(a)	<p>Advantage All staff at TMCW/large numbers of people can be asked the same questions (1) so analysis/comparisons are easy to formulate (1) Less cost/time than interviews (1) for large numbers of people/over 25 staff at TMCW (1) Responses can be anonymous (1) may provide honest answers (1).</p> <p>Disadvantage If questions are not designed carefully (1) may get unhelpful responses (1) Cannot guarantee 100% return rate (1) so analysis may be irrelevant (1) Further details/clarification (1) can be difficult to get from staff (1).</p>	6	2 advantages; max 2 per advantage. Max 4 1 disadvantage max 2.
7		<p>To identify potential problems (1) and solve them before they occur (1) To increase the shelf-life of the system (1) To maintain the integrity of the system (1).</p>	4	Any 4 from list given.
8		<p>As changes are made to the system (1st) these can be tracked (1) Version details can be checked (1st) to ensure that the most up-to-date documents are being used (1) Version details are updated (1st) as changes are made to the system (1).</p>	4	
9		<p>Memory capacity (1) Storage devices (1) Peripheral specifications (1) Data capture equipment (1) Communication equipment (1).</p>	2	Any 2 from list given.

Question		Answer	Marks	Guidance
10	(a)	A record of data about data (1) entries held about data elements (1) includes structures/flows/stores/processes (1) enables future maintenance/development (1) to see structure of database being used (1).	4	Any 4 from list given.
	(b)	Name (1) Description (1) Aliases (1) Type (1) Format (1) Values (1) Security (1) Editing (1) Comments (1).	2	Any 2 from list given, 1 mark each.
11		Physical Locks on doors/windows (1 st) only authorised people/owner has keys limiting access (1) Cages/locks on computer (1 st) to prevent theft (1) Back-ups held off-site (1 st) can be used in case of emergency (1) Blinds at windows (1 st) limits how much can be seen when offices are closed (1) CCTV cameras (1 st) can video/live stream what is happening (1). Logical Access Levels (1 st) users only have access to the data/information needed to complete their jobs (1) User Names/Passwords (1 st) determines access to information/data. (1)	4	One from each type Max 2 marks per type.

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12		<p>Answers may include:</p> <p>Advantages No cost involved as member of staff training is already getting paid Other staff do not have to cover work load if a member of staff is out of office Convenience new staff can ask questions as situations arise All situations can be covered as long as training period is long enough Existing staff can take the role of mentor.</p> <p>Disadvantages Skills and knowledge passed may include incorrect knowledge or bad working practices Pressure of working day may not provide suitable time span to pass on new skills Decisions need to be made whether training takes place on one-to-one basis or in a group Staff doing training may fall behind with own work.</p>	8		<table border="1"> <thead> <tr> <th>Band</th> <th>Mark Range</th> <th></th> </tr> </thead> <tbody> <tr> <td>H</td> <td>6–8</td> <td> <p>Candidates will show a clear understanding of the question and include detailed evaluation including the advantages and disadvantages of the use of the on-site/on-the-job training method.</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. Technical terms will be used appropriately and correctly.</p> </td> </tr> <tr> <td>M</td> <td>3–5</td> <td> <p>The information will be presented in a structured format. There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.</p> <p>Candidates will show an understanding of the question and include an evaluation including the advantage(s) and disadvantage(s) of the use of the on-site training method. Evaluation may be limited or one-sided.</p> </td> </tr> <tr> <td>L</td> <td>0–2</td> <td> <p>Candidates will demonstrate a limited understanding of the question.</p> <p>Information may be a list of advantage(s) or disadvantage(s), with little explanation.</p> <p>Information will be poorly expressed and there will be a limited, if any, use of technical terms.</p> <p>Errors of grammar, punctuation and spelling may be intrusive.</p> </td> </tr> </tbody> </table>	Band	Mark Range		H	6–8	<p>Candidates will show a clear understanding of the question and include detailed evaluation including the advantages and disadvantages of the use of the on-site/on-the-job training method.</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. Technical terms will be used appropriately and correctly.</p>	M	3–5	<p>The information will be presented in a structured format. There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.</p> <p>Candidates will show an understanding of the question and include an evaluation including the advantage(s) and disadvantage(s) of the use of the on-site training method. Evaluation may be limited or one-sided.</p>	L	0–2	<p>Candidates will demonstrate a limited understanding of the question.</p> <p>Information may be a list of advantage(s) or disadvantage(s), with little explanation.</p> <p>Information will be poorly expressed and there will be a limited, if any, use of technical terms.</p> <p>Errors of grammar, punctuation and spelling may be intrusive.</p>
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OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

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Head office
Telephone: 01223 552552
Facsimile: 01223 552553

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