

Name. _____			Printed Pages:01																												
Student Admn. No.: _____																															
School of Liberal Education Backlog Examination, June 2023 [Programme:] [Semester:] [Batch:]																															
Course Title: Basic Research Methodology and Statistics			Max Marks: 100																												
Course Code: A090201T			Time: 3 Hrs.																												
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.																														
			K Level	COs	Marks																										
SECTION-A (15 Marks)			5 Marks each																												
1.	Define term 'Statistics'.	K1	CO1	5																											
2.	State the meaning of data in statistics.	K1	CO2	5																											
3.	Explain briefly about frequency distribution table.	K2	CO3	5																											
SECTION-B (40 Marks)			10 Marks each																												
4.	Explain in detail about the various measurement scales and also discuss about the type of scales that are frequently used for data collection.	K2	CO4	10																											
5.	Illustrate the reasons for data organization in statistics.	K3	CO5	10																											
6.	Illustrate that how can you organize data in the form of a frequency distribution? Illustrate with the help of an example.	K3	CO1	10																											
7.	<p>In each of the following distributions, indicate:</p> <p>(a) the size of the class interval, (b) the midpoint of the intervals shown.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">SET A</td> <td style="width: 50%;">SET B</td> </tr> <tr> <td>1-5</td> <td>1-9</td> </tr> <tr> <td>6-10</td> <td>10-19</td> </tr> <tr> <td>11-15</td> <td>20-29</td> </tr> <tr> <td>16-20</td> <td>30-29</td> </tr> <tr> <td>21-25</td> <td>40-49</td> </tr> <tr> <td>26-30</td> <td>50-59</td> </tr> <tr> <td>31-35</td> <td>60-69</td> </tr> <tr> <td>36-40</td> <td>70-79</td> </tr> </table> <p style="text-align: center;">OR</p> <p>Draw a Pir Diagram to represent the following data detailing the monthly expenses of an institution:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Salary of the staff</td> <td style="text-align: right;">60,000.00</td> </tr> <tr> <td>Electricity, water and telephone bills</td> <td style="text-align: right;">15,000.00</td> </tr> <tr> <td>Office stationery</td> <td style="text-align: right;">10,000.00</td> </tr> <tr> <td>Miscellaneous expenses</td> <td style="text-align: right;">15,000.00</td> </tr> </table>	SET A	SET B	1-5	1-9	6-10	10-19	11-15	20-29	16-20	30-29	21-25	40-49	26-30	50-59	31-35	60-69	36-40	70-79	Salary of the staff	60,000.00	Electricity, water and telephone bills	15,000.00	Office stationery	10,000.00	Miscellaneous expenses	15,000.00	K4	CO2	10	
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SECTION-C (45 Marks)			15 Marks each																												
8.	Compute the average deviation and standard deviation from the given ungrouped data: 20, 25, 26, 29, 24, 34, 36, 28, 24, 25.	K4	CO3	15																											
9.	Differentiate the various types of Linear Correlation with an hypothetical example including formula and solution.	K4	CO4	15																											
10	<p>Find the Mean, Median and Mode for the following set of scores:</p> <p>(a) 14, 21, 39, 52, 63, 40 61, 22. (b) 80, 74, 62, 54, 49, 34, 28, 14. (c) 14, 28 39, 40, 52, 65, 73, 82.</p> <p style="text-align: center;">OR</p> <p>Find Rank Difference Correlation Coefficient from the following data and interpret the results:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Individuals</td> <td style="width: 5%;">A</td> <td style="width: 5%;">B</td> <td style="width: 5%;">C</td> <td style="width: 5%;">D</td> <td style="width: 5%;">E</td> <td style="width: 5%;">F</td> <td style="width: 5%;">G</td> <td style="width: 5%;">H</td> </tr> <tr> <td>Marks in Hindi</td> <td>40</td> <td>30</td> <td>60</td> <td>40</td> <td>10</td> <td>55</td> <td>12</td> <td>48</td> </tr> <tr> <td>Marks in English</td> <td>45</td> <td>85</td> <td>50</td> <td>32</td> <td>21</td> <td>18</td> <td>45</td> <td>55</td> </tr> </table>	Individuals	A	B	C	D	E	F	G	H	Marks in Hindi	40	30	60	40	10	55	12	48	Marks in English	45	85	50	32	21	18	45	55	K4	CO5	15
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