



FACULTY OF SCIENCE

DEPARTMENT OF BIOTECH. AND FOOD TECHNOLOGY

NATIONAL DIPLOMA IN FOOD TECHNOLOGY

MODULE: FTN2AQA

FOOD QUALITY ASSURANCE II

CAMPUS: DFC

JUNE EXAM 2018

DATE: 29/ 05/ 2018

TIME: 16:30 – 18:30 hrs

ASSESSOR:

DR BC DLAMINI

INTERNAL MODERATOR:

DR S. De KOCK

DURATION:

2 HOURS

TOTAL MARKS: 125

NUMBER OF PAGES: 4

INSTRUCTIONS:

1. Answer ALL questions.
2. Ensure your student number appears on all materials you submit.
3. Questions may be answered in any sequence but **sub-sections must be answered together.**
4. Hand in examination paper and answer sheet together

QUESTION 1: Quality Control, Quality Assurance and TQM

- 1.1 Effective quality assurance systems are aimed at producing food that conforms to specifications. However, non-conformities do occur. Briefly discuss the ISO 9001 steps for raising a “non-conformance”. (10)
- 1.2 Differentiate between Quality Assurance and Total Quality Management. (10)
- 1.3 Define benchmarking and also give reasons why companies benchmark. (10)
- 1.4 With examples, differentiate between internal failure costs and external failure costs (5)
- [35]**
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QUESTION 2: Food Safety Standards

- 2.1 Food manufacturing companies are now shifting from ISO 22000:2005 to FSSC 22000. Briefly discuss ISO 22000:2005 and the FSSC 22000 and also give a reason for the shift. (10)
- 2.2 Briefly describe how the following organizations/standards are involved in imposing food quality.
- 2.2.1 GFSI (4)
- 2.2.2 Codex Alimentarius Commission (6)
- 2.2.3 Safe Quality Foods (5)
- [25]**
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QUESTION 3: Food Allergens

- 3.1 A food manufacturing company produces both allergen-free products and products that contain allergens. Discuss how the company can prevent contamination of the allergen-free products using an allergen control program (10)
- 3.2 An effective Allergen Control Plan (ACP) must be improved with time. Discuss the triggers of an ACP review. (8)

- 3.3 How do consumers know which foods to avoid with respect to allergens? (2)
- [20]
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Question 4: Cleaning and Sanitation

- 4.1 Advanced food companies use the "C.I.P" system. Briefly discuss your understanding of the "C.I.P." system and also give the key objectives of an effective C.I.P" system. (9)
- 4.2 Following an outbreak of a foodborne disease in a food factory, investigators concluded that the efficacy of the sanitizers could have been the cause of the outbreak. Discuss the factors that affect the efficacy of sanitizers. (10)
- 4.3 Briefly discuss the three important functions of a cleaning detergent. (6)
- [25]
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QUESTION 5: HACCP

A flow diagram for the manufacture of pasteurised milk is shown in Appendix A. From the diagram, develop a HACCP plan for pasteurised milk manufacture using the following headings: Step; Hazard; Preventative Measure; CCP; Critical Limits; Monitoring; Corrective action. [20]

Total: 125 Marks

Appendix A

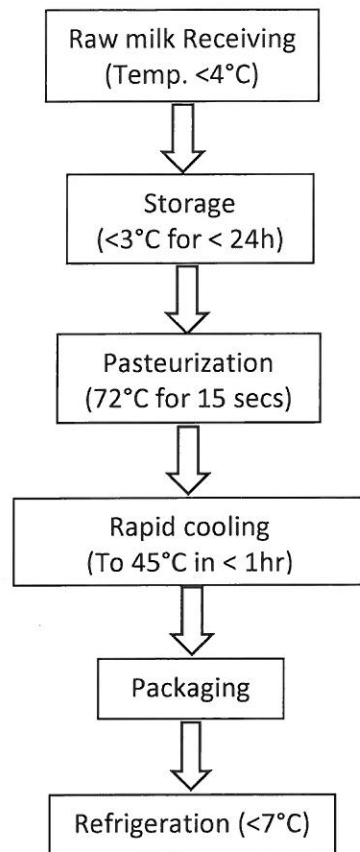


Figure 1. Flow chart for the manufacture of pasteurized milk