

## (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.

	Α	В	С	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

- 1. Set up the spreadsheet and input the data as shown in Figure 1, with alignments as shown and appropriate column widths.
- 2. Insert today's date from the computer clock beside the heading **Date:**
- 3. Calculate the **Tonnes Total** as the sum of **Tonnes Barley** and **Tonnes Wheat**
- 4. 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

- 5. Calculate the **Bonus** as the **Tonnes Total** multiplied by the **Bonus Rate**.
- 6. Use the SUM function to calculate the total **Bonus**es, and display in the cell beside the side heading **Total:**
- 7. Use the AVERAGE function to calculate the average **Bonus**es, and display in the cell beside the side heading **Average**:
- 8. Insert your Name in the second column, beside the appropriate label.
- 9. Save the spreadsheet under the filename **GOODHEW1**, for printing now or later.
  - (a)Produce a printout of the whole spreadsheet, **GOODHEW1**, excluding the main heading, and showing Row/Column identifiers.
  - (b)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.

	Α	В	С	D	Е	F	G	Н	I	J
1	Goodhew Cereal Company Ltd									
2										
3	Bonus Calculations Week 10/2003									
4										
5		Tonnes	Tonnes	Tonnes	Bonus		Bonus	Barley	Total	Percentage
6	Plant	Wheat	Barley	Total	Rate	Bonus	Adjustment	Bonus	Bonus	Of Average
7	1	34	33							
8	2	23	65							
9	3	89	72							
10	5	12	19							
11	6	23	47							
12										
13					Total:			Total:		
14					Average:			Average:		
15										
16	Plant:	1	2	3	4	5	6			
17	Adjustment	15%	20%	10%	20%	25%	15%			
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.

- 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