24P1055

M.Sc. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024 **SEMESTER 1: ZOOLOGY**

COURSE: 24P1ZOOT04: BIOSTATISTICS, DIGITAL ANALYTICS AND RESEARCH METHODOLOGY

(For Regular 2024 Admission and Improvement/Supplementary 2023/2022/2021 Admissions)

Duration: Three Hours Max. Weights: 30

PA	RT	Ά
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	Answer any 8 questions	Weight: 1
1.	What is 'Citation Index'?	(R, CO 8)
2.	Define impact factor	(R, CO 8)
3.	What is Students "t" test?	(U, CO 1, CO
		3)
4.	What is random sampling?	(R, CO 1)
5.	Define simpson index	(An)
6.	Examine the role of journals in literature review	(A, CO 7)
7.	What is F test?	(U, CO 1, CO
		3)
8.	What is 'Line of Best Fit' mean in Regression analysis?	()
9.	Examine the role of periodicals as a source of information in research	(A, CO 8)
10.	How to perform MODE function in SPSS?	(U, CO 4) (1 x 8 = 8)

PART B

Answer any 6 questions Weights: 2

11. Find the Mean

No. of teeth	24	25	26	28	29	(A)
Frequency	3	4	5	6	2	

Elaborate the various steps involved in writing an assignment (A, CO 8) 12.

13. Explain the different types of probability sampling. (An, CO 7)

14. How to do measures of dispersion in SPSS? (An)

15. Write ashort note on parametric and non parametric test (U)

16. Explain the points to be observed in selecting a research problem. (U, CO 7)

17. Comment on Skewness and Kurtosis. ()

How do we calculate Biodiversity indices? 18. (R)

 $(2 \times 6 = 12)$

PART C

Answer any 2 questions

Weights: 5

()

19. Find Karl Pearson's correlation coeffi
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Find Karl Pearson's correlation coefficient									(A,			
	X	3.5	4.2	5.6	6.5	7	8.2	8.8	9	9.7	10	co
	Y	9.8	9	8.8	8.4	8.3	8.2	8.2	8	8	8.1	2)

20. Explain the different types and methods of regression analysis.

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21. Give a detailed overview of research process.

() (U,

22. Describe Microsoft Office and its types?

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4) **(5 x 2 = 10)**

OBE: Questions to Course Outcome Mapping

СО	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Relate basics of statistics and measures of central tendency and dispersion	U	3, 4, 7, 19	8
CO 2	Interpret correlation and regression analysis	U	8, 18, 19	11
CO 3	Solve probability, hypothesis testing and vital statistics	U	3, 7, 8	3
CO 4	Analyse the basics of computer application and software	U	10, 20	6
CO 7	Summarize research formulation and design	U	6, 13, 16	5
CO 8	Outline the principles and practices of information documentation and communication	U	1, 2, 9, 12	5

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

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