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BATCH



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Rank Booster Batch for GATE 2021 (ECE) - Batch D

Started on Nov 30

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ENGLISH HINDI

Target ESE Prelims 2021 (Electrical) - Batch C

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Vishal Soni and 1 more

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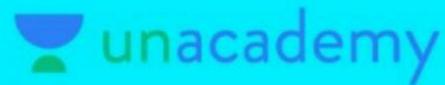
ENGLISH HINDI

Rank Booster Batch for GATE 2021 (Electrical) - Batch B

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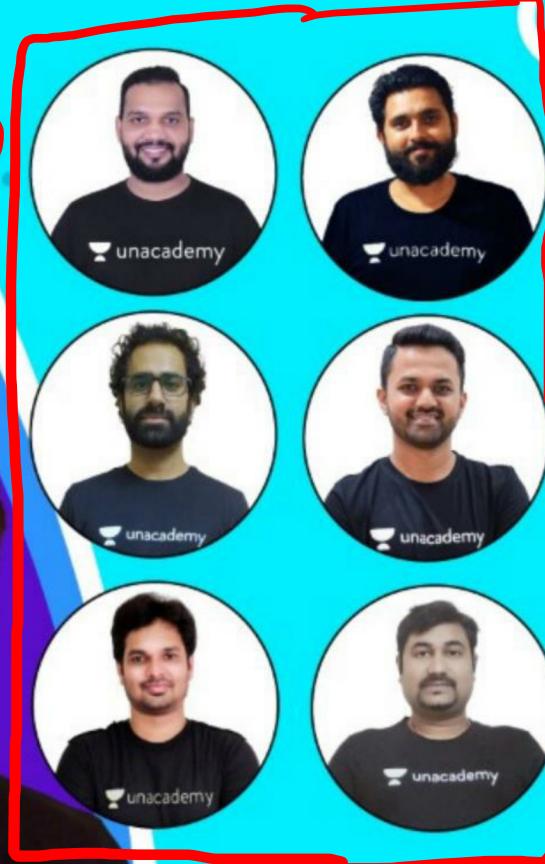
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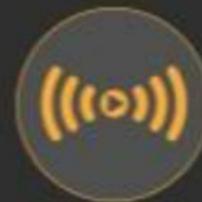
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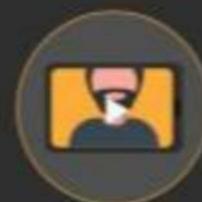
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- Venn Diagram
- Syllogism
- Series
- Analogy
- Puzzle



- Coding & Decoding
- Distance & Direction
- Blood Relation
- Seating Arrangements
- Clock & Calendar

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Faculty	Subject	Date (from)	Date (to)	Time
Ankit Goyal	Physics	25th Jan	18th Feb	12:00 PM
Pallav Gaur	Physics	25th Jan	13th Feb	2:30 PM
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Saket Verma	Physics	15th Feb	3rd March	2:30 PM

✓ Analytical Aptitude

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- Time, Speed & Distance
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- Allegation & Mixture
- Powers, exponents and logarithms
- Algebra
- Permutation & Combination
- Probability
- Data Interpretation
- Mensuration and geometry

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- Visual Comparison - Two Dimensional
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- Paper folding and Cutting

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Today's Class Agenda



Basic concept of **Mixture and Alligation**



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✓ Mixture

When two or more elements are mixed in a certain ration, it is called mixture

✓ Alligation

The rule which enables us to find the ratio in which two or more elements are mixed together is called allegation.

