SRINIVAS UNIVERSITY
INSTITUTE OF ENGINEERING AND TECHNOLOGY

MODULE 3

MACHINE LEARNING

ASSIGNMENT 3

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CSE 'A'

4TH SEM

ASSIGNMENT 3

Normal Distribution (Employee Performance)

1.Domain: Employee Performance Rating in a Company

Domain Explanation

In a company, employees are evaluated based on performance scores (out of 100).

Most employees perform **average**

Few perform **very poor**

Few perform **excellent**

This follows a **Normal Distribution (Bell Curve)**.

2. Normal Distribution Graph (How to Draw)

Draw:

X-axis → Performance Score

Y-axis → Probability / Number of Employees

Draw a **bell-shaped curve**

Mark center as **μ (Mean performance score)**

Divide into three parts:

Ua → Low Performance

Ub → Average Performance

Uc → High Performance

Example values:

Mean (μ) = 70

Standard deviation (σ) = 10

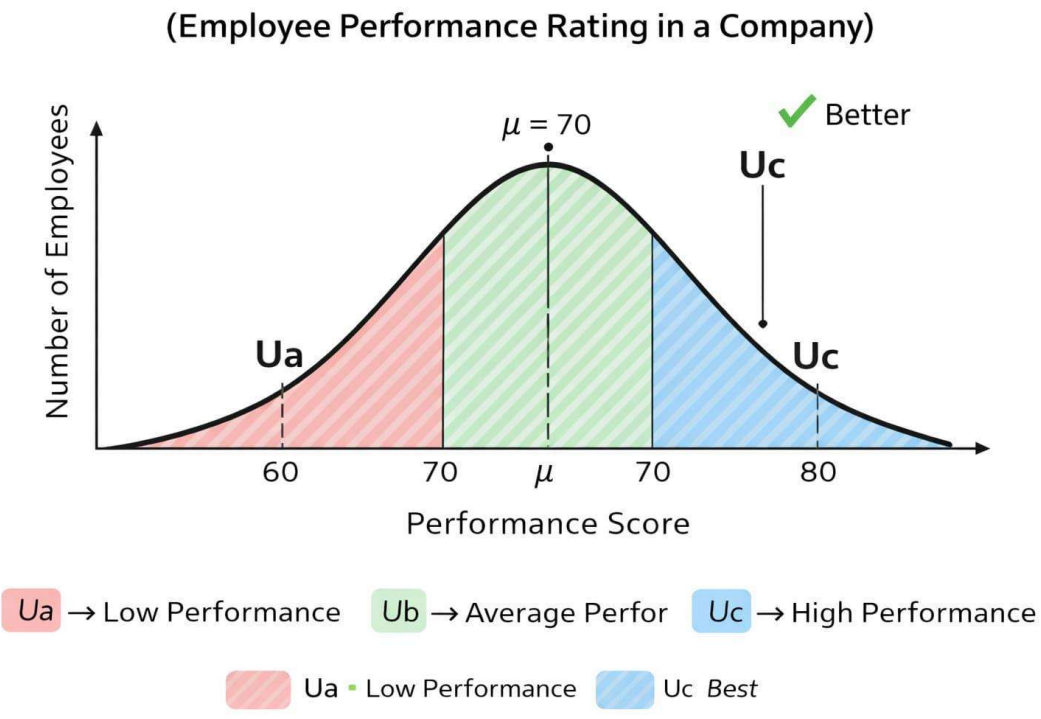
So:

60–80 → Most employees (Ub)

Below 60 → Ua

Above 80 → Uc

3. Marking Ua, Ub, Uc



- Left side → Ua (Low)
- Middle → Ub (Average)
- Right side → Uc (High)

4.Which is Better?

✅ **Uc is better**

Because:

It represents high performance

High productivity

Better growth and promotion chances