

Term End Examination-2014
Ph.D. in Dairy Science and Technology
RDR-005: Development in Dairy Processing

Time: Three Hours

MM: 100

Note: Attempt any five questions. All questions carry equal marks

1. Describe important bio-protective factors used for preservation of raw milk. How physico-chemical, microbial and nutritional properties of milk and milk products, are influenced by these factors? 20
2. Enumerate different types of UHT plants. Explain the prospects and scope of different UHT processing plants for processing buffalo milk taking into account quality aspects, heat stability, deposit formation and other important techno-economic consideration. 20
3. Describe principles and operational aspects of important emerging technologies in processing of milk and milk products. 20
4. Explain hurdle technology and its application in the development of shelf stable and intermediate moisture foods. 20
5. Describe the current trends in cleaning and sanitization of dairy equipments including development of chemical and biological detergents and sanitizers? 20
6. What are food contaminants? Describe their incidence and implications in food processing. Suggest important corrective measures. 20
7. Describe the important functional properties of milk powders. What are the technological developments in spray drying to improve the quality of dried products? 20