RECOGNISING ACHIEVEMENT

## OCR AS ICT

## Frequently Asked Questions

OCR AS ICT G062 June 2014 (version 1)

## General

1. I don't think the software available within my centre will enable me to successfully complete all elements of a particular task. What should I do?

- Either consider purchasing software that will enable this (budget permitting) or investigate a number of widely available open source or freeware products that are available. Try this link:
http://en.wikipedia.org/wiki/List of free and open source software packages

2. Is any additional guidance available?

- Yes. There is a document called 'Guidance for Teachers' that is available for download on Interchange. It contains details regarding what is meant by certain terms such as annotated evidence and the general standard expected for items such as test plans or user guides.


## Task 1 - Presentation

1. Does the diagram for part (a) for the structure of the presentation have to be hand drawn?

- No, this is not specified. It is quite acceptable to use a computer generated diagram for the design.

2. On the staff slide are the candidates meant to use any specific photographs or can they select their own?

- No data files are provided. Candidates may select their own photos for the staff.

3. On the property slide are candidates meant to use any specific photographs or can they use their own?

- No date files are provided. Candidates may use their own property images.

4. Is the information required on each 'Featured property' slide to be made up by the candidates?

- Yes, any reasonable text will be acceptable.

5. The 'content requirements' ask for 3 photos for the 3 features properties to be displayed in an animated sequence with a one second delay between each image. Does it matter what happens at the end of the sequence? Does it have to loop?

- No, it doesn't matter. The sequence may stop or it may loop.

6. The navigation requirements refers to an area that will contain a navigation bar that will contain navigation buttons. What is meant by 'navigation buttons'?

- The 'navigation buttons' will be names of the slides that are in the presentation such as 'Title', 'Services', ‘Staff', 'Property', ‘Contact', ‘Help' and 'Reset'. It does not mean 'standard' buttons for back and forwards etc.

7. Every slide will contain a 'Help' button - does the help slide itself need a 'Help' button? Is this a self-referential trick?

- No. You may decide to have a self-referencing help link but is not required. You'd need to be able to get to help from any other slide, but you don't need to get to any extra help from the help slide!

8. Every slide will contain a 'Reset' button that will link to the 'Title' slide. Does the 'Title' slide itself need a self-referential 'Reset' button?

- No, of course not. It would serve no function to specify this. Again, of course, you would not be penalised for implementing this either!

9. Are the 'Reset' and 'Help' buttons expected to go in the master slide?

- They can, but it's not a requirement. There are different ways of implementing a valid solution. Inclusion of the buttons on a master slide would lead to self-referential references which is fine. You might, however, decide to implement buttons on each separate slide to the other necessary links, and that too would be acceptable.

10. How many tests will be marked in 1 (d)?

- Only the first 3 tests documented will be marked. If there are more than 3 tests the forth and subsequent will not be marked.


## Task 2 - Spreadsheet

1. Do candidates have to print the row and column headings?

- Yes. Marks cannot be awarded without row/column headings. They are required so that formulae can be cross-referenced with values to check that the solution is correct.

2. How many tests will be marked in 2(b)?

- Only the first 3 tests documented will be marked. If there are more than 3 tests the forth and subsequent will not be marked.

3. You say that a function should be used to calculate the value for the required monthly payment. Where on earth do I begin?

- Many spreadsheet packages have an array of specialised financial functions built in that's one of the great things about spreadsheets! They enable you to build all kinds on models with the functions that are built in. Excel for example has functions such as PMT, PPMT, PV and NPER inter alia. The Excelisfun series on YouTube is a great source of information http://www.youtube.com/watch?v=i8JzLPFLDsw

You could, of course work this out yourself with some far more complex mathematics, but you don't need to! Try researching how to do mortgage calculations in Excel on Google as a starting point.
4. The final balance remaining should be exactly $£ 0.00$. Isn't that obvious?

- Not necessarily. Say you pay $£ 500$ a month on a mortgage. If the balance outstanding left to pay is $£ 850$ you'd pay your $£ 500$. If the balance outstanding was $£ 350$ you'd only pay $£ 350$ and not the monthly payment of $£ 500$. In that way the final balance remaining would be exactly $£ 0.00$. You'd have to check this condition each month to see if it was the last payment and then adjust the last monthly payment accordingly.

