National Council for Vocational Awards



NATIONAL VOCATIONAL CERTIFICATE LEVEL 2

Spreadsheet Methods Practical Level 2

Friday, 20 May 1994 - 2.00 p.m. - 4.00 p.m.

Instructions to Candidates

- 1 Attempt all **four** tasks.
- 2 Read the paper throughout before you carry out any of the tasks.
- 3 **All** printouts should have the candidate's name and examination number clearly displayed.
- 4 Printing may be carried out after the time allowed for the practical examination but no alterations may be made to saved files.

Task 1 30 marks

- 1.1 Set-up the spreadsheet and input the data as shown in **Figure 1**.
 - (a) Align main heading (Hi-Tech Productions) and subheading (Production Report January 1994) centrally over the data.
 - (B) Set column widths to appropriate values.
 - (c) Column 1 heading and values should be centrally aligned.
 - (d) Column 2 heading and values should be left aligned.
 - (e) Columns 3, 4, 5 and 6 headings and values should be right aligned.
 - (f) The profit figures should be the profit for the quantity produced in each factory and should be a calculated value.
 - (g) The values in columns 4, 5 and 6 should be displayed in currency format.
 - (h) The **Total:** and **Total Profit:** should be calculated values. They should be aligned and displayed in the same format as the column in which they appear.
- **1.2** Insert the labels **Name:**, **Examination Number:** and **Date:** in the positions indicated and insert the appropriate information after each.
- 1.3 Save the spreadsheet under the filename **REPORTI**, for printing now or later. (The printout should show borders Row/Column labels).

Figure 1

		Hi-Tecl	n Productions		
	Pro	oduction Repor	t - January	1994	
		Factory Production	Unit Production	Unit Selling	
No.	Factory	Quantity	Price	Price	Profit
1	Clondalkin	2500	£0.28	£0.48	
2	Santry	3400	£0.25	£0.46	
3	Cork	2800	£0.30	£0.49	
4	Galway	2300	£0.26	£0.52	
5	Limerick	4400	£0.32	£0.53	
6	Athlone	800	£0.28	£0.46	
7	Sligo	1800	£0.29	£0.51	
8	Waterford	3500	£0.30	£0.50	
9	Dundalk	2700	£0.33	£0.52	
	Total:			Total Profit:	
Name:					
Exami	nation No:				
Date:					

Task 2 25 marks

- **2.1** Input the additional information shown in **Figure 2.**
 - (a) Change the month in the subheading to February
 - (b) Insert an extra column where required.
 - (c) Insert the heading **Royalty Fee** in the new column and align to the right.
 - (d) Re-align the main and subheadings centrally over the data.
 - (e) The **Royalty Fee** should be calculated on the following basis and displayed in the column as a percentage (i.e. 6%, 4%, 2%): if the production quantity is greater than 2000 then the royalty fee is 6%, if the quantity is between 1000 and 2000 inclusive then the fee is 4%, if the quantity is less than 1000 then the fee is 2%.
 - (f) The **Royalty Fee** should be displayed in percentage format and right aligned.
- **2.2** Reposition the **Total Profit:** heading.
- **2.3** Recalculate the profit on the following basis:

 The royalty fee is a percentage of the Unit Selling Price and reduces the profit by that amount.
- **2.4** Save the spreadsheet under the filename **REPORT2**, for printing now or later. (The printout should show borders Row/Column labels).

Figure 2

	<u> </u>	B	i - Tech Prod	luctions		
		Product	ion Report -	February 19	94	
No.	Factory	Factory Production Quantity	Unit Production Price	Unit Selling Price	Royalty Fee	Profit
1	Clondalkin	2500	£0.28	£0.48		
2	Santry	3400	£0.25	£0.46		
3	Cork	2800	£0.30	£0.49		
4	Galway	2300	£0.26	£0.52		
5	Limerick	4400	£0.32	£0.53		
6	Athlone	800	£0.28	£0.46		
7	Sligo	1800	£0.29	£0.51		
8	Waterford	3500	£0.30	£0.50		
9	Dundalk	2700	£0.33	£0.52		
	Total:				Total Profit:	
Name	:					
Exam	ination No:					
Date	*					

Task 3 35 marks

- 3.1 Input the additional information shown in Figure 3.
 - (a) Change the month in the subheading to March.
 - (b) Delete the Athlone, Sligo, Waterford and Dundalk factories from the spreadsheet.
 - (c) Insert the **Blackrock** factory into the spreadsheet.
 - (d) Change the production quantities as shown.
 - (e) Insert the headings **Spare Capacity:** and **Value of Spare Capacity:** in the position shown.
 - (9 Insert an extra column for the **Factory Production Capacity** and place this heading in the position shown.
 - (g) Right align the new column and heading.
 - (h) Re-align the main and subheadings centrally over the data.
 - (i) Insert the table: No., **Manager**, and **Capacity** in the position shown and fill in the information in the table, aligned as in Figure 3.
- 3.2 Use the LOOKUP function to insert the **Factory Production Capacity** for each factory in the **Factory Production Capacity** column, from the table in 3.1(i).
- 3.3 Calculate the total production capacity and place it in the position indicated at the bottom of that column.
- 3.4 The **Spare Capacity** should be the difference between the sum of the factory production capacities and the sum of the factory production quantities.
- 3.5 The **Value of Spare Capacity** should be calculated using the selling price only.
- 3.6 Sort the spreadsheet into alphabetical order on the **Factory** names.
- 3.7 Save the spreadsheet under the filename **REPORT3**, for printing now or later. (Make two printouts of **REPORT3** to show (i) Values (ii) formulas and cell references).

Figure 3

	I	I	Hi-Tech	Productions			
		Prod	uction Repor	t - March	1994		
		Factory	Factory	Unit	Unit	· · · · · · · · · · · · · · · · · · ·	
34 -		Production	Production	Production	Selling	Royalty	
No	Factory	Capacity	Quantity	Price	Price	Fee	Profit
6	Blackrock		5000	£0.23	£0.51		
1	Clondalkin		900	£0.28	£0.48		
2	Santry		1800	£0.25	£0.46		
3	Cork		3200	£0.30	£0.49		
4	Galway		2300	£0.26	£0.52		
5	Limerick		3500	£0.32	£0.53		
	Total:			Total Profit:			
Spare	Capacity:			Value of Spare Capacity:			
	<u>-</u> 						
	No.	1	2	3	4	5	6
	Manager:	M. Murphy	P. Doyle	J. Daly	B. Walsh	H. Byrne	N. Cleary
	Capacity:	4000	4500	4000	3000	4500	6000
Name	1						
	ination No:						
Date							

Task 4 10 marks

4.1 Produce a **Bar Chart** from spreadsheet REPORT3 to show the quantities produced in each factory:

- (a) The quantities should be taken from the **Factory Production Quantity** column.
- (b) The bar chart should have the heading **Production Quantities.**
- (c) The X axis should have the factory name under each bar and have the word **Factory** as the X axis label.
- (d) The Y axis should show the quantities in figures and have the word **Quantity** as the Y axis label.
- 4.2 Save the Bar Chart under the filename GRAPH (either separately or as part of the spreadsheet REPORT3), for printing now or later.

Printing.

Printing may be carried out after the time allocation for the examination but no alterations may be made in the saved files.

The following printouts are required:

- 1 Printout of **REPORTI**, complete with border (Row/Column labels)
- 2 Printout of **REPORT2**, complete with border (Row/Column labels)
- Printout of **REPORT3.** to show all values complete with border (Row/Column labels).
- 4 Printout of **REPORT3**, to show all formulas and cell references.
- 5 Printout of the **GRAPH.**