

Register No.:

**597**

**April 2024**

*Time – Three hours*  
*(Maximum Marks: 100)*

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.  
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. What is meant by transportation refrigeration?
2. Write short notes on long term storage.
3. Write the storage conditions of meat and fishery products.
4. What do you mean by precooling of dairy products?
5. Write about display cases in commercial refrigerators.
6. What is chilling rate factor?
7. List the steps involved in ice cream manufacturing.
8. State the purpose of heat treatment of metals.
9. List out the effects of refrigeration for preserving the tissues and virus.
10. What is the importance of air conditioning in tunneling?

PART – B

11. (a) Explain the various factors contributing to food spoilage and the control of the spoilage agents.  
(Or)  
(b) Explain about immersion freezing and freeze drying with neat sketch.
12. (a) (i) Explain the processing of carbonated drinks. (7)  
(ii) Describe the chilling, processing and storage conditions of poultry products. (7)  
(Or)  
(b) Discuss about the butter separation and storage process with neat sketch.
13. (a) Explain about the air conditioning of theatre and auditorium.  
(Or)  
(b) (i) Explain about the wall gain load, product load and respiration load accounted for cooling load calculation. (7)  
(ii) Discuss about the refrigeration load in freezers and calculation of freezing time. (7)
14. (a) Discuss about gas liquification process for LNG with neat sketch.  
(Or)  
(b) (i) Discuss about the achievement of dimensional stability for tools and gauges. (7)  
(ii) Explain the requirements of textile industry air conditioning. (7)
15. (a) Explain about blood bank refrigeration and its required conditions.  
(Or)  
(b) Discuss about the air conditioning of :  
(i) Television centre. (7)  
(ii) Museum. (7)

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