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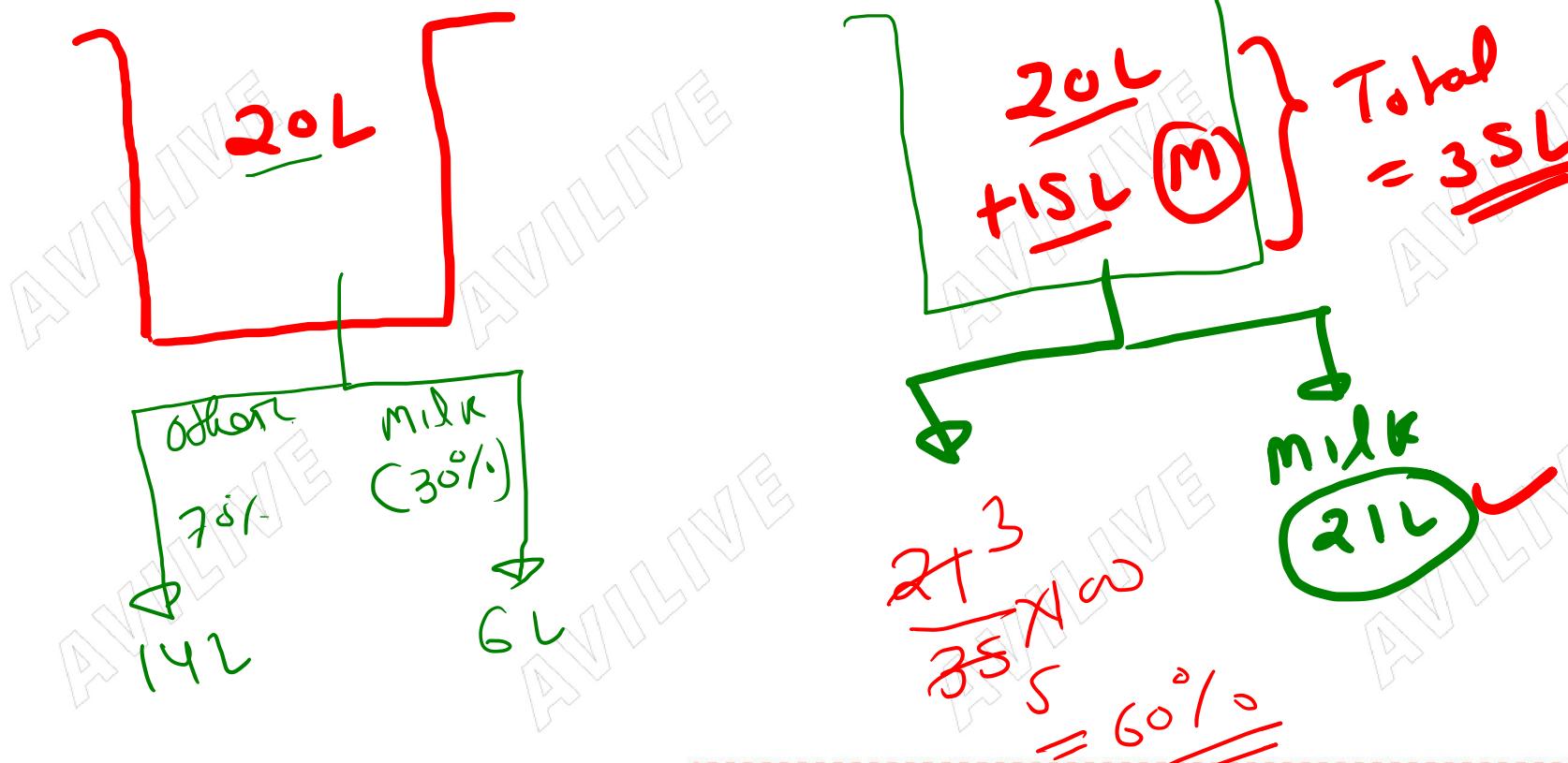
1) 20 liter of mixture have 30% of milk if we add 15 liter of milk what will be the new percentage of milk?

A) 45%

B) 40 %

C) 60%

D) NOTA



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2) In a mixture of 50 liter, milk is 20%. What amount of milk must be added so that the percentage of milk becomes 50%.

A) 20

B) 30

C) 40

D) NOTA

50 L \rightarrow Milk (20%)
10 L

Other \rightarrow Milk
40 L \rightarrow 10 L

\downarrow $+30 L$ \downarrow $+x L$
 $(40 L)$ \rightarrow 50% \rightarrow $(10 + x)L$ \rightarrow 50%

$$\begin{aligned} 10 + x &= 40 \\ x &= 30 \text{ L} \end{aligned}$$

3) In 15 liter of a mixture ratio of acid and water is 3:2. What quantity of water must be added so that the ratio becomes 2 : 3?

