

Roll No:
Date:

St. Claret College

Autonomous, Bengaluru

UG END SEMESTER EXAMINATION-NOVEMBER 2025

BCA III SEMESTER

CADE 3425A: FEATURE ENGINEERING

TIME: 1 hour 30 mins

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MAX. MARKS: 40

This paper contains TWO printed pages and THREE parts

Instructions:

1. Verify and ensure that the question paper is completely printed.
2. Any discrepancies or questions about the exam paper must be reported to the COE within 1 hour after the examination.
3. Students must check the course title and course code before answering the questions.

PART-A

Answer ALL questions. Each answer carries ONE mark.

[10 x 01 = 10]

1. Features in Machine Learning are
 - a) Output labels
 - b) Input variables
 - c) Noise in the dataset
 - d) Always numerical
2. The process of converting raw data into a usable form for ML is
 - a) Model validation
 - b) Overfitting
 - c) Backpropagation
 - d) Feature preprocessing
3. Salary is
 - a) Ratio
 - b) Interval
 - c) Nominal
 - d) Ordinal
4. Mention which ML models are most sensitive to feature scaling?
 - a) Decision Trees
 - b) Naive Bayes
 - c) Random Forests
 - d) KNN
5. is best for numerical skewed data.
 - a) Median
 - b) Mean
 - c) Mode
 - d) Drop rows
6. Binning is mainly used to
 - a) Increase data size
 - b) Smooth noisy data
 - c) Add missing values
 - d) Split categorical data
7. Feature extraction is particularly useful when
 - a) Features are highly correlated
 - b) Data is already small
 - c) Only categorical features exist
 - d) Noise is minimal
8. is a supervised discretization method.
 - a) Equal-width binning
 - b) ChiMerge
 - c) Equal-frequency binning
 - d) Random binning