5. Will the last monthly payment period vary depending upon the values in Table 2.4?

- Yes. If you pay a mortgage over 25 years with no overpayments it will take (25 * 12) 300 payment periods to pay the mortgage. If you make overpayments each month the balance outstanding will reduce more quickly and it will take less monthly payments to pay the mortgage off. That's why it's a good idea to make overpayments on your mortgage if you are able to do so!

6. What if I don't get exactly the same figures as you've got in table 2.5 ?

- With any mathematical model there are a number of variables that may differ. Different software may provide different functions that produce slightly different results due to the way in which numerical data is stored or rounded. If you approach the task in the correct way slight variations in the results will not be penalised (the markscheme will allow some variation). The task is assessing the ability to investigate, create and explain a numerical model. Slight differences will be magnified as the model runs over a number of payment periods so you might want to check that you've made sure that the payments are rounded up to the nearest penny too!

7. In Table 2.6 how are the years and months calculated? Isn't that the same as the term in Table 2.4?

- Maybe, maybe not! If overpayments are made on a mortgage the mortgage gets paid off more quickly. In Table 2.4 a $£ 100,000$ mortgage is paid over 25 years. If no overpayments are made it will take 25 years and 0 months to repay. If overpayments of $£ 200$ a month are made it will be repaid a lot sooner. By constructing a payments model it is possible to calculate this. There are many ways of doing this.


## Task 3 - Relational Database

1. Do I need to use a relational database?

- Yes. You may simplify some aspects of the task by using a flat-file database or a spreadsheet but you will not be able to achieve full credit for a number of questions. The task has been specifically written to test relational database skills.

2. In 3c 'the total number of viewings arranged for the property (previous and future) should be displayed'. Is this the same as the total viewings?

- Yes. If there are viewings that have been arranged for a future date they should be included in the total for the number of viewings arranged.

3. 'If the property has had past viewings the date of the most recent viewing should be displayed'. How should I go about this?

- A query needs to be written to find the viewings for the given property for dates equal to or before today's date. Max / Min values can be calculated from a range of values that are returned from the query.

4. 'If a double booking is attempted a customised error message should be displayed that indicates what the potential problem is'. If there is more than one potential problem does there need to be more than one error message?

- There are different ways to implement a solution. The values on the booking form may be filtered (based on queries) so that the lists for agent/property/buyer do not allow for the possibility of a double booking taking place. If this is implemented, annotated and explained there would be no generation of error messages. An alternative is to perform checks once the 'Process Booking' button is clicked. If this is the case the different problems must be identified. i.e. If there would be a double booking of both an agent and a buyer then there should be two separate error messages.


## Useful Spreadsheet Skills

Cells

- Formatting (alignment, wrapping, data type)
- Conditional formatting
- Naming cells
- Relative and absolute references
- Validation

Specialised functions

- Lookup functions - HLOOKUP, VLOOKUP, LOOKUP, INDEX, MATCH
- Rounding functions - ROUND, INT, CEILING
- Logical functions - IF, nested IF, AND, OR
- $\quad$ Financial Functions - PMT, PPMT, NPER, PV

Worksheets

- $\quad$ Naming
- Linking

Customised interface controls

- Drop down combo box / list box
- Check box
- Spinner / Scroll bars
- Buttons

Macros

- Attaching a macro to a control or button


## Useful Database Skills

Tables

- Primary key identification and assignment
- Field data types
- $\quad$ Field validation (rules and input masks)
- Importing data from another data source

Relationships

- $\quad$ Creating a foreign key
- Referential integrity

Form design

- $\quad$ Simple form based upon one table
- Customising e.g. removing the default navigation bar and adding buttons
- Discussion of bound controls (linked to the underlying table) and unbound controls that can be created to include expressions
- $\quad$ Sub-forms to show data from a 1:M relationship or the results from a query

Queries

- $\quad$ Simple parameter
- Complex parameter
- Parameters taken from form values
- $\quad$ Query joins (Left and Right Join)
- Cross-tab query
- Actions queries (Update, Make Table, Append, Delete)

Reports

- Basing a report on a query
- Adding calculations to reports e.g. totals
- Grouping levels and pagination by grouping level

Calculations and Macros

- Writing expressions to perform calculations
o Domain aggregate functions e.g. DSUM, DCOUNT, DMAX to extract results from queries
o DateDiff, DateAdd, Now()
o IIF and nested IIF
- Creating sequences of instructions for more complex processing e.g. creating a macro to run an archive routine