15 L

$$\begin{array}{l} A : w \\ 3 : 2 \\ 6 \text{ L} : 4 \text{ L} \\ (3+2) \text{ unit} \rightarrow 15 \\ \text{5 unit} \rightarrow 15 \\ 1 \text{ unit} \rightarrow 3 \end{array}$$

$$\begin{array}{l} A \quad w \\ 9 \text{ L} \quad 6 \text{ L} \\ \downarrow \quad \downarrow \\ 9 \text{ L} \quad (6+x) \text{ L} \\ +x \text{ (7.5 L)} \end{array}$$

$$\frac{9}{6+x} = \frac{2}{3} \Rightarrow 27 = 12 + 2x$$

$$x = 7.5 \text{ L}$$

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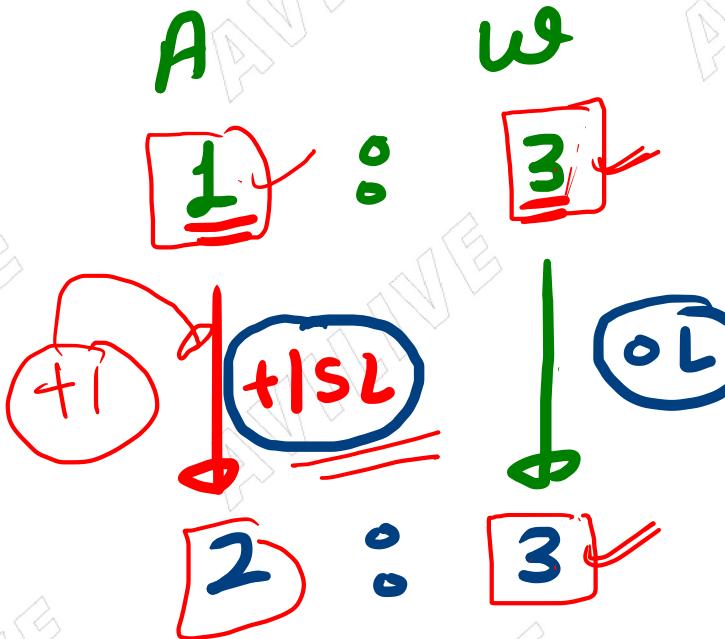
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4) In a mixture ratio of acid and water is 1:3. If we add 15 liter of acid ratio becomes 2:3 .

Find the initial quantity of mixture?

