2019

M.Sc.

4th Semester Examination

FISHERIES SCIENCE

Paper - FSC 401

Full Marks: 40

Time: 2 Hours

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

Unit - I

(Food Safety and Quality Assurance)

1. Answer any two questions from the following:

2×2=4

- (a) Distinguish between homogenous and heterogenous nucleation.
- (b) What is peeling and deveining?
- (c) Mention the composition of muscles of any one shell fish.

[Turn Over]

- (d) Indicate the significance of IQF.
- 2. Answer any two questions from the following: 2×4=8
 - (a) Describe briefly any two thawing methods employed in fish processing.
 - (b) State the packaging requirements of frozen fish.
 - (c) Briefly comment on the Microbial hazards of fishery products.
 - (d) State in brief the methods of prawn freezing on commercial scale.
- 3. Answer any *one* question from the following:

 1×8=8
 - (a) (i) Comment on quality assurance and quality control.
 - (ii) State the composition of HACCP team with a note on their responsibilities.
 - (iii) Add a note on organoleptic test. 3+3+2
 - (b) Short Note: 4+4
 - (i) Smoking of fish
 - (ii) Fish spoilage

Unit - II

(Fisheries Extension, Economics and Marketing)

- 4. Answer in brief any two questions from the following: 2×2=4
 - (a) What do you mean by Participatory Rural Appraisal (PRA)?
 - (b) Indicate the different factors responsible for price determination of a fish market.
 - (c) Define law of demand and supply.
 - (d) Write down the characteristics of an Entrepreneur.
- 5. Answer any *two* questions from the following:

 2×4=8
 - (a) Write down the role of FFDA in fisheries development in India.
 - (b) Discuss about the specific role of KVK in fisheries development.
 - (c) Socio-economic analysis of fisher —how do you account for that?

- (d) Enumerate the importance of extension teaching methodology.
- 6. Answer *one* questions from the following: $1 \times 8 = 8$
 - (a) (i) What do you mean by extension?
 - (ii) Write down the primary objectives of fisheries extension.
 - (iii) Enlist the different principles of fisheries extension. 2+3+3
 - (b) (i) Classify different market.
 - (ii) Write on priority basis the problems of Indian fish market.
 - (iii) Discuss the role of MPEDA with particular reference to the export of different fishery products. 2+2½+3½