

**UNIVERSITY OF SWAZILAND**  
**Faculty of Science**  
**Department of Computer Science**  
**SUPPLEMENTARY EXAMINATION 2007**

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

**Course number: CSS100**

**Time allowed: 3 hours**

**Instructions: Answer any 4 of the 5 questions.**

**This examination paper should not be opened until permission has been granted by the invigilator.**

### **Question 1**

- a) List any 2 input devices and 2 output devices. In addition, explain the purpose of each device you have listed. [8]
- b) List any 2 communication devices. [2]
- c) Which is greater: 25000 kilobytes or 15 megabytes? [1]
- d) Distinguish between computer hardware and software. [2]
- e) Explain the IPO scheme. [6]
- f) List the 3 parts of the Central Processing Unit (CPU) and explain the purpose of each. [6]

## Question 2

- a) Distinguish between files and folders. [2]
- b) Distinguish between *double-clicking* and *dragging* of the mouse. [2]
- c) When we *auto-hide* the taskbar, how does its appearance and behaviour change as a result? [2]
- d) What is the purpose of the *clipboard*? [1]
- e) Describe in detail how you would carry out the following tasks in the Microsoft Windows operating system:
  - i. Resize a window to make it slightly larger. [1]
  - ii. Minimize a window. [1]
  - iii. Bring a minimized window back into view. [1]
  - iv. In a row of 3 icons, select (highlight) only the 1<sup>st</sup> and 3<sup>rd</sup> icons (excluding the 2<sup>nd</sup> icon). [2]
  - v. On the desktop, create a scrap document containing the single word: NOTES. [4]
  - vi. Search for all files whose name includes the letter w [3]
  - vii. Make a copy of all files found in the G: \CSS100 folder, putting the copied files into the F: drive. [6]

### **Question 3**

Describe in detail how you would carry out the following tasks in Microsoft Word:

- a) Centre-align the title and change its font size to 18. [2]
- b) Justify and italicize a paragraph. [2]
- c) Save a document as a new file in the F: drive with file name exam.doc [2]
- d) Indent only the first line of a paragraph. [1]
- e) Increase the line spacing of a paragraph to 1.5. [2]
- f) Create a table of 2 columns and 3 rows. [4]
- g) Add an extra row to the bottom of an existing table. [2]
- h) Remove an existing table. [2]
- i) Move a paragraph which currently appears in the first page, into the last page. [4]
- j) Show page numbers in the bottom-right corner of each page. [4]

#### Question 4

The questions further below refer to the following 2 Microsoft Excel spreadsheets. The spreadsheet on the left is called the **original** while the one on the right is called the **modified** spreadsheet. They show the names of 6 countries, as well as the area (number of square kilometres) and population size of each.

	A	B	C	D
1	COUNTRIES			
2	Name	Area	Population	
3	Vatican	0.44	850	
4	Monaco	1	31693	
5	Nauru	21	11845	
6	Tuvalu	26	10838	
7	S. Marino	60	26937	
8	L'tenstein	160	32204	
9				

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10				

- In what ways is the modified spreadsheet different from the original? Describe the five (5) differences as precisely as possible. [6]
  - Describe in detail how you would carry out the changes mentioned in a). [6]
  - In the modified spreadsheet, it is necessary to show the average population of all countries. Write a formula to calculate this value. Also mention the cell where you would type this formula. [3]
  - In the modified spreadsheet, it is necessary to show the *population density* (number of people per square kilometre) of the Vatican. Write a formula to calculate this value. Also mention the cell where you would type this formula. [6]
- Finally, describe how the population densities of each of the other 5 countries (Monaco, Nauru etc.) can be shown. [6]
- Describe in detail how a bar chart of all countries' areas can be added to the modified spreadsheet. [4]

### **Question 5**

- a) Explain the following terms in relation to databases: *field*, *record* and *primary key*.

[4]

- b) Give suitable data types for each of the following fields:

- Company names
- Birthdays

[2]

- c) Give suitable field names, data types and field sizes for the following database table:

Name	Area	Population
Vatican	0.44	850
Monaco	1.1	31693
Nauru	21.2	11845
Tuvalu	26.3	10838
San Marino	60.4	26937
Liechtenstein	160.5	32204

[9]

- d) Assume that the database table shown in c) has already been created and named as COUNTRIES. Describe in detail how you would carry out the following tasks in Microsoft Access:

- i. Delete the record for Tuvalu.

[2]

- ii. Assuming that you are currently viewing the Datasheet View, change to Design View.

[1]

- iii. Create a query to find out which countries have a population of more than 20000.

[7]