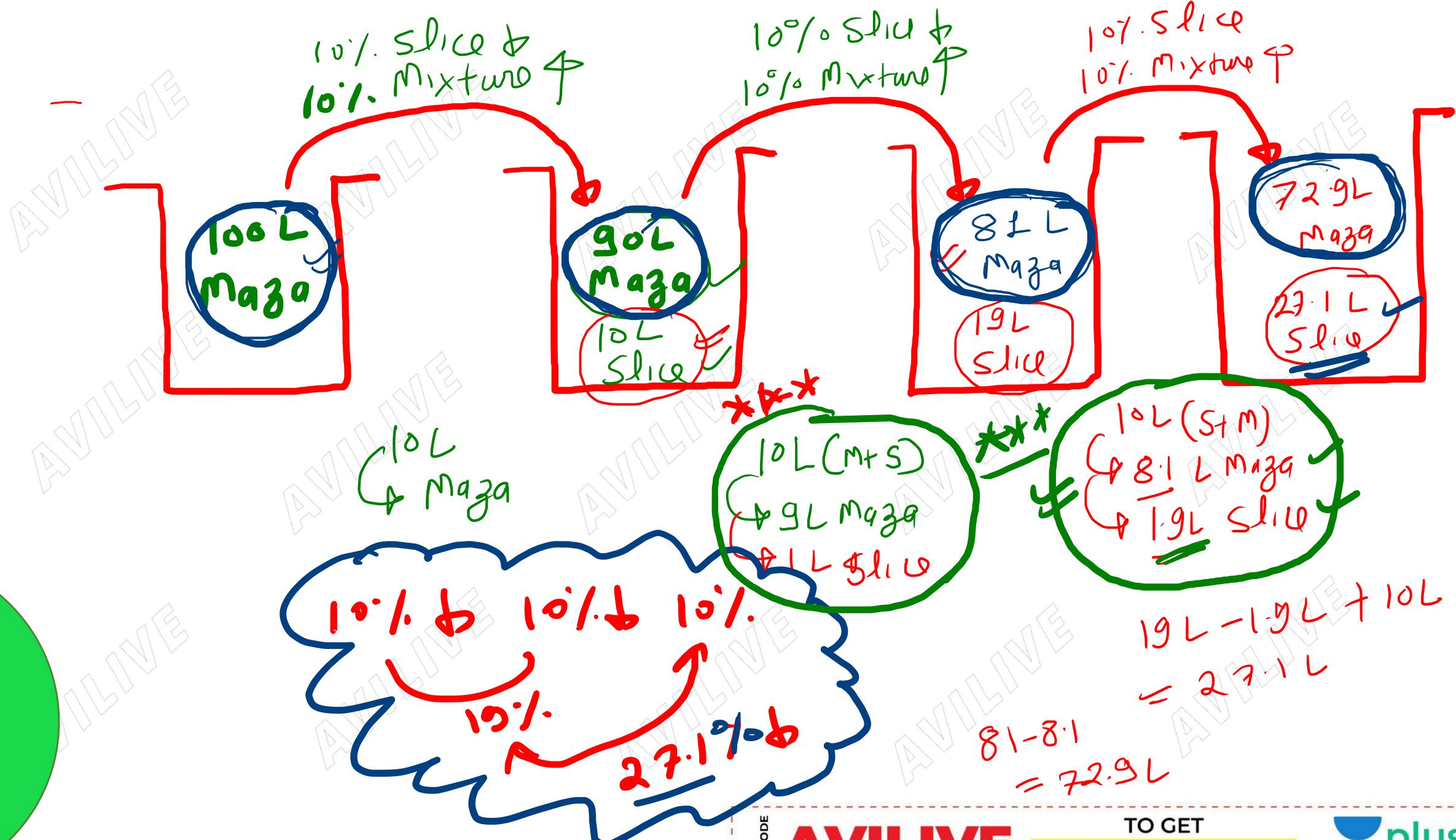
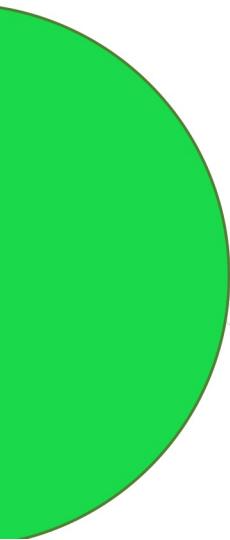
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1 unit + 15L

(1 + 3) Unit

21 unit + 60L



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5) There is a bottle of coke. 25% of it is replaced by Pepsi. Again 25% is replaced by Pepsi and finally another 25% is replaced by Pepsi. What is the approximate final percentage of coke in the bottle?

