



**BE-241**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. - VI) Examination**

**March/April - 2014**

**Biotechnology**

*(ES : Dairy Biotechnology)*

*(Elective Paper)*

Time : 3 Hours]

[Total Marks : 50

1 Answer the following :

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- (1) Lactose is a \_\_\_\_\_ ?
  - (a) Monosaccharide
  - (b) Disaccharide
  - (c) Polysaccharide
- (2) Pasteurization of milk is carried out at \_\_\_\_\_ ?
  - (a) 62.8° C
  - (b) 100° C
  - (c) 121° C
- (3) Which bacterial species is commonly present in milk ?
  - (a) Bacillus spp.
  - (b) Salmonella spp.
  - (c) Lactobacillus spp.
- (4) Which of the following is a pathogen found in milk ?
  - (a) Mycobacterium
  - (b) Lactobacillus
  - (c) Streptococcus
- (5) Which protein is mainly present in the milk ?
  - (a) Casein
  - (b) Resin
  - (c) Milcin

- (6) Sterilization of milk is carried out at which temperature for 1-2 seconds ?
- (a) 300° F
  - (b) 300° C
  - (c) 121° C
- (7) Which of the following is a fermented milk product ?
- (a) Kefir
  - (b) Khaman
  - (c) SCP
- (8) Which milk product is having a medicinal role ?
- (a) Acidophilus milk
  - (b) Cow milk
  - (c) Yoghurt
- (9) Which of the following is a type of cheese ?
- (a) Koumiss
  - (b) Camembert
  - (c) Buttermilk
- (10) Which of the following is a starter culture used in milk products ?
- (a) Lactobacillus spp.
  - (b) Salmonella spp.
  - (3) Mycobacterium spp.

2 Answer the following : (any **five**)

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- (a) Give name of fungi used in cheese production.
- (b) Ripening process is the part of preparation of which milk product ?
- (c) Give two names of microorganisms used as starter culture.
- (d) Define Pasteurization.
- (e) Give two names of fermented milk products.
- (f) Give the name of bacteria used to prepare Bulgarian milk.
- (g) Which biochemical type of bacteria can produce Lactic acid in milk ?

- 3 Answer the following : (any **four**) 20
- (a) Discuss any one biochemical type of microorganisms of milk.
  - (b) Write a note on Starter culture.
  - (c) Discuss Kefir and Koumiss
  - (d) Discuss types of cheese
  - (e) Discuss the nutritional value of milk
  - (f) Write a note on Pathogenic type of bacteria in milk.
- 4 Answer the following : (any **one**) 10
- (a) Discuss general steps of cheese preparation.
  - (b) Discuss Pasteurization of milk.
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