PRESIDENCY UNIVERSITY BENGALURU

SET B

SCHOOL OF COMMERCE **END TERM EXAMINATION - JAN 2024**

Semester : Semester V - 2021 Course Code : BCH3005 **Course Name :** Data Transformation using AI analytics **Program :** B.Com. Honors

Date: 10-JAN-2024 Time: 1:00 PM - 4:00 PM 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

- 1. Explain briefly how Machine Learning is impacting the Marketing department in organizations.
- (CO1) [Knowledge]
- 2. Define Machine Learning
- 3. Define R2. How is it relevant in a linear regression model?
- 4. List Principles of Decision trees
- 5. Specify CHAID trees

PART B

ANSWER ALL THE QUESTIONS

 $5 \times 10M = 50M$

6. Describe the assumptions that underlie linear regression models. Explain why these assumptions are important and how violations of these assumptions can impact the reliability of a linear regression model.

(CO2) [Comprehension]



(CO2) [Knowledge]

(CO2) [Knowledge]

(CO3) [Knowledge]

(CO3) [Knowledge]

 $5 \times 2M = 10M$

7. Illustrate how AI-ML Influence on financial business	
	(CO2) [Comprehension]
8. Describe Bayesian classification model steps	
	(CO3) [Comprehension]
9. Explain Agglomerative Hierarchical clustering	
	(CO3) [Comprehension]
10. Specify Boosting Algorithms and explain Adaptive Boosting algorithm	(000) [0
	(CO3) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS 2 X 20M = 40M

- 11. Describe Gradient descent algorithm in Machine Learing
- **12.** Describe K-Means clustering and its applications.

(CO3) [Application]

(CO3) [Application]