

*Ollscoil na hÉireann Gaillimh*  
*National University of Ireland, Galway*  
*Semester II Examinations 2002/2003*

First Year B.A. (Economics and Social Studies) – St. Angela's College, Sligo

**INFORMATION TECHNOLOGY**

**Exam Code:** 1BA5  
**Module Code:** CT120  
**Exam:** Information Technology  
**Paper No:** 1 - **THEORY PAPER**  
**External Examiner:** Prof. D. Bell  
**Internal Examiner(s):** Prof. G. Lyons  
Kathleen Meehan

**INSTRUCTIONS**

Attempt ONLY three questions.  
ALL questions carry equal marks.  
Use answer books as provided.

**Time allowed:** **One Hour**

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1. With the aid of a simple diagram list 5 correctly named areas of an active window within either a Word or an Excel environment.
2. What is a peripheral device? Give 3 examples with a brief explanation of each.
3. Give 3 examples of backup storage devices for backing up data. Which one would you choose for a small business and why?
4. Explain what is meant by each of the following:
  - i. RSI
  - ii. Hardware
  - iii. Computer Virus
  - iv. LAN
  - v. WAN
5. What do the terms Volatile and Non-Volatile memory refer to when using a computer? List the main features of both terms.
6. Information technology has replaced or changed many jobs and employment patterns – name two jobs where this has happened (write a short paragraph on both)?

## QUESTION 1: EXCEL

a. Open Excel and enter the following data:

ABC Computers Ltd							
	Oct	Nov	Dec	Cost	Education	Total	Sales
Item Description	Sales	Sales	Sales	Price	Price	Sales	Average
Std keyboard	27	22	15	2.8			
Non std keyboard	65	33	41	8.2			
14" Monitor	26	20	13	40.94			
15" Monitor	40	48	37	90.23			
Mini Tower	69	52	41	27.91			
Graphics Card	0	1	0	18.12			
24 Speed CD	43	27	18	39.54			
32 Speed CD	2	5	9	86.47			
P11 Processor	24	12	7	94.02			
P111 Processor	45	21	14	155.24			
Totals							
<b>Summary Information</b>							
Education Markup %	1.20						
Average Monthly Sales							
Overall Total Sales							

- Save your work and call the file **Question 1**.
- Change the widths of the columns so that all data is displayed in full.
- Right align all headings from 'Oct Sales' to 'Sales Average' and bold all these headings on these two rows, including 'Item Description'.
- Under the heading 'Education Price' create a formula (using absolute referencing) to calculate the price of each item to Education once the Markup % has been applied (see summary information). Replicate this formula for all items.
- Under the heading 'Total Sales' create a formula using the SUM function and multiplication to calculate the overall total of the Oct to Dec sales to the Education sector. Replicate this formula for all items.
- Opposite 'Totals' insert a suitable Sum function to calculate the total of the Oct sales. Replicate this formula for Nov and Dec sales.
- Opposite 'Average Monthly Sales', use the Average function to calculate the average of 'Total Sales'.
- Opposite 'Overall Total Sales', use the Sum function to calculate the total of 'Total Sales'.
- Under the heading 'Sales Average' use the IF function to show "Above Average" if the total sale price is greater than the 'Average Monthly Sales' or "Below Average" if it is less than the 'Average Monthly Sales'.
- Display all monetary fields with 2 decimal places, leaving the remainder of the fields in integer format (no decimal places).
- Display 'Overall Total Sales' in currency format using the Euro symbol.
- Change the heading 'ABC Computers Ltd' to size 20, Tahoma font style, and font colour to Red and centre across all columns.
- Create a Bar Chart to show sales for November and December, using a legend and appropriate axes labels – ensure final display is tidy and any text legible (this will be used in Question 3).
- Insert your name as a header and print one copy ensuring all is contained on one page.
- Print a further copy showing column/row headings with the grid lines and all formula in full.
- Save and close your file.

## **QUESTION 2: ACCESS**

- a. Open Access and create a new database called **Question 2**.
- b. Create a table using similar (or the same) column headings as in Question 1 (Excel). Choose data types as necessary based on the information in Excel. No primary key is to be used.
- c. Copy the complete data for all Sales items (Std Keyboard to P111 Processor) from Question 1 and append into the Access table.
- d. Call this table **4<sup>th</sup> Quarter Sales** and adjust column widths as deemed necessary so that all the data can be seen.
- e. Carry out the following queries that matches the following criteria:
  - i. All sales average that are 'Above Average' in ascending order of 'Total Sales' - call this query **Above Average**
  - ii. All keyboard items – call this **Keyboards**.
  - iii. All items whose 'Cost Price' falls between €20 and €40 and in descending order of 'Item Description' – call this **Cost Price 20-40**.
- f. Create a report from 'Above Average' query in landscape – call this report **Target Breakers**.
- g. Insert your name in the header area of this report and print the report.
- h. Save and close your file.

### QUESTION 3: WORD

ABC Computers Ltd

4<sup>th</sup> Quarter Report

Below is feedback for the 4<sup>th</sup> Quarter Sales to the Education Sector from the Accounts Department. Please let me have your comments on these results and where necessary any remedial action that may be required.

Above Average

*Insert 'ABOVE AVERAGE' query from Question 2*

Cost Price €20 - €40

*Insert 'COST PRICE 20-40' query from Question 2*

Keyboards

*Insert 'KEYBOARD' query from Question 2*

Please remember at all times it is your responsibility to:

Meet your targets

Maintain customer satisfaction

Meet the aims and objectives of our sales team

**INSERT A PAGE BREAK AT THIS POINT**

December Sales

It is obvious from the graph below that the December sales dropped below target. This may have been because of seasonal issues but it is important that we come up with a strategy for next year that sales are not significantly down due to seasonal issues. Perhaps the sales team might meet for a brainstorming session to come up with possible solutions.

*Insert Bar Chart from Question 1*

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- Open a new document in Word and change left and right margins to 2.5cms and the top and bottom margins to 2cms.
  - Insert the above as requested (including queries, charts and page breaks) spellcheck, proofread, and save as **Question 3**.
  - Centre the top line 'ABC Computers Ltd' – change to Arial Font, Size 20 and Colour Red and draw a box around this text.
  - All other text to be fully justified.
  - All side headings to be Arial Font, Size 16 and Colour Red. (5 side headings)
  - Add bullets to the list under 'Please remember at all times it is your responsibility to:' and change just this list to 1½ line spacing.
  - Enter your name in the Top Right as a Header and page numbers middle bottom
  - Print your document.
  - Save and close the file.