**Spreadsheets**

**6N4089**

**Level 6**

**2015 - Monaghan Institute**

**Practical Examination 40% - Duration 2 Hours**

**Instructions to Candidates:**

1. **There are two parts to this exam Section A and Section B both parts are compulsory.**
2. All questions to be attempted.
3. Write your name on the label attached to your memory stick.
4. Ensure all files are saved on the memory stick with the correct file names.
5. Add your name in the header of each worksheet.
6. You must submit your exam paper at the end of the exam.
7. Ensure your work is printed **and** saved on the provided USB memory device.
8. The use of Microsoft Help is forbidden.

**Candidate Name:**

**PPS No:**

**Tutor Name:**

**SECTION A 20%**

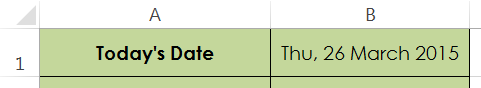
**Data Inputted Accurately**

1. Create an Excel workbook and save it as to the USB with your name as the title.
2. Rename the worksheet to ‘Wages Calculation’.
3. In the footer of this worksheet add the title ‘Create a Spreadsheet’ to the left section and your name to the right section.
4. Input the text and data values into the spreadsheet; ensure you follow the cell references exactly as shown (see the next page).

**16 Marks**

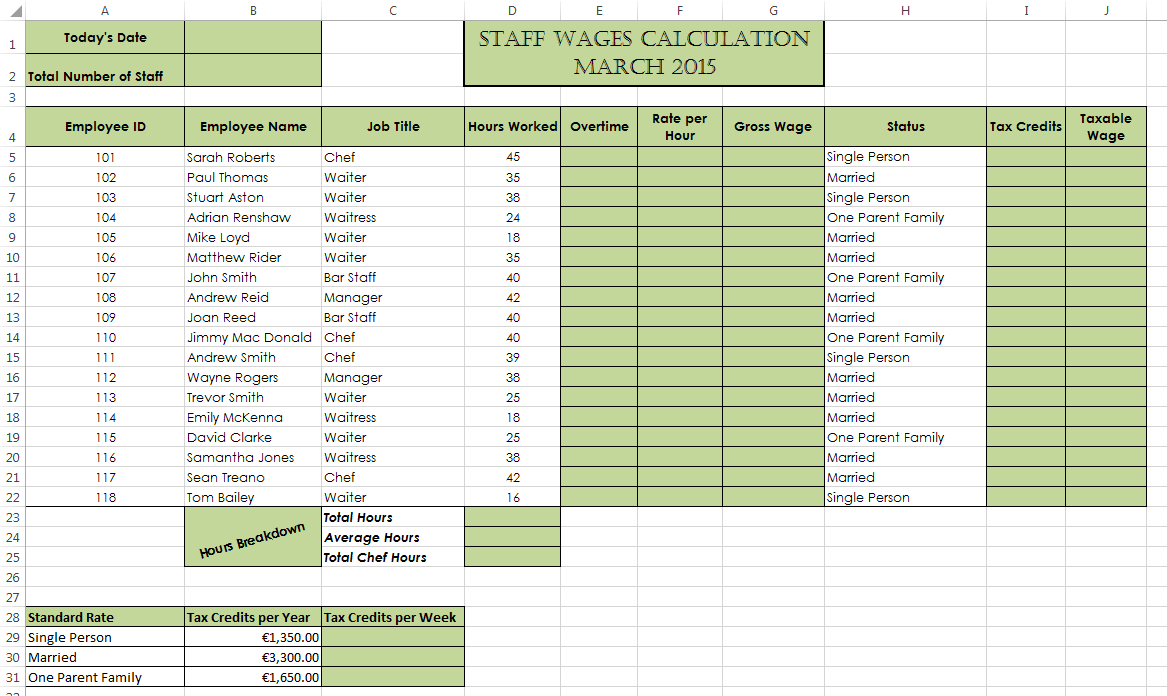
**Cells Accurately Formatted**

1. Input the heading ‘Staff Wages Calculation March 2015’ into cell D1. Merge and centre cells D1:G2, wrap the text to two lines and centre align horizontally and vertically. Set the font to the style ‘Castellar’ and size 16. Add shading to the merged cell, add a thick box border and set the row height of rows 1 and 2 to 25.
2. Apply the formatting exactly as shown on the worksheet ‘Wages Calculation’ (see the next page).
3. Ensure shading, cell alignment, bold, italics, case (uppercase and title case), borders (single and thick) and currency formatting are all used as shown.
4. Set the merged cell B23:B25 to an orientation of 15 degrees as shown.
5. Set the text in the spreadsheet to Century Gothic font size 10 (do not include the merged cell D1).
6. Set the custom number format of the cell B1, to show the day of the week, the day of the month, the month and the year (in the format shown here).



