THE UNIVERSITY OF ZAMBIA
SCHOOL OF NATURAL SCIENCES
DEPARTMENT OF COMPUTER STUDIES
CSC 2101 – INTRODUCTION TO COMPUTER SYSTEMS

TEST TWO

TIME: *1 HR 30 MIN*

INSTRUCTIONS: ANSWER ALL QUESTIONS

28th April 2017

QUESTION ONE

An electronic spreadsheet is analogous to an accountant's ledger sheet. It contains rows and columns for entering character or numeric data.

a) List and explain ***three (3)*** scenarios in which you would use spreadsheet software [9]
b) List and explain ***four (4)*** terminologies used in spreadsheet software [8]
c) List and explain ***four (4)*** advantages of using spreadsheet software [4]
d) List and explain ***four (4)*** disadvantages of using spreadsheet software [4]

QUESTION TWO

Presentation software is software that facilitates creation of a series of slides, i.e., a presentation.

a. List and explain ***four (4)*** terminologies used is presentation software [4]
b. Give ***five (5)*** advantages of using presentation software providing a real life scenario in which this would be applicable [10]
c. List and explain ***two (2)*** disadvantages of using presentation software [2]
d. Give ***two (2)*** examples of presentation software providing a brief contrast between the two. [4]
e. List ***five (5)*** similarities between Microsoft word and Microsoft power point [5]

QUESTION THREE

a. In the context of information processing, define the following [5]
   1. Data
   2. Information
   3. Knowledge
   4. Expert Systems
   5. Information Processing

b. Write brief notes on the following types on systems, providing day to day examples of their application [20]
   1. Transaction Processing Systems
   2. Management Information Systems
   3. Decision Support System
   4. Office Information Systems

c. Give a scenario in which you would use Access instead of Excel, giving the benefits and downsides of each. [5]

University of Zambia
School of Natural Sciences
Department of Computer Science

CSC2000 Test 2

Duration: 1 hour

Answer all questions.

Section A [5 marks each question]

1. Which class or interface defines the `wait()`, `notify()` and `notifyAll()` methods?
2. What method must be defined by a class implementing the `java.lang.Runnable interface`?
3. Which method is used to make a main thread to wait for all child threads?
4. Which method is used to check if a thread is running?
5. What method call will directly stop the execution of a Thread?
6. Write code for two types of valid constructors for Thread class.
7. Write the code that is missing.

```
public class ThreadExtended extends Thread {
   public void run() {
      System.out.println("\nThread is running
      now\n");
   }
   public static void main(String[] args) {
      //Some code missing....
      threadE.start();
   }
}
```

8. What keyword is used to achieve concurrency in Java threads?
9. What method call is used to identify threads?
10. Write a code block to create and start a thread using the class below.

```
public class MyRunnable implements Runnable
{
    public void run()
    {
        // some code here
    }
}
```