Office Solutions Development

December 2015

Sample Exam Marking Scheme

This marking scheme has been prepared as a **guide only** to markers. This is not a set of model answers, or the exclusive answers to the questions, and there will frequently be alternative responses which will provide a valid answer. Markers are advised that, unless a question specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks.

If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

Throughout the marking, please credit any valid alternative point.

Where markers award half marks in any part of a question, they should ensure that the total mark recorded for the question is rounded up to a whole mark.

Marker's comments:

Moderator's comments:

Mark:	Moderated mark:	Final mark:

Penalties applied for academic malpractice:

Marks

Question 1

a) Identify FOUR (4) features of database software that can facilitate the way that an organization manages its information.

4

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *It enables the storage of data*
- *Queries can be used for data retrieval/enables quick data retrieval*
- *Data can be filtered*
- *Sorting of data*
- *Various types of reports can be produced from the data*

b) Explain briefly what is meant by the term *data warehouse*.

2

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *It is a system that can be used for analysing data*
- *It is a system that can be used for reporting data*
- *A data warehouse can store data from many sources*
- *The data stored may be current or historical data*

c) Recommend FOUR (4) business processes that project management software can support.

4

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Decision making*
- *Planning resources*
- *Organising resources*
- *Managing resources*
- *Allocating resources*
- *Scheduling events/timescales*
- *Managing budgets*
- *Estimating costs*

Total: 10 Marks

Question 2

a) Suggest THREE (3) business processes that can benefit from the use of simulation software.   **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Financial forecasting/estimation*
- *Cost reduction*
- *Business modelling/task modelling*
- *Waste reduction*
- *Inefficiency reduction*

b) Identify THREE (3) functions of spreadsheet software that can be used to aid financial analysis.   **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Max*
- *Min*
- *Average*
- *Median*
- *Mode*
- *Count*
- *Count If*

c) Recommend TWO (2) types of multimedia software that would be advantageous for using in a marketing department.   **2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *Graphics*
- *Image editing*
- *Presentation*
- *Video editing*
- *Sound editing*

d) Outline TWO (2) measures of quality of bespoke software.   **2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *Does it meet the business requirements of an organisation*
- *Does it meet the needs of an organisation's end users*

Total 10 Marks

Question 3

a) Suggest FOUR (4) criteria that can measure the effectiveness of software which has been developed by an end user.

4

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Is it user friendly*
- *Is it functional*
- *Is it reliable*
- *Is it secure*
- *It is maintainable*
- *Is it accessible*

b) Identify THREE (3) processes in an advertising department that can be done more efficiently using software developed by end users.

3

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Data retrieval*
- *Input of data*
- *Output of data*
- *Formatting of materials*
- *Production of tables/graphs (trends/comparisons)*

c) Identify THREE (3) disadvantages of end user software development.

3

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Development time may be slow*
- *End users may lack appropriate expertise/training*
- *Testing may not take place or be insufficient*
- *There may be inaccuracies in the finished product*
- *The work may not be planned efficiently*
- *Documentation may not be produced or is not produced to a required standard*

Total: 10 Marks

Question 4

a) Outline the purpose of a form field in word processing software.　**2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *It is used in a word processed form as a field in which data is entered.*
- *It is can be tied to a custom field.*
- *It can be tied to a default field.*
- *Types include checkboxes/text fields/drop down lists.*

b) Explain THREE (3) reasons to attach a digital signature to a word processed document.　**3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *To confirm the identity of the person who has produced the document.*
- *To verify/reassure that the contents of a document are secure.*
- *To confirm/assure that the contents of a document have not been changed.*
- *To ensure the authenticity of a document.*

c) Identify THREE (3) review tools in word processing software.　**3**

Award 1 mark for each bullet point up to a maximum of 3 marks.

- *Spelling and grammar check*
- *Thesaurus*
- *Word count*
- *Research*
- *Translate*
- *Language*
- *Track changes*

d) Explain the purpose of applying a watermark to a word processed document.　**2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *It is used to specify information about a document, e.g. it is a confidential document/it must be read urgently*
- *It makes it more difficult to copy an image/text*

Total: 10 Marks

Question 5

a) Identify THREE (3) reasons to use conditional formatting when using spreadsheet software. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Allows rules/conditions to be set for formatting a cell/a range of cells*
- *When the rules/conditions are met formatting is then applied to the cell/cells*
- *Different formatting options can be applied to a cell/cells, e.g. background colour*
- *When a condition is met in a cell/cells the colour will be applied*
- *It makes it easier to find specific data*
- *It makes it easier to keep track of data as it changes*

b) Explain the purpose of using a Pivot Table in a spreadsheet. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Used with large, detailed sets of data*
- *Enables data to be sorted quickly*
- *Enables data to be summarized*
- *Enables data to be totalled*
- *Enables the average of data to be calculated*

c) Suggest TWO (2) business processes that could be helped by the use of graphs. **2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *Comparisons of information*
- *Trends of various data*
- *Costs*

d) Identify TWO (2) methods of data validation in spreadsheet software. **2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *Drop down lists*
- *Error alerts/message alerts*
- *Date restrictions*
- *Time restrictions*
- *Number restrictions*
- *Text restrictions*

