

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



End-Semester Examination, September/October 2013
Year II Semester II

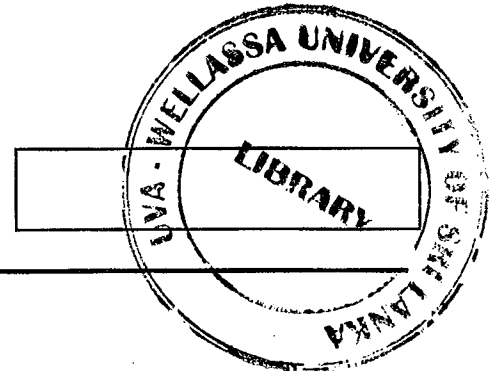
TEA 222-2 Tea Processing Technology I

Instructions

Answer all questions

No. of questions : Two (2)
No. of pages : Three (3)
Total marks allocated : 60%
Time : One (1) hour

Index No:



Part II – Essay

QUESTION 1

A low country factory has the following machinery

47" Rollers - 04 Nos.
45" Rollers - 02 Nos.
44" Rollers - 02 Nos.

Roll Breakers (Capacity 27 kg / min) - 04 Nos.

The output of the ECP drier No.1 and No.2 are 125 kg MT/ hr and 215 kg MT / hr respectively at a wither of 42 % MT/WL.

The following information is given:

1st Dhool - 8 %
2nd Dhool - 16 %
3rd Dhool - 18 %
4th Dhool - 18 % and balance is Big Bulk

The average green leaf intake is 13,600 kg / day

Taking into consideration the above information and answer the following questions.

- I. What is the dhool requirement for the driers?
- II. What is the charging interval?
- III. What are the initial and subsequent charges for the rollers ?
- IV. What is the quantity of bulk available for each rolling ?
- V. Sketch the rolling programme on a graph paper
- VI. How many Roll Breakers are needed for the above rolling programme ?
- VII. How many workers are needed for the above rolling programme?
- IXI. If the green leaf intake is 6500 kg / day;
 - a). What is the drier you choose to use and the out-put of the drier?
 - b). What is the charging interval you decide on ?

(Assumption: Gross out turn 22.5 % and maximum capacities of withered leaf and rolled leaf for Orthodox Rollers are given below)

Roller Size (Inches)	Withered Leaf Capacity (kg)	Rolled Leaf Capacity	
		Early Rolling (kg)	Late Rolling (kg)
47	275	300	350
45	225	260	275
44	160	175	200

QUESTION 02

- I. State four main grades made in a up country factory and sketch a flow diagram of the grading procedures.
- II. State five main grades made in a CTC tea factory in Sri Lanka and sketch a flow diagram of the grading procedures.
- III. A buyer claims that the purchase sample differs to bag sample and teas vary from bag to bag. Explain possible reasons for the buyer's claim.

