ENGINEERING Mathematics

(A) Probability and statistics.

Part 01 : ✓ Basic prob THEORY
  ✓ classification of events
  ✓ conditional probability
  ✓ bayES THEOREM.

Part 02
  ✓ Random variable.
  ✓ Properties of Random variable.
  ✓ expectation, MEAN, ST. dev, variance

Distribution THEORY

$\boxed{30\,hrs}$

- ✓ bernoulli Distribution
- ✓ binomial distr
- ✓ Poisson distribution
- ✓ Uniform Distribution
- ✓ Negative binomial distribution
- ✓ Uniform conti Dis
- ✓ Exponetial distribution
- ✓ Normal distribution
- ✓ Standard Normal distribution

Part 04   Regression

linear algebra ⇒ Matrices / applications

=) system of Equⁿ

⇒ vector space

⇒ Eigen value / eigen vector

⇒ Diagonalization of matrix

⇒ some extra topics

15 - 20 Hrs.

CALCULUS :- limit / Function / Differentiation /
MEAN value THEOREM / partial derivative /
MAX / min ONE variable / Integration / AREA /
some Important Integration

15 - 20 Hrs

Total Hrs $\Rightarrow$ 70 Hrs $\Rightarrow$ 35 days

$$\begin{cases} CSE & - & 05-07 \text{ marks} \\ DATA & - & \underline{25} - \text{marks} \\ Science & & \end{cases} \; \underline{CSE}$$

$$\begin{cases} DATA \; Science & - & prob + Linear + \underline{CALCULUS} -40 \text{ Mar} \\ \boxed{CSE \quad \longrightarrow \quad \underline{prob} + \underline{linear} + CALCULUS} \\ & = \\ & \underline{06-08} + 05-07 \\ & \underline{marks} \end{cases}$$

✓ $\begin{cases} 2 \; or \; 3 \; subject \; | \; \underline{Exclusive \; for} \; CSE \; STUDENTS \end{cases}$

Monday →

✓ DA COURSE → 3 months maths

$$Maths = \underline{40 \ marks}$$

$$CSE \ maths = 06 - 08 \ marks.$$

✓ NEW batch → 2 subjects

✓ Discipline + regularity + $\underline{Revision}$
$(1 \ hrs)$

✓ Maths + programming.

DATA Science → CSE

Maths

(25 marks)

(DATA Science)

CSE

at least ONE

time DATA

Science

(future)

4000 question prob + PYQ + linear + CALCULUS

Topic WISE —Test

(bino)

DA ✓

CS ✓

IIT advanced + JAM + GATE maths

Fear $\rightarrow$ Prob. + finish

Suggested Readings.

$\left\{ \begin{array}{l} \checkmark \; \# \quad \text{david Morin} \\ \\ \quad \text{prob for beginers} \\ \\ \checkmark \; \# \quad \text{populis / Seldom Ross.} \end{array} \right\}$ $\dfrac{\text{NOTES}}{\Downarrow}$

Till July LAST

Suggested readings ⇒ NOTES | DPP | special class ⟩

✓ prob/ statistics — <u>NO Pre knowledge required to learn prob/</u>
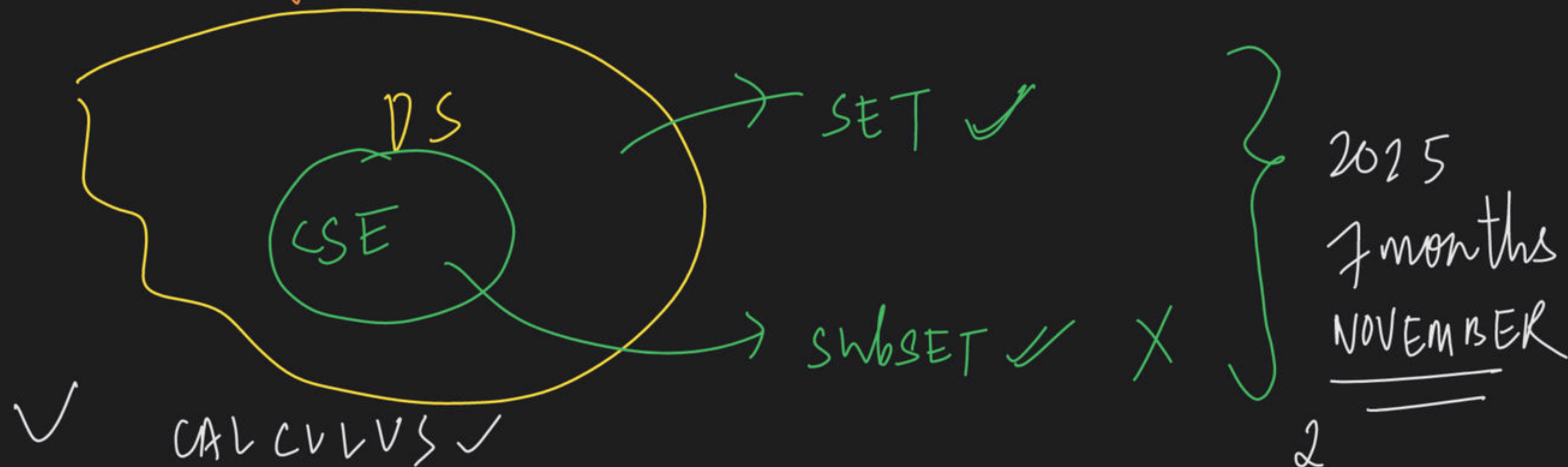
✓ Regular class Attend + DisciplinE

✓ Question bank → 2000 question class
2000 question DPP + quizzes
+ Question bank

✓ Telegram → Rahul Sir Unacademy.

Lecture Duration — 8 to 10 AM $\Big\}$ more
                                Then
$(1;30 \text{ Hrs})$ max $\Big\}$ sufficient

✓ ONLY for CSE

✓✓ Regression — 1 Hrs — <u>Remove</u>

DS
→ SET ✓

CSE
→ SUBSET ✓ X

$\Big\}$ 2025
7 months
NOVEMBER
2

✓
CALCULUS ✓

✓ ONLY 2 subjects

✓ (Revision) per day any time 2 hrs.

special class — CALCULUS

+ DATA Science — 25 marks ⎤
  CSE — 06-08 marks ⎦ +15 marks — dATA
                                  Science
                                  both

EM + DM = 08 + 06-08

GATE $\Rightarrow$ National level exam

GATE SCORE

IIT   foreign Uni   central

colleges $\rightarrow$

✓ TIER-2 / 3

✓

NOTES / ✓

✓

GAORAO

✓ Rahul Sir Unacademy

✓ DPP + question + Discussion

DATA Science $\longrightarrow$ 40 Days

25 marks — DONE

Maths

✓ July End $\Rightarrow$
Maths + DM

✓DA $\longrightarrow$ Data Science — October +NOVEMBER

✓ copy ≡
✓ prob + faith + patience + both ✓ } regular
                                        Monday

Monday — Pumulation/combination of

Prob.

→ owly 10th Pass

START