

The Open University of Sri Lanka Faculty of Engineering Technology

Bachelor of Industrial Studies Honours (Agriculture) Programme Bachelor of Technology Honours (Engineering) Programme

Final Examination-2016/2017

AEX6236/AEI6236 Processing of food products/ Food Processing

Date

: 20.11.2017

Time

: 0930-1230

Duration

: Three (03) hours

SECTION 2: Answer any four (04) questions.

- 1. (a) Briefly explain how different type of microorganisms involve in production of different fermented food products.
 - (b) What are the advantages of fermented foods?
- 2. "Microwave assisted thawing is quicker than thawing under running water." Critically evaluate this statement.
- 3. Raw milk at 4 °C is to be pasteurized at 72 °C in a plate heat exchanger at a rate of 4000 l/hr. The specific heat of milk is 4000 JKg⁻¹ °C⁻¹ and density of milk is 1000 Kgm⁻³
 - a.) Calculate the volumetric flow rate of milk. b) Calculate the heat required to heat the milk from 4 °C to 72 °C
 - C) Briefly explain why milk is needed to be centrifuged before making ready to drink (RTD) Milk.
- 4. "Drip loss is low in fast frozen meat products than slow frozen meat products" Critically evaluate this statement giving suitable illustrations.
- 5 Write short notes on two (02) of the following topics.
 - a) Expression is a mechanical separation method used in the production of virgin coconut oil
 - b) Application of X ray separation method as a miscellaneous dry cleaning method
 - c) Applications of nanotechnology in food industry
- 6. "Milk is a highly perishable, nutritious food product which needs to be processed, stored and transported at correct temperatures to retain quality of product" Critically evaluate this statement with the experience you gained by visiting a fresh milk processing factory.