A) 56

B) 52

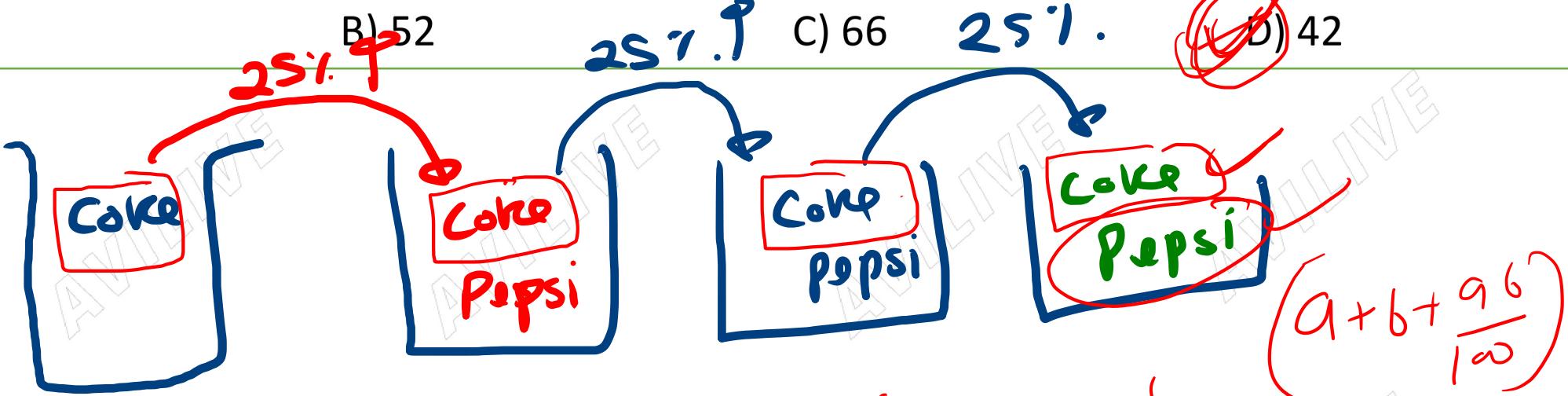
25%
C)

66

25%
D)

42

$$100 - 58 = 42\%$$



$$25\% \quad 25\% \quad 25\%$$

$$\frac{-25 - 25 + (25)(-25)}{100} \\ -50 + 6.25 = -43.75$$

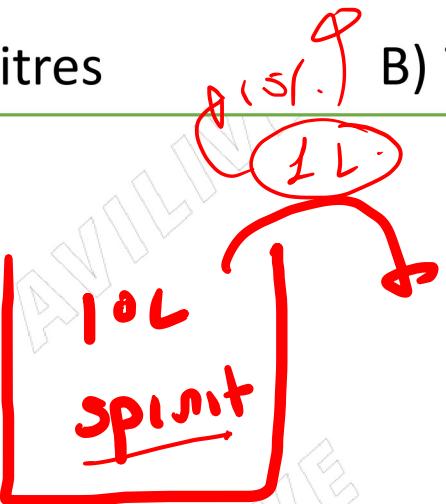
$$-44 - 25 + \frac{25 \times 44}{100} \\ -69 + 11 \\ -58$$



6) A container originally contains 10 litres of pure spirit. From this container 1 litre of spirit is replaced with 1 litre of water. Subsequently, 1 litre of the mixture is again replaced with 1 litre of water and this process is repeated one more time. How much spirit is now left in the container?

[GATE 2011, 2 MARK]