Total: 10 Marks

Question 6

a) Recommend FOUR (4) validation methods that database users must know about when developing a database. **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Range check*
- *Type check*
- *Length check*
- *Format check*
- *Presence check*
- *Check digits*
- *Lookup*

b) Identify THREE (3) functions of a database management system. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Manage the storage of data*
- *Manage the access to data by many users*
- *Manage the integrity of data*
- *Manage the consistency of data*
- *Manage the security of data*
- *Manage backup and recovery of data*

c) Explain briefly THREE (3) purposes of an input mask when using a database. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *It controls data entry*
- *It helps to maintain consistency*
- *It helps to make a database easier to manage*
- *It provides a set format for data entry*

Total: 10 Marks

Question 7

a) Identify FOUR (4) advantages to users of application software if macros have been applied to features and functions of the software. **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Data is more efficient*
- *Data output is more efficient*
- *Formatting is more efficient*
- *Sorting of data is more efficient*
- *Formatting is more efficient*
- *Navigation is more efficient*
- *Time is saved*
- *Effort is saved*

b) Recommend FOUR (4) features of spreadsheet software that can benefit from the use of macros. **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Data input*
- *Data output*
- *Import of data from other software*
- *Export of data to other software*
- *Sorting of data*
- *Production of graphs*
- *Formatting of cells/text/numbers*
- *Lookup tables*
- *Pivot tables/charts*
- *Conditional formatting*

c) State TWO (2) disadvantages of using a macro recorder to construct a macro. **2**

Award 1 mark for each bullet point up to a maximum of 2 marks:

- *The code generated is not efficient*
- *More code is generated than when writing a macro in VBA*
- *Almost all actions are recorded and this contained in the code/code less efficient*
- *It is a slower method of developing a macro*

Total: 10 Marks

Question 8

a) Recommend THREE (3) factors to consider for accessibility of application software. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Choice of colours*
- *Size of the text*
- *Navigation*

b) Identify THREE (3) methods of customising an application software interface. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Preference settings/displays can be changed*
- *Elements/items on the screen can be rearranged*
- *Menus can be modified*
- *Menu bars can be added/removed*
- *Ruler bars can be added/removed*
- *Macros can be applied*
- *Keys can be reassigned*
- *Page displays can be changed*

c) Distinguish between *reliability* of application software and *functionality* of application software. **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *It controls data entry*
- *It helps to maintain consistency*
- *It helps to make a database easier to manage*
- *It provides a set format for data entry*

Total: 10 Marks

Question 9

a) Differentiate between *black box* and *acceptance testing*.   **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *Black box testing tests that the features and operations of the software function correctly/functional testing/validation testing*
- *Black box testing is performed by testers*
- *Acceptance testing is performed by users/customers to help them decide whether to accept the software as it is or whether enhancements or improvements need to be made*
- *Acceptance testing marks the boundary between software being developed for use to the software being used.*

b) Outline THREE (3) advantages of black box testing.   **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *The tester does not need to have access to the program code*
- *The tester is not required to have a deep technical knowledge*
- *The tester does not need to know how the software works*

c) Identify THREE (3) additional testing methods to those referred to in question 9 (a).   **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *White box testing*
- *Graphical User Interface (GUI) testing*
- *Usability testing*

Total: 10 Marks

Question 10

a) Identify THREE (3) application software evaluation methods. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Opinion based evaluation*
- *Observation based evaluation/a user is observed using software*
- *Usability testing/a combination of opinion based and observation based evaluation*

b) Outline FOUR (4) aspects of usability of application software that should be evaluated. **4**

Award 1 mark for each bullet point up to a maximum of 4 marks:

- *How easy the software is to navigate*
- *How easy the software is to learn*
- *How easy the software is to interact with*
- *How quickly it is for an experienced user to complete tasks*
- *How quickly users can recover when making errors/assistance that users receive from the software*

c) Suggest THREE (3) ways pf assessing users' opinions of application software. **3**

Award 1 mark for each bullet point up to a maximum of 3 marks:

- *Questionnaires*
- *Interviews*
- *Observations*

Total: 10 Marks

End of Examination Paper

Learning Outcomes matrix

Question	Learning Outcomes assessed	Marker can differentiate between varying levels of achievement
1	1	Yes
2	1	Yes
3	1	Yes
4	2	Yes
5	2	Yes
6	2	Yes
7	3	Yes
8	3	Yes
9	2	Yes
10	3	Yes

Grade descriptors

Learning Outcome	Pass	Merit	Distinction
Understand how application software can support business processes	Demonstrate adequate level of understanding	Demonstrate robust level of understanding	Demonstrate highly comprehensive level of understanding
Be able to design and implement office solutions	Provide adequate design to address the specification	Provide detailed and appropriate design to address the specification	Provide wholly appropriate and innovative design that meets the specification
Be able to demonstrate that business processes have been enhanced/improved	Demonstrate ability to perform the task	Demonstrate ability to perform the task consistently well	Demonstrate ability to perform the task to the highest standard