

2022

M.Sc.

4th Semester Examination

FISHERIES SCIENCE

PAPER—FSC—401

Full Marks : 50

Time : 2 Hours

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.

Illustrate the answers wherever necessary.

UNIT-401.1

FISH PROCESSING TECHNOLOGY AND QUALITY ASSURANCE

1. Answer any two questions.

2×2

(a) Why does spoiled fish release unpleasant/

(Turn Over)

unhealthy odor?

- (b) State the significance of IQF technique.
- (c) Why fast freezing is advantageous than slow freezing?
- (d) What is shelf life of fish in ice?

2. Answer any *two* questions.

2×4

- (a) How much ice is required for preservation of 70kg pomfret from 20°C to 0°C? (Specific heat of fish 4J/g and latent heat of ice is 334.7 KJ).
- (b) How would you maintain the hygienic condition in a fish processing plant?
- (c) What are the spoilage indices used to determine the degree of fish spoilage?
- (d) Briefly describe the biochemical changes in fish tissues during spoilage.

3. Answer any *one* question.

1×8

- (a) Distinguish between Pre and Post-rigor fish.

Briefly describe Cryogenic freezing with their merits and demerits. 3+(3+2)

- (b) What is quality assurance? State the principles of HACCP study. Briefly describe the packaging requirement in frozen fish. 1+3+4

UNIT-401.2

FISHERIES EXTENSION, ECONOMICS AND MARKETING

1. Answer any *two* questions. 2×2
- (a) Write down the different parameters for GDP calculations in Fisheries.
- (b) Write the differences between formal education and extension education.
- (c) Name four successful NGO working in the field of fisheries development in West Bengal.
- (d) Point out the important characteristics of a successful Entrepreneurs.

2. Answer any *two* questions. 2×4

- (a) Discuss different fisheries extension methods.
- (b) Write down the different steps of project cycle.
- (c) State the role of MPEDA for marine fisheries products exports from India.
- (d) Write a note on PMMSJ.

3. Answer any *one* question. 1×8

- (a) Classify different fish markets. How to determine the price of a commodity? Write a note on the different problems in fish marketing in India. 3+2+3
- (b) How to study the socio-economic status of fishers? Write note on the role of Women SHG in fisheries sector in India. 4+4

[*Internal Assessment - 10 Marks*]
