

Ex4m :- Q1

(1) Machine Learning problem statement (Churn prediction) ?

→ Problem statement :-

→ Predict whether a customer will churn (Yes/No) based on their purchase behaviour.

→ Input features :-

→ Age

→ Gender

→ Income

→ Number of purchases

→ Subscription duration.

→ Total purchases

→ Tenure months

→ Avg order value

→ Target variable

• Churn (0 = No, 1 = Yes)

→ Types of machine learning

- Supervised Learning

- Binary classification

Q) What are Sensors? (with numpy explanation)?

Ans) A sensor is a device that detects or measures a physical quantity and converts it into duty (usually electrical signals).

Ex: Example with numpy:-

→ temperature = np.array([30, 31, 32, 31, 30])

np.mean (temperature)

np.max (temperature)

np.min (temperature)

Ans) Sensors collect real world duty → Numpy processes that duty efficiently.