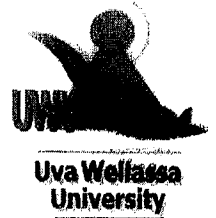


Uva Wellassa University
Faculty of Animal Science and Export Agriculture
B.Sc. in Export Agriculture
B.Sc. in Tea Technology and Value Addition



End Semester Examination - September/October 2015
Year I Semester II

Irrigation and Water Management (EAG 131- 2)

Instructions

Answer **All** questions.

No. of questions : Three (03)

No. of pages : Two (02)

Total marks allocated : 40%

Time : 01 Hour

PART III - ESSAY

Question 1

Write short notes.

(40 marks)

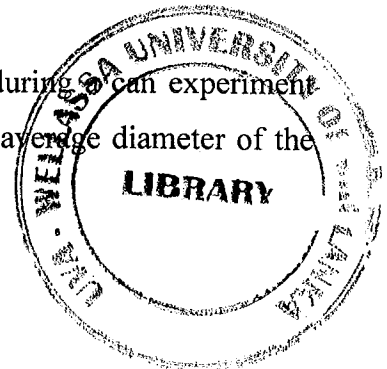
- 1.1. Total available water in the soil
- 1.2. Management allowable depletion of soil moisture
- 1.3. Net irrigation requirement
- 1.4. Irrigation efficiency

Question 2

- 2.1. Briefly discuss the advantages and disadvantages of surface irrigation and sprinkler irrigation. (20 marks)
- 2.2. Briefly discuss the ideal wetting pattern and the reasons for the occurrence of poor wetting patterns of furrow irrigation. (20 marks)

Question 3

Following table shows the collected volumes of water in 24 cans during a can experiment conducted by a group of students of Uva Wellassa University. The average diameter of the cans was 14 cm.



Can No.	Collected water (mL)
1	380
2	256
3	348
4	364
5	330
6	322
7	386
8	340
9	320
10	280
11	270
12	362
13	310
14	326
15	378
16	366
17	374
18	328
19	240
20	254
21	322
22	366
23	350
24	220

3.1. Calculate,

- a) Depths of water collected in each can in cm. (10 marks)
- b) Average of depths of water collected. (10 marks)
- c) Average of minimum depths of water collected. (10 marks)
- d) Pattern efficiency of the sprinkler head. (05 marks)

3.2. Comment on the obtained value for the pattern efficiency of this sprinkler head.

(05 marks)