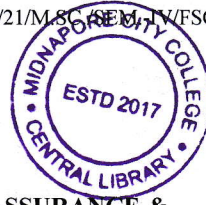


PG (CBCS)
M.Sc. Semester- IV Examination, 2023
FISHERIES SCIENCE
PAPER: FSC 401
(FISH PROCESSING TECHNOLOGY AND QUALITY ASSURANCE &
FISHERIES EXTENSION, ECONOMICS AND MARKETING)



Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

UNIT: 401.1

FISH PROCESSING TECHNOLOGY AND QUALITY ASSURANCE

F.M. - 20

GROUP-A

1. Answer any **TWO** of the following questions: 2×2=4
- State the characteristics of post rigor fish.
 - Define Refrigerated Sea Water (RSW).
 - What are the main causes of spoilage of fish?
 - State the concept of HACCP.

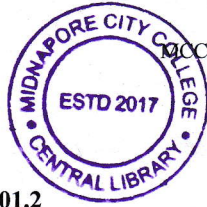
GROUP-B

2. Answer any **TWO** from the following questions: 2×4=8
- Briefly describe the quality control of fishery products.
 - Discuss cryogenic freezing using liquid nitrogen.
 - Write down the advantages of chilling of fish with ice.
 - Differentiate between tube ice and Plate ice.

GROUP-C

3. Answer any **ONE** of the following questions: 1×8=8
- Define Botulism. Write down two causative agents responsible for Botulisms. State its impact on human health. 2+2+4=8
 - 100 Kg lean fish with 1% lipids, 19% solids and 80% water at an initial temperature of 20°C. Calculate CPF Value and ice requirements for cooling of fish. 4+4

(P.T.O)



UNIT: 401.2

FISHERIES EXTENSION, ECONOMICS AND MARKETING

F.M.- 20

GROUP-A

4. Answer any **TWO** from the following questions: 2×2=4
- What is extension education?
 - Name four successful NGO working in the field of fisheries development in West Bengal.
 - Point out the important characteristics of a successful Entrepreneurs.
 - Name two bank who provide loan for fishery.

GROUP-B

5. Answer any **TWO** from the following questions: 2×4=8
- What are the objectives of Fishery Extension education?
 - Write down the different steps of project cycle.
 - Write the role of NGO's in fishery extension.
 - State the role of MPEDA for fisheries products from India. Write a note on PMMSJ.

GROUP-C

6. Answer any **ONE** from the following questions: 1×8=8
- What is market? What will be the criteria of a good fish market? Write a note on different problem facing Indian fish market.
 - How to study the socio-economic status of a fishers? Write note on the role of Women SHG in fisheries sector in India.
