2023

M.Sc.

4th Semester Examination FISHERIES SCIENCE

PAPER: FSC-402

Full Marks: 40

Time: 2 hours

The figures in the right hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer from all the Units as directed.

UNIT--I

(FISHERIES STATISTICS AND RESEARCH METHODOLOGY)

- **1.** Answer *any* **two** from the following questions: $2 \times 2 = 4$
 - (a) Classify different types of central tendency.

- (b) State the objective and purpose of research.
- (c) What are the differences between hypothesis and research results?
- (d) Define frequency and cumulative frequency.
- 2. Answer any two from the following questions: 4×2=8
 - (a) Discuss different steps and elements in research process.
 - (b) State the importance of diagrammatic representation of data.
 - (c) Find the mean and SD of the composite set from the means and SD of its component sets as given in the following table:

The second of th					
	lst Set	2nd Set	3rd Set		
Number of observations	200	250	300		
Arithmetic mean	25	10	15		
Standard Deviation	3	1	5		
			i		

- (d) The mean weight (g) of a group of 100 Labeo robita fishes is 9.35 g. The mean weight of 25 of them is 8.75 g and other 65 is 10.51 g. What is the mean weight of remaining fishes?
- **3.** Answer *any* **one** from the following questions: 1×8=8
 - (a) State the relation among AM, GM and HM. Find the missing frequencies of the following data. Given that AM= 67.45 g:

Weight of fish		63-65 ₁ 6	o6-68 E	9-71	- <u></u> 72-74	Total
E			1_			
No. of fish	5	18	t_3	$f_{\mathbf{d}}$	8	100
10			2			

 $3 \pm 5 - 8$

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

2+4+2=8

UNIT-II

(FISHERIES LEGISLATION, COMPUTER AND BIOINFORMATICS)

4. Answer any **two** from the following questions: $2 \times 2^{\circ} 4$

(a) Write a note on banned fishing season in Indian marine water.

(Turn Over)

- (b) Briefly discuss the Biological Diversity Act. 2002.
- (c) Name the components of a data communication system.
- (d) Write a note on the Merchant Shipping Act, 1958.
- **5.** Answer *any* **two** from the following questions: $4 \times 2 = 8$
 - (a) Briefly discuss the function of MPEDA Act, 1972.(b) Briefly discuss the Coastal Aquaculture
 - Authority Act. 2005.

 (c) What do you mean by software? Explain
 - with example.

 (d) Classify operating system depending upon
- 6. Answer any one from the following questions:

 8×1=8

the type of user interface.

- (a) Give an account on the Marine Fishing Regulation Act. What are the regulations for the territorial water imposed by the Govt. of West Bengal under this Act?

 243:3=8
- (b) Discuss different categories of networks.

 Briefly write on different generations of computer.

 4+4=8

* * *