

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET - A**

**SCHOOL OF ENGINEERING  
END TERM EXAMINATION - JUN 2023**

**Semester :** Semester IV - 2021

**Course Code :** CSE2027

**Course Name :** Sem IV - CSE2027 - Fundamentals of Data Analytics

**Program :** CAI,CEI&CST

**Date :** 10-JUN-2023

**Time :** 9.30AM - 12.30PM

**Max Marks :** 100

**Weightage :** 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**(10 X 2 = 20M)**

1. How can the performance of a logistic regression algorithm be measured ?  
(CO5) [Knowledge]
2. Define Central Tendency and list its three important measures.  
(CO1) [Knowledge]
3. List any two machine learning algorithms that can be used for both regression and classification problems.  
(CO5) [Knowledge]
4. \_\_\_\_\_ are a set of statistical parameters to measure a distribution.  
(CO2) [Knowledge]
5. List any 4 data visualization techniques.  
(CO4) [Knowledge]
6. Define Semi-Structured Data with example.  
(CO1) [Knowledge]
7. Mention any two advantages of secondary data.  
(CO3) [Knowledge]
8. What is correlation ? List its types.  
(CO3) [Knowledge]
9. What is a Pivot table ?  
(CO4) [Knowledge]
10. Under which sampling every element of the population has an equal probability of getting selected.  
(CO2) [Knowledge]

## PART B

### ANSWER ALL THE QUESTIONS

(5 X 10 = 50M)

11. To solve classification problems, a Logistic Regression Machine learning algorithm is used. What is Logistic Regression and sigmoid function? How can you measure the performance of a logistic regression classifier using confusion matrix.  
(CO5) [Comprehension]
12. Explain the different scales used for data measurements.  
(CO1) [Comprehension]
13. Differentiate between Questionnaire and Schedule methods of primary data collection.  
(CO3) [Comprehension]
14. Sales of a company (in Lakhs per month) are given below:  
59.74, 40.87, 98.1, 60.54, 59.74, 63.4, 72.5.  
Find the fluctuation in the sales per month.  
(CO2) [Comprehension]
15. Describe the different types of charts used for data visualisation with an example for each.  
(CO4) [Comprehension]

## PART C

### ANSWER ALL THE QUESTIONS

(2 X 15 = 30M)

16. Explain all the types of data analysis methods with an example for each.  
(CO1) [Application]
17. Two bowlers bowl the cricket balls in following speed in India(Km/H) and Australia(Miles/H).  
Who has the highest variation?  
Bowler-1(Km/H) 110, 140, 135, 125, 150, 145  
Bowler-2(Miles/H) 92, 86, 104, 93, 87, 103  
(CO2) [Application]