Reg. No ....   Name **22P1050**

M. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022
SEMESTER 1 : ZOOLOGY
COURSE : 21P1ZOOT04 : BIOSTATISTICS, DIGITAL ANALYTICS AND RESEARCH METHODOLOGY
(For Regular - 2022 Admission and Supplementary - 2021 Admission)

Duration : Three Hours   Max. Weights: 30

PART A
Answer any 8 questions   Weight: 1

1.	What is an ogive?	(U, CO 1)
2.	What is mode?	(U, CO 1, CO 2)
3.	What is VBG model?	(U, CO 3)
4.	What is Mc Nemar test?	(U, CO 3)
5.	How you can insert a coloum break ?	(U)
6.	How to calculate median in Excel	(U, CO 4)
7.	Describe species richness and eveness ?	(R, CO 5)
8.	Define 'Rationalism'.	(R, CO 6)
9.	State the 'Principle of Replication' in the context of experimental designs in research	(R, CO 7)
10.	Comment on the role of patents as a source of information in research	(U)

(1 x 8 = 8)

PART B
Answer any 6 questions   Weights: 2

11. Find the Mode

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	
No. of students	4	9	13	15	12	8	3	(A, CO 1, CO 2)

12.	What is correlation? What are the major types in it?	(R, CO 2)
13.	How to apply templates for slides in Ms powerpoint ?	(R, CO 4)
14.	How to insert different types of charts in Excel ?	(An)
15.	What does high shannon index mean ?	(U)
16.	Distinguish between Research and Scientific methods	(An, CO 6)
17.	Explain the steps involved in conducting a literature review	(U, CO 7)
18.	Give a brief overview of the structure of a research proposal	(U, CO 8)

(2 x 6 = 12)

Answer any 2 questions   **Weights: 5**

19.   Deduce the Spearman's rank correlation coefficient from the following data.

Physics	85	60	73	40	90
Chemistry	93	75	65	50	80

(A, CO 2)

20.   Find standard deviation

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	10	20	40	30	20	10	4

(A, CO 1, CO 3)

21.   Define MS powerpoint , its features ,,advantages ?   (R, CO 4)

22.   Give a critical account of the importance and processes of literature review in research

(U, CO 7)

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Relate basics of statistics and measures of central tendency and dispersion	U	1, 2, 11, 20	9
CO 2	Interpret correlation and regression analysis	U	2, 11, 12, 19	10
CO 3	Solve probability, hypothesis testing and vital statistics	U	3, 4, 20	7
CO 4	Analyse the basics of computer application and software	U	6, 13, 21	8
CO 5	Utilize the application of SPSS and Primer6	U	7	1
CO 6	Perceive the basic concepts of research	U	8, 16	3
CO 7	Summarize research formulation and design	U	9, 17, 22	8
CO 8	Outline the principles and practices of information documentation and communication	U	18	2

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