Reg. No ..... Name **22P1039**

M. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022

SEMESTER 1 : AQUACULTURE AND FISH PROCESSING

COURSE : **21P1AQCT03: BIOSTATISTICS AND COMPUTER APPLICATION**

(For Regular - 2022 Admission and Supplementary - 2021 Admission)

Duration : Three Hours Max. Weights: 30

PART A

Answer any 8 questions **Weight: 1**

1. Differentiate between absolute and relative measures of dispersion (E, CO 1, CO 2)
2. Explain Von Bertalanffy's growth equation (U, CO 1, CO 2)
3. When do you say two variables are correlated? Explain how will you measure the correlation between two variables (E, CO 1, CO 2)
4. Define Poisson distribution (U, CO 1, CO 2)
5. Define sampling inspection plans (U, CO 1, CO 2, CO 6)
6. Define simple random sampling (U, CO 1, CO 2)
7. Give the full form of (a) POST (b) CD-ROM (c) BASIC (d) HTML (U, CO 4, CO 5)
8. Define CUI and GUI (U, CO 4, CO 5)
9. Explain Global Positioning System (U, CO 3, CO 4, CO 5)
10. Name some of the software packages in fisheries (U, CO 3, CO 4, CO 5, CO 6)

(1 x 8 = 8)

PART B

Answer any 6 questions **Weights: 2**

11. Describe skewness and kurtosis (U, CO 1, CO 2)
12. Differentiate between primary data and secondary data. Explain the important methods of collection of primary data (U, CO 1, CO 2)
13. What is the difference between correlation and regression analysis (U, CO 1, CO 2)
14. Describe normal distribution and its properties (U, CO 1, CO 2)
15. Twenty, half liter water filled bottles are taken at random for dissolved oxygen determination. The number of air bubbles (defects) from the bottles is given in the table. Draw a control chart for this data (An, CO 1, CO 2)

Bottle no	1	2	3	4	5	6	7	8	9	10
Defects (c)	4	5	7	3	3	5	6	2	4	8
Bottle no	11	12	13	14	15	16	17	18	19	20
Defects (c)	3	5	4	3	4	5	3	7	6	6

16. Write an account on tests of significance (U, CO 1, CO 2)

17. Explain input-output devices, central processing units and commercially used storage devices (U, CO 4, CO 5)

18. Explain the following terms
A. Search engines
B. E-mail (U, CO 4, CO 5)

(2 x 6 = 12)

PART C
Answer any 2 questions **Weights: 5**

19. Calculate Karl Pearson's coefficient of correlation between export and landings of fish from the following data (An, CO 1, CO 2)

Landings (tons)	39	65	62	90	82	75	25	98	36	78
Export (tons)	24	53	58	86	62	68	16	91	28	64

20. What are the different methods of data collection? Describe the methods of classifying and presenting a statistical data (U, CO 1, CO 2, CO 6)

21. What are the main differences between Windows and Linux? (E, CO 3, CO 4, CO 5)

22. Write an account of internet and world wide web and its impact on fisheries development in India (A, CO 3, CO 4, CO 5)

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Application of statistical tools for experimental practices	An	1, 2, 3, 4, 5, 6, 11, 12, 13, 14, 15, 16, 19, 20	28
CO 2	Basic awareness on statistical tools in research and analysis of biological phenomenon	An	1, 2, 3, 4, 5, 6, 11, 12, 13, 14, 15, 16, 19, 20	28
CO 3	Computer knowledge are imparted as applicable to aquaculture practices	An	9, 10, 21, 22	12
CO 4	Computer knowledge at preliminary level for further studies	U	7, 8, 9, 10, 17, 18, 21, 22	18
CO 5	Appropriate use of internet and communication system	U	7, 8, 9, 10, 17, 18, 21, 22	18
CO 6	Sampling methods useful in estimation of marine fish landings	U	5, 10, 20	7

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;