## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Agriculture - NOC: Thermal Processing of Foods
Subject Co-ordinator - Prof. R. Anandalakshmi
Co-ordinating Institute - IIT - Guwahati
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Food Microbiology
Lecture 2 - Blanching, Pasteurization, Ultra-pasteurization, Hot fill and UHT
Lecture 3 - Thermal processing equipment
Lecture 4 - Milk pasteurization
Lecture 5 - Canning operations
Lecture 6 - Temperature distribution and heat penetration
Lecture 7 - Kinetics of reactions
Lecture 8 - F value and process requirements
Lecture 9 - Quality considerations and process optimization
Lecture 10 - Shelf life studies
Lecture 11 - Validation of heat processes
Lecture 12 - Fundamentals of aseptic processing
Lecture 13 - Aseptic equipment design
Lecture 14 - Aseptic process design
Lecture 15 - Microwave and radio frequency heating
Lecture 16 - Ohmic heating
Lecture 17 - Overview of non-thermal processing technologies
Lecture 18 - Advanced separation processes
Lecture 19 - High pressure dialysis, ultrafiltration and reverse osmosis
Lecture 20 - Nanofiltration, electrodialysis and membrane separation
Lecture 21 - Various types of heat exchangers for food process engineering
Lecture 22 - Various types of driers for food process engineering
Lecture 23 - Importance and applications of extrusion technology in food processing
Lecture 24 - Changes of properties and functional components of extruded foods
Lecture 25 - Food biosensors
Lecture 26 - Types of functional foods
Lecture 27 - Packaging considerations
Lecture 28 - Biocomposite/bionanocomposite materials for food packaging applications
Lecture 29 - Sanitary components and requirements
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Lecture 30 - Regulatory considerations Lecture 31 - Special Lecture