

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



End Semester Examination September/October 2015
Year II Semester I

Rubber Processing Technology I (PLT 342-2)

Instructions

Answer **all** questions.

No. of questions : Two (02)

No. of pages : One (01)

Time : One hour (01 hr)

Total marks allocated : 60%

Part II – Essay

Question 01

- I. Discuss about advantages and disadvantages of standardization of latex during the manufacture of dry rubber forms from NR field latex.

(07 Marks)

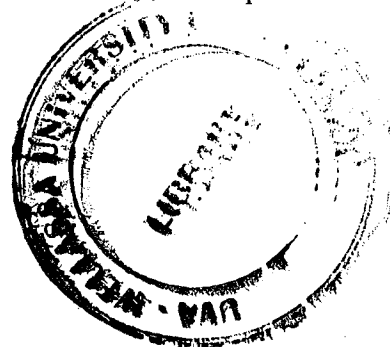
- II. Describe the three (03) steps of manufacturing processes when a discoloration of fractioned and bleached crepe rubber is reported.

(08 Marks)

- III. Account for the following observations.

- (a). RSS could be sulphur cured at a higher curing rate than that of white crepe rubber.
(b). Un-fractioned crepe rubber has a higher PRI value than that of fractionated rubber.
(c). Air dried sheet rubber is the best alternative rubber for replacement of un-fractioned and unbleached rubber in the natural rubber based rubber product industry.

(15 Marks)



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Question 02

- I. Describe the main operations involved in the manufacturing process of centrifuged latex starting from natural rubber field latex, with an aid of the suitable flow diagram.
(08 Marks)
- II. List out the chemicals and equipment used in the manufacture of centrifuged latex.
(06 Marks)
- III. What are the advantages of TSR over the conventional grades of natural rubber?
(06 Marks)
- IV. Give manufacturing steps (in sequential order) of two of the following rubbers starting from latex or dry rubber. Give two uses of each of the selected rubber types.
- a) Oil extended natural rubber
 - b) De-proteneized natural rubber
 - c) Constant Viscosity rubber
- (10 Marks)