ELL301 HOMEWORK 25 MARKS

We are continually searching for ways to improve agricultural productivity. One way to facilitate this is to improve efficiency of resources used such as water and soil by continuous monitoring. Therefore, sensors for water and soil (composition, temperature) are important.

There already exist sensors of water and soil chemistry and a part of this assignment is to study their design. In addition to the design mechanism, a challenge is to ensure that they are rugged and reliable.

The statement of problem for this assignment is

a) Survey existing sensors for water and soil.
b) Study in depth one soil sensor and one water sensor. You may also design one on your own.
c) Discuss the robustness and reliability of the sensors presented in b) and how it can be interfaced with a data logging and transmission setup.

Instructions.

1. Marks will be allotted as per letter grades below,

| | | | |
|---|---|---|---|
| 0 | F | Fail | no submission or violation of instructions / unethical practises |
| 5 | D | Pass | some work done |
| 10 | C | Basic | work done for a, b & c |
| 15 | B | Good | work done for a, b & c AND some of these are clear |
| 20 | A | V. Good | work done for a, b & c AND all of these are clear |
| 25 | O | Excellent | in addition to criteria for A, more work done. |

2. One report per student.
(via moodle, please press 'submit')

3. Final Report due on 15.04.2019, 11:59 PM.
Late submission penalty of 2.5 marks per day on the total marks.

4. Draft reports encouraged before 15.03.2019.

5. Final report should reflect your own understanding.