



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING**

**THIRD SEMESTER – APRIL 2023**

**PFP 3503 – PLANT PRODUCT PROCESSING**

Date: 06-05-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

**PART – A**

**Q. No Answer ALL questions**

**(10 x 3 = 30 Marks)**

- 1 Why tempering is done during milling of wheat?
- 2 Define Nixtamalization.
- 3 Suggest measures to inactivate anti-nutritional factors in pulses.
- 4 How are pulses polished?
- 5 List the different metrics for fruit maturity.
- 6 What are zero energy cooling chambers?
- 7 How vegetable oils are deodorized?
- 8 Draw the processing flow chart of peanut butter.
- 9 What are the byproducts obtained during sugarcane processing?
- 10 Define Spices.

**PART – B**

**Answer ALL the questions**

**(5 x 8 = 40 Marks)**

- 11 (a) Give an account on the various byproducts of wheat.  
(OR)  
(b) Explain the effect of heat on rice starch.
- 12 (a) Explain the various stages of sugar cookery.  
(OR)  
(b) Write short notes on the various aspects of plantation crops.
- 13 (a) Discuss the various types of drying pulses.  
(OR)  
(b) Explain the nutritional and phytochemical composition of pulses.
- 14 (a) Write short notes on artificial ripening and waxing of fruits.  
(OR)  
(b) Outline the postharvest physiological changes of fruits and vegetables.

15 (a) Examine the processing methods used to extend the shelf-life of oils.

**(OR)**

(b) Write short notes on carbohydrate based fat substitutes.

**PART – C**

**Answer any TWO questions**

**(2 x 15 = 30 Marks)**

16 (a) Write short notes on wet milling of maize.

(8)

(b) Illustrate CFTRI method of pigeon pea milling using a flow chart.

(7)

17 Discuss in detail the manufacturing of chocolate from cocoa beans.

18 Elaborate on the various types of precooling methods of fruits and vegetables.

19 Explain the process of refining edible oils.

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