

Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
300 level 2nd Semester Examination - Jan/ Feb 2016
SCT 415-1 Green Techniques for Industries



Instructions to candidates

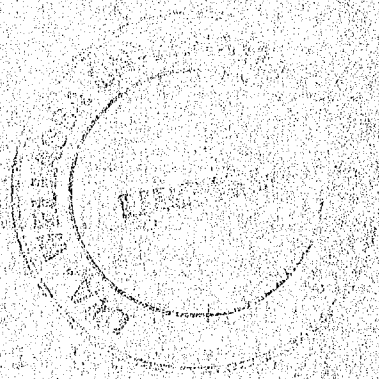
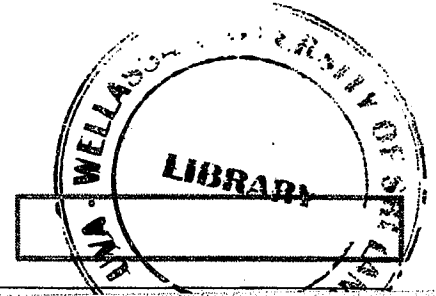
Duration: 01hour

Number of questions: 04

Answer all the questions in Part A and Part B.

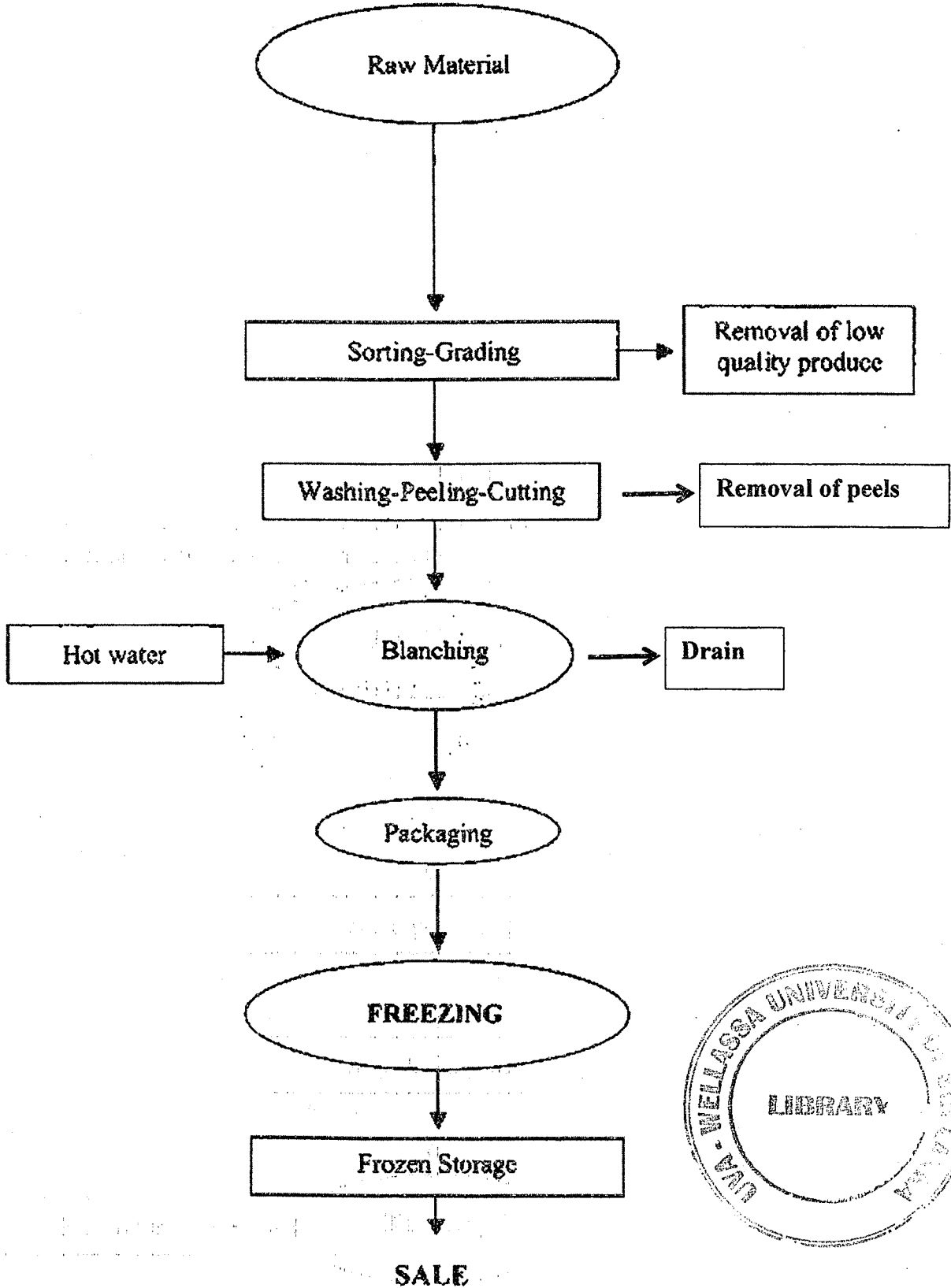
Mark allocation: 100

Index No.



PART B

1. The diagram below gives the production flowchart of a fresh cut vegetable. All unit operations of production process are run by machinaries.



- a. i. Write the mass balance equation for the production process of fresh cut vegetables in the diagram above. Calculate mass balance by using the given information. (Raw material input = 1000 kg. Hot water = 50 kg. Drain = 50 kg. Removal of low quality produce = 107 kg. Removal of peels = 100 kg. Sale = 680 kg.)
- (10 mark)
- ii. Explain reasons for answer in above "a,i".
- (7 mark)
- b. i. Identify possible unit operations (in above diagram) that needed Cleaner Production (CP) implementation.
- (8 mark)
- ii. Explain possible steps of CP implementation for the mentioned unit operation in above "b,i".
- (15 mark)