**8 Marks**

**Worksheet - Wages Calculation**

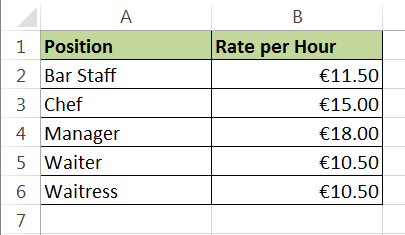


**Formula Accurately Applied**

1. Insert a function in cell B1 to display the date from the computer clock.
2. Use the SUM function to calculate the **Total Hours** in cell D23.
3. Using a function calculate the **Average Hours** in the cell D24 (format to 1 decimal place).
4. Using a SUMIF function calculate the **Total Chef Hours** worked by the Chefs in cell D25.
5. In cell C29 calculate the **Tax Credits per Week** by dividing the **Tax Credits per Year** by 52. Auto fill this formula to cell C31.
6. In cell E5 calculate the **Overtime** using the SIMPLE IF function as follows, if the **Hours Worked** is greater than 40, subtracting 40 hours from **Hours Worked** otherwise overtime is 0 hours. Auto fill this formula to cell E22.

**Lookup Function Accurately Applied**

1. Create a new worksheet and name it ‘Wages per Hour’.
2. Add the following data to this worksheet.



1. Name the range from cell A1 to B6 **WagesRates**.
2. Add a VLOOKUP to the ‘Wages Calculation’ worksheet in cell F5 to find the **Rate** **per** **Hour** from the ‘Wages per Hour’ worksheet using the **WagesRates** named range. Autofill the formula from cell F5 to cell F22.

**12 Marks**

**Formula Accurately Applied**

1. In cell G5 calculate the **Gross Wage** by multiplying the **Hours Worked** by the **Rate per Hour**. Calculate the overtime at 1.5 times the normal wage, multiply it by the **Overtime** hours and add it. Autofill the formula from cell G5 to cell G22.

**6 Marks**

**Compound Nested IF Accurately Applied**

1. Add a compound IF in cell I5 to calculate the **Tax Credits** as follows:

* If the **Status** is“Single Person” use the credits in cell C29.
* If the **Status** is “Married” use the credits in cell C30.
* If the **Status** is anything else use the credits in cell C31.

1. Drag this formula down to cell I22 using auto fill, remember to use cell referencing where it is required.

**16 Marks**

**Formula Accurately Applied**

1. In cell J5 calculate the **Taxable Wage** by subtracting the **Tax Credits** from the **Gross Wage**.

**2 Marks**

**Sort on Multiple Column/Row Applied**

1. Apply the following custom sort to the worksheet “Wages Calculation”:

* Sort the data by the label **Job Title** from A to Z and by the **Gross Wage** Largest to Smallest.

**8 Marks**

**Chart/Graph Accurately Produced**

1. Create a bar chart based on the **Employee Name**, **Gross Wage** and **Taxable Wage** of all of the *Waiters*.

1. Move this chart to a new worksheet and rename the worksheet ‘Waiter Wages’.
2. Set the title of the chart to your name and set the vertical and horizontal axis titles to appropriate headings.
3. Turn on the data table with legend keys and turn off the legend.
4. Set the chart to an appropriate style.
5. Turn on the data labels.
6. Add an image to the plot area (there are three available on your USB, do not access the internet).
7. In the header of worksheet add the module name and code to the left section.

**12 Marks**

**Printing**

Print the worksheet ‘Wages Calculation’ showing the formula, in landscape and scaled to fit on 1 page by 1 page (adjust all columns so formula are visible).

Print the worksheet ‘Wages Calculation’ showing values in portrait and scaled to fit on 1 page by 1 page (readjust all columns to appropriate widths).

