



I- First question (6 marks)

1- Give reasons of the following:- (2 marks/one each)

- a- R.M.No. and P.No. are used to measure the degree of butter purity.
- b- Pasteurization of milk used for dairy products manufacture is essential.

2- Write about:-

- a- Health benefits of table eggs. (2 marks)
- b- Defects in cheese due to coliforms and clostridia. (2 marks)

II- Second question (7 marks)

Please answer the following questions:-

- 1- Differentiate in a table between spore-forming organisms causing food poisoning. (3 marks)
- 2- Point out the (CCP1) during manufacturing of condensed milk, milk powder and evaporated milk products. (2 marks)
- 3- Discuss in details about the non-microbial defects during evaporated milk manufacturing. (2 marks)

III- Third question (6 marks)

Write on the following:- (1.5 marks each)

- 1- Straining and homogenization of milk during heat treatment.
- 2- Non- enzymatic browning and a gum mass of egg products.
- 3- Factors affecting on production of good quality butter.
- 4- Sanitary test for examination of ice cream.

IV- Fourth question (6 marks)

A)- Mark (✓) for true and (X) for wrong, then correct the wrong statement and give reason(s). (2 marks/one each)

- 1- Lactose % increases in case of mastitis.
- 2- CMT reaction must be scored after 15 sec.

B)- Complete the following sentences:- (4marks/one each)

- 1- Technologies used to render food safe are¹.....,².....,³..... and⁴.....
- 2- The packaging material hygiene can be assess either by¹..... and².....
- 3- The starter culture in 'Long-set' method for yoghurt manufacture is added in% of...¹... permitting the fermentation to be continued for...²... hrs. at an incubation temperature of ...³...°C. At this point, the acidity will be⁴.....%.
- 4- Milk intended for cream manufacture must be.....¹.....,².....,³..... and.....⁴.....

***With best wishes, head of food control department
Prof. Dr. Azza M.M. Deeb***