

**D 52990**

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Name.....

Reg. No.....

**THIRD SEMESTER B.VOC. DEGREE EXAMINATION  
NOVEMBER 2023**

Fish Processing Technology

SDC 3FI 12—FREEZING TECHNOLOGY IN SEA FOOD PLANTS

(2021 Admissions)

Time : Two Hours and a Half

Maximum : 80 Marks

**Section A***Each question carries 2 marks.**Ceiling 25 Marks.*

1. What is freezer burn ?
2. What is shelf life ?
3. What are the physical changes during freezing ?
4. Eutectic point.
5. What is an immersion freezer ?
6. What are the chemical changes occurring in proteins due to freezing ?
7. What is the effect of post-mortem condition on sensory qualities of fish ?
8. What are the advantages and disadvantages of thawing ?
9. Explain freezing methods.
10. Define fluidized bed freezing.
11. Define oxidation.
12. What are natural food additives ?
13. Define GMP.
14. What are the physical changes during freezing ?
15. What is an Antioxidant ?

**Turn over**

**Section B**

*Each question carries 5 marks.*

*Ceiling 35 Marks.*

16. Describe atomic structure of water.
17. What are the steps involved in freezing of fishery products ?
18. What is a plate freezer ?
19. What are the chemical changes occurring in nucleotides due to freezing ?
20. Different methods of thawing frozen fish.
21. Does the colour of frozen food change after thawing ?
22. What are the recent advances in fish thawing ?
23. What is the difference between slow freezing and slow freezing ?

**Section C**

*Answer any two questions.*

*Each question carries 10 marks.*

24. What is fish fillet ? Explain the treatments, glazing, packaging and freezing of fish fillet
25. What are the changes in texture, taste, odour occurring during freezing and frozen storage ?
26. What is Thawing ? What are the advantages and disadvantages of thawing ?
27. Compare slow freezing and quick freezing.

(2 × 10 = 20 marks)