

**Exam. Code : 107703**  
**Subject Code : 1889**

**Bachelor of Food Science & Technology (Hons.) 3rd Sem.**  
**FST-302 FLUID MILK PROCESSING**

Time Allowed—3 Hours] [Maximum Marks—50

**Note :—** Attempt any 5 out of 8. All questions carry equal marks.

1. (a) List the major and minor constituents of milk. Give the average composition of cow milk.  
(b) Discuss some of the important physical properties of milk and their significance.
2. (a) Briefly describe the different proteins present in milk. What is their nutritional significance ?  
(b) Mention the factors on which stability of milk proteins depend.
3. (a) What is double toned milk ? How does it differ from standard milk ?  
(b) With the help of a labeled flow diagram describe its manufacture.
4. (a) What is the purpose of addition of vitamins to milk? List the vitamins and the levels at which they are added to milk.  
(b) What are the technological difficulties in making vitamin enriched milk ?

5. (a) Why are the preservative added to milk ? What is their mode of action ?  
(b) Mention any two preservative used in milk and also give method for their detection.
6. (a) What is the purpose of milk clarification ?  
(b) What are the constituents present in slime obtained after clarification ?
7. It is required to make 700 kg of milk testing 4.5% fat. How many kg of cream (25% fat) and milk (3% fat) will be required ?
8. (a) List the objectives of milk pasteurization  
(b) Discuss the advantages of HTST over LTLT pasteurization.