Mark Scheme (Results)

All series

Pearson BTEC Nationals
In Information Technology (31761H)
Unit 2: Creating Systems to Manage Information

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Unit 2: Creating Systems to Manage Information - Marking grid

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Specific Marking guidance

- The marking grids have been designed to assess learner work holistically.
- Rows within the grids identify the assessment focus/outcome being targeted. When using a marking grid, the 'best fit' approach should be used.
- Examiners should first make a holistic judgement on which band most closely matches the learner response and place it within that band. Learners will be placed in the band that best describes their answer.
- The mark awarded within the band will be decided based on the quality of the answer in response to the assessment focus/outcome and will be modified according to how securely all bullet points are displayed at that band.
- Marks will be awarded towards the top or bottom of that band depending on how they have evidenced each of the descriptor bullet points.

Part A

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 1: ERD screenprint	**0**	**1-2**	**3-4**	**5-6**	**7-8**	**8**
	No rewardable material	ERD shows an attempt at normalisation with significant data redundancy. ERD has some correct relationships shown.	ERD shows that most data is correctly normalised with some data redundancy. ERD has some correct relationships and some correct relationship types.	ERD shows that most data is correctly normalised with minimal data redundancy. ERD has mostly correct relationships and mostly correct relationship types shown.	The ERD shows that the data is correctly normalised with no data redundancy. ERD has correct relationships and relationship types shown throughout.	
Activity 2: Table structure and validation	**0**	**1-2**	**3-4**	**5-6**	**7-8**	**8**
	No rewardable material	Uses some meaningful field and table names with some inconsistencies. The table structure identifies some primary and foreign key fields. The table structure has limited use of correct data types. Limited use of validation which may be inaccurate.	Uses meaningful field and table names with minor inconsistencies. The table structure identifies most primary and foreign key fields. The table structure has correct data types for most fields. Accurate validation rules for some of the fields that require validation.	Uses a recognised naming convention with minor inconsistencies for fields and tables. The table structure identifies all primary and most foreign key fields. The table structure has correct data types for most fields including matching primary and foreign key fields. Accurate validation rules for most of the fields that require validation.	Uses a recognised naming convention consistently for fields and tables. The table structure identifies all primary and foreign key fields. The table structure has correct data types for all fields. Accurate validation rules for all fields that require validation.	

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 3: Queries and Report	**0**	**1-3**	**4-6**	**7-9**	**10-12**	**12**
	No rewardable material	Queries and report include limited relevant fields. Queries and report include details of some criteria and calculations required, which may include inaccuracies. Presentation of data in queries and report will not aid readability and understanding of data.	Queries and report includes some relevant fields. Queries and report include accurate details of some criteria and calculations required. Presentation of data in queries and report will, in places, aid readability of and understanding of data.	Queries and report includes mostly relevant fields. Queries and report includes accurate details of most criteria and calculations required. Presentation of data in queries and report will mostly aid readability and understanding of data.	Queries and report includes all relevant fields only. Queries and report include accurate details of all criteria and calculations required. Presentation of data in queries and report will aid readability and understanding of data.	

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 4: Structure Testing	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data. Expected results are generic or mostly inaccurate. Test data may not be present Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found.	Testing is adequate to confirm a working solution, including some normal, erroneous and/or extreme data. Expected results are mostly accurate and based on identified test data but may lack detail. Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found.	Testing is thorough, including a range of normal, erroneous and extreme data. Expected results are specific and accurate based on identified test data. Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed.	

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 5: Structure Evaluation	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies. Limited or unsupported justification of the relational database structure selected. Limited links between aspects of the solution and the requirements of the scenario. Technical vocabulary is used but it is not used appropriately to support arguments.	Some accurate and relevant understanding of technical concepts shown. Some valid justification, which may lack support of the relational database structure selected. Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity. Mostly accurate technical vocabulary is used to support arguments.	Accurate and detailed understanding of relevant technical concepts shown throughout. A valid and fully supported justification of the relational database structure selected. Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout. Fluent and accurate technical vocabulary is used to support arguments.	

Part B

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 6:	**0**	**1-4**	**5-7**	**8-10**	**11-14**	14
Interface and Functionality	No rewardable material	Interface is unclear or provides limited information and there are inconsistencies and inaccuracies in formatting, so a user would experience difficulty in using the database and making maintenance by a third party difficult	Interface is clear but there are some inconsistencies and inaccuracies in formatting allowing a user to use the database with minor difficulties and allowing maintenance by a third party with minor difficulties.	Interface is clear with minimal inconsistencies and inaccuracies in formatting allowing a user to use the database easily and allowing maintenance by a third party with minor difficulties.	Interface is clear and intuitive, consistently and accurately formatted allowing a user to easily use the database and allowing it to be easily maintained by a third party.	
		Interface may not have details of criteria/calculations required, or these may include inaccuracies.	Interface includes accurate details of some criteria/calculations required.	Interface includes accurate details of most criteria/calculations required.	Interface includes accurate details of all criteria/calculations required.	
		Interface uses minimal validation, checking procedures and automation resulting in a system with limited capacity to reduce errors or handle unexpected events.	Interface uses some accurate validation, checking procedures and automation, resulting in a system that minimises the most common errors and handles some unexpected events.	Interface uses accurate validation, checking procedures and automation, resulting in a system that minimises the majority of errors and handles most unexpected events.	Interface uses accurate validation, checking procedures and automation throughout, resulting in a robust system that minimises errors and handles unexpected events.	
		Interface may not be fully functional and/or may have major errors that prevent the interface from meeting the given criteria.	Interface is functional and meets some of the given criteria with minimal errors.	Interface is functional with minimal errors and meets the given criteria.	Interface is fully functional and fully meets the given criteria.	

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 7: Interface Testing	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data. Expected results are generic or mostly inaccurate. Test data may not be present. Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found.	Testing is adequate to confirm a working solution, including some normal, erroneous and/or extreme data. Expected results are mostly accurate and based on identified test data but may lack detail. Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found.	Testing is thorough, including a range of normal, erroneous and extreme data. Expected results are specific and accurate based on identified test data. Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed.	

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 8: Interface Evaluation	**0**	**1-2**	**3-4**	**5-6**	**6**
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies.	Some accurate and relevant understanding of technical concepts shown.	Accurate and detailed understanding of relevant technical concepts shown throughout.	
		Limited or unsupported justification of the quality, performance and usability of the interface.	Some valid justification, which may lack support of the quality, performance and usability of the interface.	A valid and fully supported justification of the quality, performance and usability of the interface.	
		Limited links between aspects of the solution and the requirements of the scenario.	Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity.	Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout.	
		Technical vocabulary is used but it is not used appropriately to support arguments.	Mostly accurate technical vocabulary is used to support arguments.	Fluent and accurate technical vocabulary is used to support arguments.	