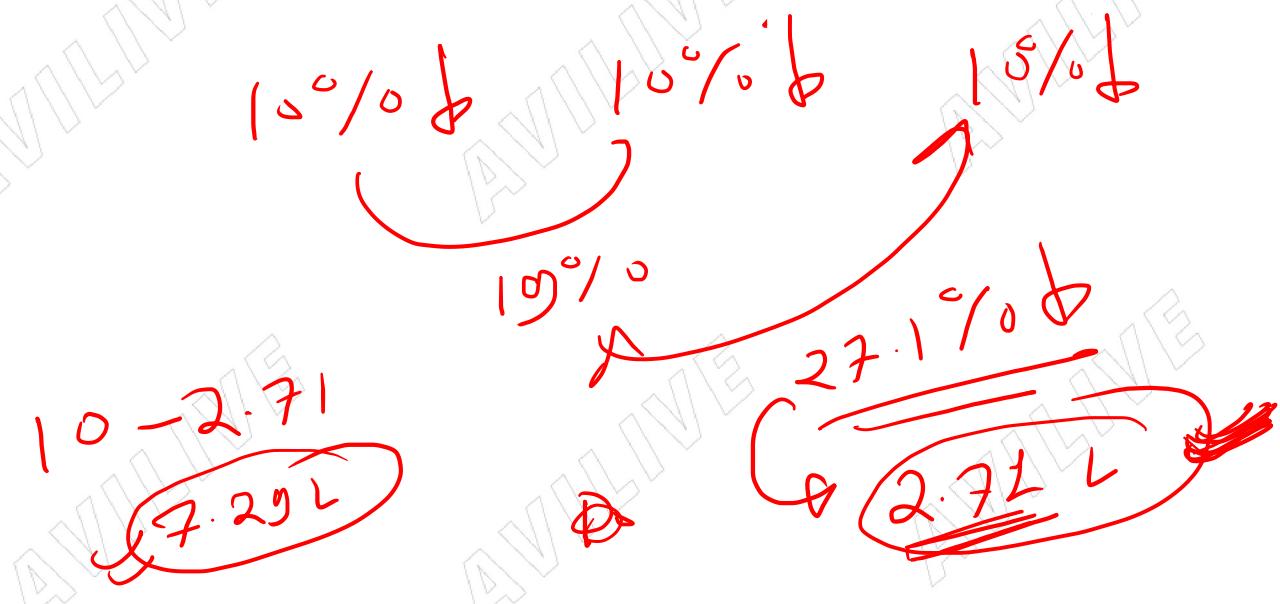
A) 7.58 litres



B) 7.84 litres

C) 7 litres

D) 7.29 litres



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Pattern

Total 10 Questions

1) Five Question
Each question 1 mark

2) Five Question
Each question 2 mark

