

UNIVERSITY OF SWAZILAND

Faculty of Science

Department of Computer Science

MAIN EXAMINATION, MAY 2010

Title of paper: **INTRODUCTION TO COMPUTING FOR SOCIAL SCIENCE**

Course number: **CSS100**

Time allowed: 3 hours

Instructions: Answer all 4 questions.

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

Question 1 (Computer Hardware) – [25 marks]

- a)
- i. Distinguish between data and information. [2]
 - ii. Explain how the computer works in terms of the IPO (input, processing and output) scheme. [4]
- b) List and briefly describe any 2 input and 2 output devices. [4]
- c)
- i. Inside what part of the computer would you expect to find the CPU (Central Processing Unit)? Why is it hidden? [2]
 - ii. The CPU itself consists of 3 main parts. Write their full names and describe their purpose. [6]
- d) RAM and ROM are 2 examples of storage devices. Write their full names and explain the main difference between them. [4]
- e) Which of the following quantities of information is greater? Explain your answer fully.
- 4000 kilobytes
 - 2 gigabytes
- [3]

Question 2 (The Operating System) – [25 marks]

- a) Contrast the meanings of the following pairs of terms:
- i. Files & folders
 - ii. Menu bar & tool bar
 - iii. Pointing the mouse & dragging the mouse
 - iv. Active window & inactive windows [8]
- b) How would you resize the taskbar? [1]
- c) Assume that 3 files named **a**, **b** and **x** are located on the desktop. Describe the steps that need to be taken in order to carry out the following:
- i. Delete **a**
 - ii. Change the name of **b** to **c**
 - iii. Create a new folder named **d** on the desktop
 - iv. Move **x** into the new folder **d** [6]
- d) Supposing that My Computer window is displaying the contents of a large folder (hundreds of files), how would you *quickly* highlight only files created in the year 2008? [4]
- e) Describe how the search box may be used to find all files in the **F:** drive whose names start with the letter **j** [3]
- f) Describe the steps you would take to make a new scrap document named **notes** to appear on the desktop. [3]

Question 3 (Word Processing) – [25 marks]

- a) Define the following terms:
- i. Font style
 - ii. Line spacing
 - iii. Right-aligned paragraph [3]
- b) How are spelling mistakes highlighted by the word processor? How might some *suggested corrections* to spelling mistakes be obtained? [2]
- c) Assume that a single-page document consists of a heading at the top line followed by three paragraphs. Describe the steps that need to be taken in order to carry out the following:
- i. Centre-align the heading and increase its font size to 18. [2]
 - ii. Fully justify the first paragraph. [2]
 - iii. Indent the second paragraph by 1 inch. [2]
 - iv. Double-space the third paragraph. [2]
 - v. Make a table of 3 rows and 2 columns to appear in the space between the second and third paragraphs. Within the table, make the first column narrower than the second. [5]
 - vi. Add a second page containing the same text as the first page. [4]
 - vii. Show page numbers at the top-right corner of each page. [3]

Question 4 (Spreadsheets) – [25 marks]

Answer the questions further below with reference to the following spreadsheet. It shows the population of Swaziland (in thousands) broken down by age group and gender. For example, it shows that there were 61,000 men aged between 20 and 24.

	A	B	C	D
1	Age group	Male	Female	
2	0-4	68	68	
3	5-9	69	69	
4	10-14	75	74	
5	15-19	74	74	
6	20-24	61	62	
7	25-29	37	40	
8	30-34	22	26	
9	35-39	16	22	
10				

- a) At what address is the cell pointer located in this spreadsheet? [1]
- b) Write down a *dynamic formula* that might be typed into cell B10, such that the total male population below age 30 (i.e. aged from 0 to 29) is shown. [4]
- c) Write down a *dynamic formula* that might be typed into cell C10, such that size of the largest female age group is shown. (Note that, given the data above, the result would be 74.) [4]
- d) Describe the steps that need to be taken in order to make the following changes to the above spreadsheet (take care to state the addresses of cells mentioned in your answer):
- i. Italicize all the age-group *names* (from 0-4 down to 35-39). [2]
 - ii. Change the text colour of the column headings to blue. [3]
 - iii. Insert a new blank row above the first row. [2]
 - iv. Sort the entire table in ascending order of female population group size. [5]
 - v. Insert a pie chart showing male and female population in the 35-39 age group. [4]