

UNIVERSITY OF SWAZILAND
Faculty of Science
Department of Computer Science
MAIN EXAMINATION, MAY 2011

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) Distinguish between hardware and software. [2]
- b) Describe the workings of a computer with the help of the IPO scheme diagram. [5]
- c) List and briefly describe the 5 main kinds of computer hardware. For each kind, provide an example of a hardware device. [10]
- d) List and describe the main parts of the CPU. [6]
- e) Suppose that a hard disk drive has 60 GB of free space. Is it possible to copy a 500 MB file to this hard disk? Explain your answer. [2]

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

- a) Distinguish between each of the following pairs:
- i. A minimized window and a closed window.
 - ii. Horizontal and vertical scrolling.
 - iii. Menu bar and tool bar.
 - iv. Window and icon.
 - v. Copying and moving a file. [10]
- b) Saving a file results in the transfer of data from one hardware device to another. What are these 2 devices? [2]
- c) Describe the steps that need to be taken to accomplish the following on the desktop:
- i. Reduce the height of a window. [1]
 - ii. Delete a file. [1]
 - iii. Rename a file. [1]
 - iv. Highlight 2 icons at once. [2]
 - v. Create a text document. [2]
- d) Describe the steps that need to be taken to accomplish the following using Windows Explorer or My Computer window:
- i. Navigate up one level from the current folder. [1]
 - ii. View the modification date of all files in the current folder. [2]
 - iii. Copy a file from one folder to another. [3]

Question 3 (Word Processing) – [25 marks]

- a) With the help of diagrams contrast between any 3 kinds of paragraph alignment. [6]
- b) Briefly explain the meanings of font *type*, font *size* and font *style*. [3]
- c) Describe the steps that need to be taken to accomplish the following using Microsoft Word:
- i. Make a word both italic and bold. [2]
 - ii. Set the font of the title to Arial and increase the size to 18 pt. [2]
 - iii. Indent a paragraph by 2 inches. [2]
 - iv. Identify a misspelled word and obtain suggestions for correcting it. [2]
 - v. Create a table with 2 rows and 3 columns. [2]
 - vi. Add page numbers to the bottom-right corner of each page. [3]
 - vii. Save the document in the F: drive, giving it a new name, ESSAY. [3]

Question 4 (Spreadsheets) – [25 marks]

Answer the questions further below with reference to the following spreadsheet. It shows the marks gained by 8 students in 2 tests.

| | A | B | C | D |
|----|---------|--------|--------|---|
| 1 | Student | Test 1 | Test 2 | |
| 2 | 610100 | 21 | 60 | |
| 3 | 601011 | 45 | 48 | |
| 4 | 602000 | 74 | 60 | |
| 5 | 611000 | 55 | 60 | |
| 6 | 600020 | 63 | 72 | |
| 7 | 601000 | 50 | 30 | |
| 8 | 611020 | 53 | 41 | |
| 9 | 600100 | 55 | 48 | |
| 10 | | | | |

- a) At what address is the cell pointer located in this spreadsheet? [1]
- b) What is the meaning of *logical test*? [1]
- c) Write down *dynamic formulas* to accomplish the following:
- Show the total marks of student number 610100 at D2. [2]
 - Show the average Test 1 mark at B10. [3]
 - Show the highest Test 2 mark at C10. [3]
 - Show the word POOR at E2, provided student number 610100's total is less than 80 marks. Otherwise, leave E2 blank. [6]
- d) Describe the steps that need to be taken in order to change the above spreadsheet as follows:
- Change the height of the first row to 20 units. [2]
 - Insert a bar chart showing all marks in Test 1. [3]
 - Sort the entire table in ascending order of student number. [4]