

2022

M.Sc.

4th Semester Examination

FISHERIES SCIENCE

PAPER—FSC-402

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-402.1**

**FISHERIES STATISTICS AND RESEARCH  
METHODOLOGY**

1. Answer any two questions. 2×2

(a) Distinguish between populations and samples.

(Turn Over)

- (b) What do you mean by applied and fundamental research?
- (c) What is hypothesis? Mention its importance.
- (d) What is frequency? State on frequency density.

2. Answer any *two* questions.

2×4

- (a) Discuss different steps and elements in research process.
- (b) Discuss different types of bar diagrams with proper example.
- (c) Calculate the Coefficient of correlation between Length (X) and Weight (Y) variables collected from *Cirrhinus mrigala* fish of a pond and comment on your result.

X (cm)	23	22	24	17	19	20	18	21
Y(g)	16	12	18	04	03	10	05	12

- (d) The mean weight (g) of a group of 100 *Labeo rohita* fish is 9.35 g. The mean weight of 25 of them was 8.75g and other 65 is 10.51g. What

is the mean weight of the remaining fish?

3. Answer any *one* question.

1×8

(a) Compare Mean Deviation and Standard Deviation. Compute the Standard Deviation from the following frequency distribution.

Length of fish (cm)	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99
Number of fish	5	12	15	20	18	10	6	4

3+5

(b) Mention important characteristics of a good researcher. How to write a review of literature in your thesis? Differentiate between references and bibliography.

2+4+2

**UNIT-402.2****FISHERIES LEGISLATION, COMPUTER AND  
BIOINFORMATICS**

1. Answer any *two* questions. 2×2
- (a) Mention different central fisheries legislations of India.
  - (b) Write a note on marine fisheries resources of India.
  - (c) Write any two features of the computer.
  - (d) What do you mean by volatile memory?
2. Answer any *two* questions. 2×4
- (a) Write a note on the regulation of fishing by foreign vessels.
  - (b) Highlight the Indian Fisheries Act, 1897.
  - (c) What do you mean by software? Explain with examples.
  - (d) Discuss the principles and functions of the coastal Authority Act, 2005 .

3. Answer any *one* question. 1×8

(a) Write short note on: 4×2

i) Marine Fishing Regulation Act.

ii) The Merchant Shipping Act, 1958

iii) Differentiate between secondary memory and primary memory.

iv) Operating System.

(b) Answer the following questions: 4+4

i) Discuss about the model bill on Inland Fisheries and Aquaculture, 2005

ii) Briefly write on different generations of computer with examples.

[ *Internal Assessment - 10 Marks* ]

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