



***(National Council for Vocational Awards)***



# **Spreadsheet Methods B20028**

**Practical Examination 2003**

# **Duration: Two Hours**

## **INSTRUCTIONS TO CANDIDATES**

1. Attempt **all** tasks **in order**.
2. Read the paper throughout before you carry out any of the tasks.
3. Enter your name and examination number clearly on all printouts.
4. Printing may be carried out, under supervision, after the time allowed for the practical examination but no alteration may be made to saved files.
5. The use of calculators is strictly forbidden.
6. Files must be saved on your allocated network drive.
7. At the end of the examination, return all printouts and this examination paper to the exam supervisor.

Candidate Name: \_\_\_\_\_

Date: \_\_\_\_\_

Goodhew Cereal Company Ltd process cereals for the home market. They run several plants around the country. Each manager is paid a bonus based on the production levels achieved on a weekly basis. You are required to set up a spreadsheet to assist with the calculations.

All monetary data should be displayed in currency format with two decimal places.

	A	B	C	D	E	F
1	Goodhew Cereal Company Ltd					
2						
3	Bonus Calculations Week 10/2003					
4						
5		Tonnes	Tonnes	Tonnes	Bonus	
6	Plant	Wheat	Barley	Total	Rate	Bonus
7	1	34	33			
8	2	23	65			
9	3	89	72			
10	4	45	51			
11	5	12	19			
12						
13	Name:				Total:	
14	Date:				Average:	

**Figure 1**

- Set up the spreadsheet and input the data as shown in Figure 1, with alignments as shown and appropriate column widths.
- Insert today's date from the computer clock beside the heading **Date:**
- Calculate the **Tonnes Total** as the sum of **Tonnes Barley** and **Tonnes Wheat**
- Use the IF function to calculate the **Bonus Rate** based on the following information:
 

If the **Tonnes Total** is greater than 75, then the **Bonus Rate** is €1.45

Otherwise the **Bonus Rate** is €0.50
- Calculate the **Bonus** as the **Tonnes Total** multiplied by the **Bonus Rate**.
- Use the SUM function to calculate the total **Bonuses**, and display in the cell beside the side heading **Total:**
- Use the AVERAGE function to calculate the average **Bonuses**, and display in the cell beside the side heading **Average:**
- Insert your Name in the second column, beside the appropriate label.
- Save the spreadsheet under the filename **GOODHEW1**, for printing now or later.
  - Produce a printout of the whole spreadsheet, **GOODHEW1**, excluding the main heading, and showing Row/Column identifiers.
  - Produce a printout of the spreadsheet, **GOODHEW1**, showing all formulae with cell references and Row/Column identifiers.

10.Delete the record for Plant 4 from the spreadsheet.

11.Input the additional information as shown in **Bold** print in Figure 2 below, and move the side heading **Date:** and today's date to their new positions.

	A	B	C	D	E	F	G	H	I	J
1	Goodhew Cereal Company Ltd									
2										
3	Bonus Calculations Week 10/2003									
4										
5		Tonnes	Tonnes	Tonnes	Bonus		<b>Bonus</b>	<b>Barley</b>	<b>Total</b>	<b>Percentage</b>
6	Plant	Wheat	Barley	Total	Rate	Bonus	<b>Adjustment</b>	<b>Bonus</b>	<b>Bonus</b>	<b>Of Average</b>
7	1	34	33							
8	2	23	65							
9	3	89	72							
10	5	12	19							
11	<b>6</b>	<b>23</b>	<b>47</b>							
12										
13					Total:			<b>Total:</b>		
14					Average:			<b>Average:</b>		
15										
16	<b>Plant:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>			
17	<b>Adjustment</b>	<b>15%</b>	<b>20%</b>	<b>10%</b>	<b>20%</b>	<b>25%</b>	<b>15%</b>			
18										
19	Name:									
20	Date:									

**Figure 2**

12.Insert the additional record for Plant 6 as shown.

13.Use the LOOKUP function to insert the **Bonus Adjustment** from the table multiplied by the **Bonus** into the column under the column-heading **Bonus Adjustment**.

14.Use an IF function to calculate the **Barley Bonus** based on the following information:

- If the **Barley Tonnes** is in excess of 40 the **Barley Bonus** is 10
- If the **Barley Tonnes** is between 20 and 40 the **Barley Bonus** is 5
- Otherwise the **Barley Bonus** is 0.

15.Calculate the **Total Bonus** as the sum of the other three bonuses.

16.Calculate the **Total** and **Average** of the **Total Bonus** as shown.

17.Calculate the **Percentage of Average** by expressing the **Total Bonus** as a percentage of the **Average**.

18.Re-centre both headings as shown.

19.Sort the spreadsheet in ascending order on the **Tonnes Total** column.

20.Save the spreadsheet under the filename **GOODHEW2**, for printing now or later.

- (a)Produce a printout, in landscape orientation, of the whole spreadsheet, **GOODHEW2**, showing Row/Column identifiers.
- (b)Produce a printout of the spreadsheet, **GOODHEW2**, showing all formulae with cell references and Row/Column identifiers.

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20. Produce a **Bar Chart** from the spreadsheet **GOODHEW2** to show the **Total Bonus** paid to each plant manager.

(a) The total payment should be taken from the **Total Bonuses** column.

(b) The bar chart should have the heading:

**Bonus Payments – Week 10/2003.**

(c) The X axis should have the plant number under each bar and have the word **Plant #** as the X axis label.

(d) The Y axis should show the bonus payment and have the words **Total Bonus** as the Y axis label.

21. Save the bar chart under the filename **CHART** (either separately or as part of the spreadsheet - **GOODHEW2**), for printing now or later.

22. Print the chart.

### **CHECK LIST OF REQUIREMENTS**

At the end of the examination you should have the following items:

The following files saved on disk:

- (a) **GOODHEW1**
- (b) **GOODHEW2**
- (c) **CHART**

The following printouts:

- (a) **GOODHEW1**, (specified area only), to show all values.
- (b) **GOODHEW1**, to show all **formulae** and cell references.
- (c) **GOODHEW2**, to show all **values**.
- (d) **GOODHEW2**, to show all **formulae** and cell references.
- (e) **CHART**