



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

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

**THIRD SEMESTER – NOVEMBER 2023**

**PFP 3503 – PLANT PRODUCT PROCESSING**

Date: 04-11-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

**PART – A**

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

**Q. No Answer ALL questions**

- 1 How are cereal grains malted?
- 2 List the types of corn.
- 3 Suggest measures to increase the nutritional composition of legumes.
- 4 How are pulses graded?
- 5 Mention the quality indicators of jam.
- 6 Recognize the methods used for artificial ripening of fruits.
- 7 Define hydrogenation of oils and give examples.
- 8 Draw the processing flow chart for dehydrating coconut.
- 9 Name the traditional varieties of sugars available in India.
- 10 Define condiments.

**PART – B**

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

**Answer ALL the questions**

- 11 (a) Give an account on the various value added millet products.  
(OR)  
(b) Examine the manufacturing process of refined wheat flour and whole wheat flour.
- 12 (a) Determine the impact of temperature on the formulation of sugar based candies.  
(OR)  
(b) Write short notes on the various health effects of spices.
- 13 (a) Discuss the various anti-nutritional properties of pulses and ways to overcome them.  
(OR)  
(b) Classify legumes and illustrate the structure of a pea.
- 14 (a) Write short notes on the preservation of fruits.  
(OR)  
(b) Outline the processing protocol of marmalades.

15 (a) Examine the role of imitation dairy products in food industry.

**(OR)**

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

**PART – C**

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

**Answer any TWO questions**

16 Propose appropriate milling technology for pulses.

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

18 Elaborate on the post-harvest technology of fruits and vegetables.

19 Devise a processing protocol for the following:

**(10 + 5)**

Refining of oils

Extending the shelf-life of oils.

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