



G H Raisoni College of Engineering and Management, Pune

(An Empowered Autonomous Institute affiliated to Savitribai Phule, Pune University. NAAC Accredited "A+" Grade)

First Year B. Tech.

(TERM-I)

CAE II Winter 2025 (2023 Pattern)

Foundation of Data Analytics (23UESL1206)

(Time: - 01 Hour)

(Max. Marks:20)

Instructions to the students:

- i) All questions are compulsory. ii) Neat diagrams must be drawn wherever necessary.
- iii) Figures to the right indicate full marks. iv) Use of scientific calculator is allowed
- v) Assume suitable data, if necessary.

Q.No.	Question	Marks	CO	BL																				
1	Calculate Linear Regression equation for the following data																							
a	<table border="1"> <tr> <td>X</td> <td>8</td> <td>4</td> <td>2</td> <td>6</td> <td>9</td> <td>10</td> </tr> <tr> <td>Y</td> <td>7</td> <td>3</td> <td>10</td> <td>5</td> <td>8</td> <td>11</td> </tr> </table> <p style="text-align: center;">OR</p>	X	8	4	2	6	9	10	Y	7	3	10	5	8	11	5	CO3	3						
X	8	4	2	6	9	10																		
Y	7	3	10	5	8	11																		
b	<p>Explain the characteristics of Standard Normal Distribution with neat sketch of probability distribution curve</p> <p>Find Z scores of following data</p> <table border="1"> <tr> <th>Student</th> <th>Score(X)</th> </tr> <tr> <td>A</td> <td>50</td> </tr> <tr> <td>B</td> <td>60</td> </tr> <tr> <td>C</td> <td>70</td> </tr> <tr> <td>D</td> <td>80</td> </tr> <tr> <td>E</td> <td>90</td> </tr> </table> <p style="text-align: center;">OR</p>	Student	Score(X)	A	50	B	60	C	70	D	80	E	90	5	CO3	2								
Student	Score(X)																							
A	50																							
B	60																							
C	70																							
D	80																							
E	90																							
d	Discuss confidence interval and also explain 03 different cases	5	CO3	2																				
2.	For the following data, Use pivot table count function to find number of male and female students using Gender data . Explain proper procedure and draw final pivot table.																							
a	<table border="1"> <tr> <th>Rno</th> <th>Student Name</th> <th>Gender</th> <th>Marks</th> </tr> <tr> <td>1</td> <td>Student 1</td> <td>Male</td> <td>15</td> </tr> <tr> <td>2</td> <td>Student 2</td> <td>Male</td> <td>16</td> </tr> <tr> <td>3</td> <td>Student 3</td> <td>Female</td> <td>17</td> </tr> <tr> <td>4</td> <td>Student 4</td> <td>Male</td> <td>19</td> </tr> </table> <p style="text-align: center;">OR</p>	Rno	Student Name	Gender	Marks	1	Student 1	Male	15	2	Student 2	Male	16	3	Student 3	Female	17	4	Student 4	Male	19	5	CO4	3
Rno	Student Name	Gender	Marks																					
1	Student 1	Male	15																					
2	Student 2	Male	16																					
3	Student 3	Female	17																					
4	Student 4	Male	19																					
b	Explain any five pivot table summarization functions	5	CO4	2																				
c	Explain the difference between count numbers and count function with suitable example	5	CO4	2																				

[Total No. of Question -02]

[Total No. of Pages - 2]

OR

d What is the role of pivot tables in data analysis? Discuss sorting and filtering operations in pivot table 5 CO4 2

BL – Bloom's Taxonomy Levels (1- Remember, 2- Understand, 3 – Apply, 4 – Analyze,5 –Evaluate
6 - Create