Print the worksheet ‘Fixed Prices’ in landscape orientation.

Print the chart in landscape orientation.

**SECTION B 20%**

Create a word document and save it as your name Answers e.g. Jane Smith Answers. You will be required to add screen shots and answers to this document. Please label each answer clearly.

1. **Filtering**
2. Open the spreadsheet ‘Exam Workbook’ which is saved to your USB. Go to the worksheet ‘Cars’.
3. Turn on Filtering for the table and apply the two filters as follows:
   1. Show cars that are all colours except Blue or Black.
   2. And show cars that have been made after the year 2010.
4. Add a screen shot of the filter results to your answer document.
5. Turn off filtering.

**8 Marks**

1. **Customise Toolbars**
2. In your spreadsheet software, create a new tab and name the tab ‘Exam’.
3. Create a group for this tab and name it ‘Useful Tools’.
4. Add the following commands to the group:
   1. Format Painter
   2. Merge & Centre
5. Add a screen shot of the new toolbar to your answer document.

**8 Marks**

1. **Importing Data and Creating Hyperlinks**
2. On your USB there is a text file called Passenger List.txt which is tab delimited.
3. Import the text file into the ‘Exam Workbook’ as a new worksheet and name the worksheet ‘Passenger List’.
4. Add a screen shot of one of the windows of the importing process to your answer document.
5. Save the workbook.
6. On the ‘Passenger List’ worksheet create a hyperlink to the website www.monaghaninstitute.ie

**8 Marks**

1. **Freezing Panels and Show/Hide Rows or Columns**
2. In the worksheet ‘Passenger List’ freeze the first row and the first two columns.
3. Hide the rows 3, 5 and 11. Hide the column D.
4. Add a screen shot of this to your answer document.

**8 Marks**

1. **Evaluate Formula and Trace Precedents/Dependents**
2. Open the workbook which you created in Section A.
3. On the worksheet ‘Wages Calculation’ in cell D25, use the Evaluate Formula feature.
4. Add a screen shot of this feature to your answer document.

**8 Marks**

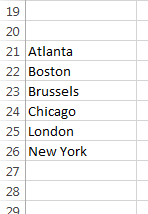
1. **Worksheet and Cell Protection**
2. In the workbook ‘Wages Calculation’ format the cell ranges from B5:D22 and the cells H5:H22 so that they are not locked.
3. Apply protection to the whole worksheet ‘Wages Calculation’. Do not include a password.
4. Add a screen shot of the Protect Sheet window to your answer document.

**8 Marks**

1. **Pivot Tables**
2. In the ‘Exam Workbook’ there is a worksheet called ‘Top 250 Movies’ open this worksheet.
3. Create a pivot table using the data in this worksheet, save the pivot table to a new worksheet.
4. In this pivot table you are required to show the total number of films broken into the categories of Genre and whether they were produced in Colour, Black and White or both.
   1. Add the Colour as a Column Label.
   2. Add the Genre as a Row Label.
   3. Add the Title as the Values (count them).
5. Apply a Pivot Table Style to the pivot table.
6. Rename the worksheet as ‘Pivot Table’ and save the workbook.
7. Add a print screen of your pivot table to your answer document.

**8 Marks**

1. **Data Validation**
2. In the ‘Exam Workbook’ in the ‘Passenger List’ worksheet add the following text as shown.



1. Apply a data validation list to column C that will only show these words as its source.
2. Save the workbook.

**8 Marks**

1. **Conditional Formatting**

1. In the ‘Exam Workbook’ in the ‘Cars’ worksheet apply conditional formatting to column F as follows:
   1. If the car is Silver show Grey font.
   2. If the car is Blue show blue font.
2. Save the workbook.

**8 Marks**

1. **Critique Spreadsheet Design**

In the ‘Exam Workbook’ the ‘Top 250 Movies’ worksheet holds a list of the Top 250 movies and all there relevant details.

1. Critique this worksheet by recommending 2 changes that you would use to improve the spreadsheet. Explain your recommendations in the answer document (you do not need to implement them).

**8 Marks**

**Printing**

In your answer document ensure each question is labelled clearly. Print your answer document.

**Saving**

Ensure all your work is saved to the USB. Work which does not have a screen shot will be marked from the USB.