

Term End Examination-2014
Ph.D. in Dairy Science and Technology
RDR-009: Application of Biotechnology in Dairy Industry

Time: Three Hours

MM: 100

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

1. Explain the principles and processes involved in genetic improvement of lactic acid bacteria to enhance their technological and functional attributes. 20
2. Describe important metabolic engineering of lactic acid bacteria for production of nutraceuticals. 20
3. Characterize important bioactive compounds and their functions present in milk and milk products. 20
4. Explain role and mode of action of probiotics in control of diseases. Explain the factors in assessing the safety of probiotics? 20
5. What are GM Foods? Give the principle and process of making of these Foods. Explain the associated food safety issues. 20
6. Describe the principles and procedures of rapid detection tests for food borne bacterial pathogens and spoilage organisms. 20
7. Describe different type of bacteriocins, their modes of action and potentials in food preservation and control of food poisoning. 20