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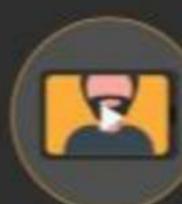
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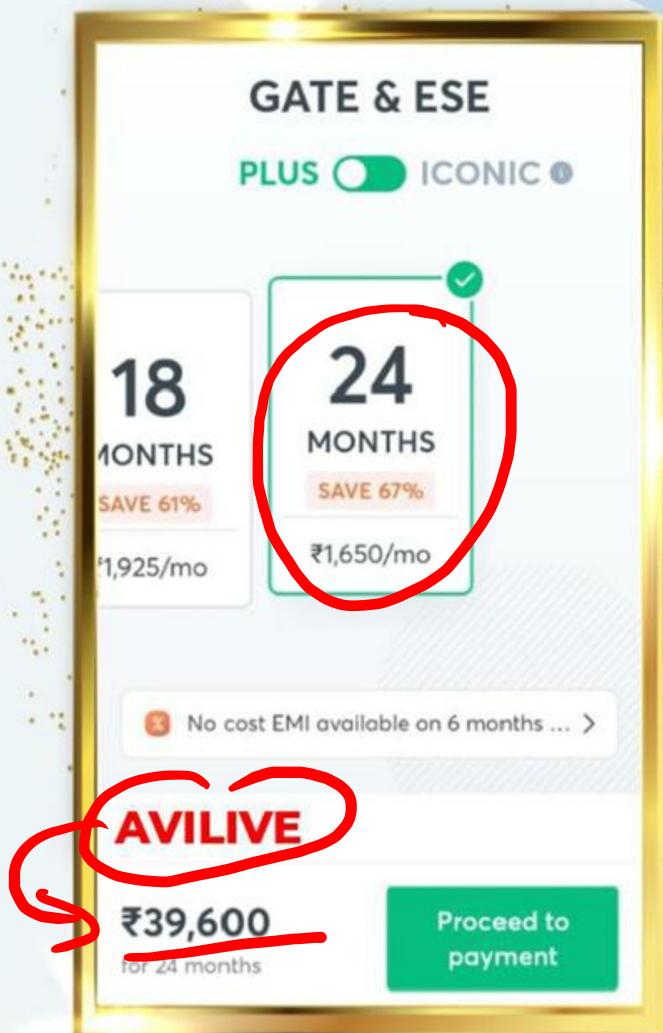
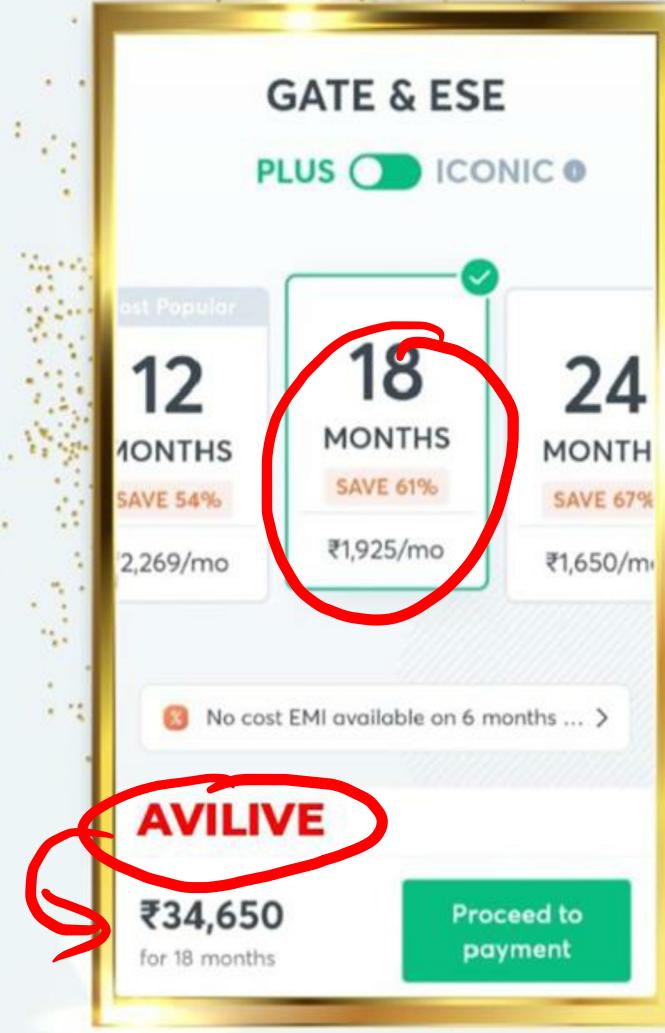
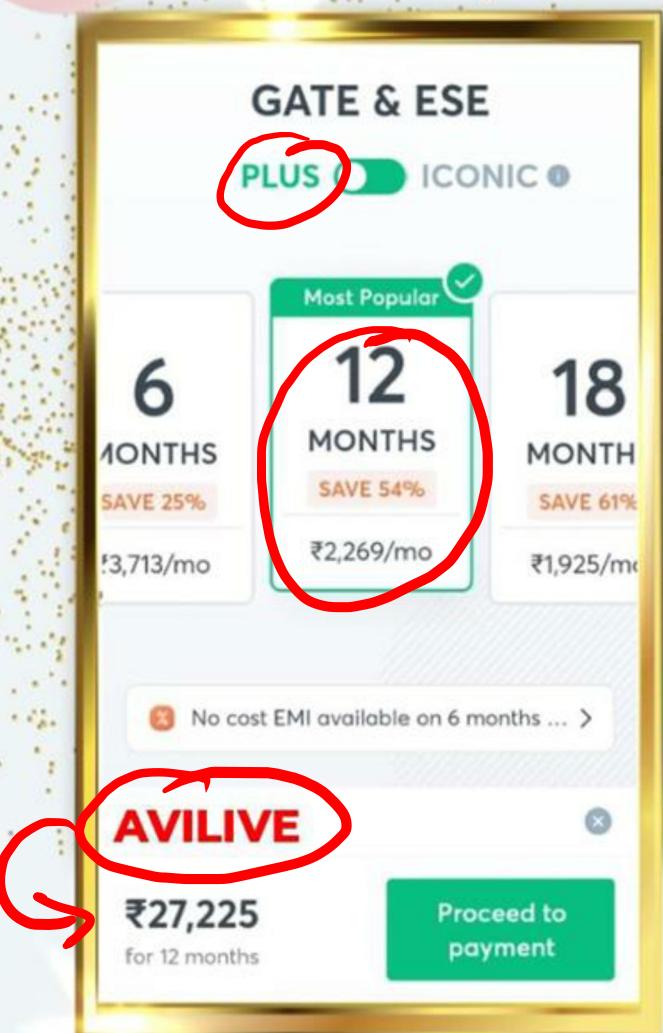
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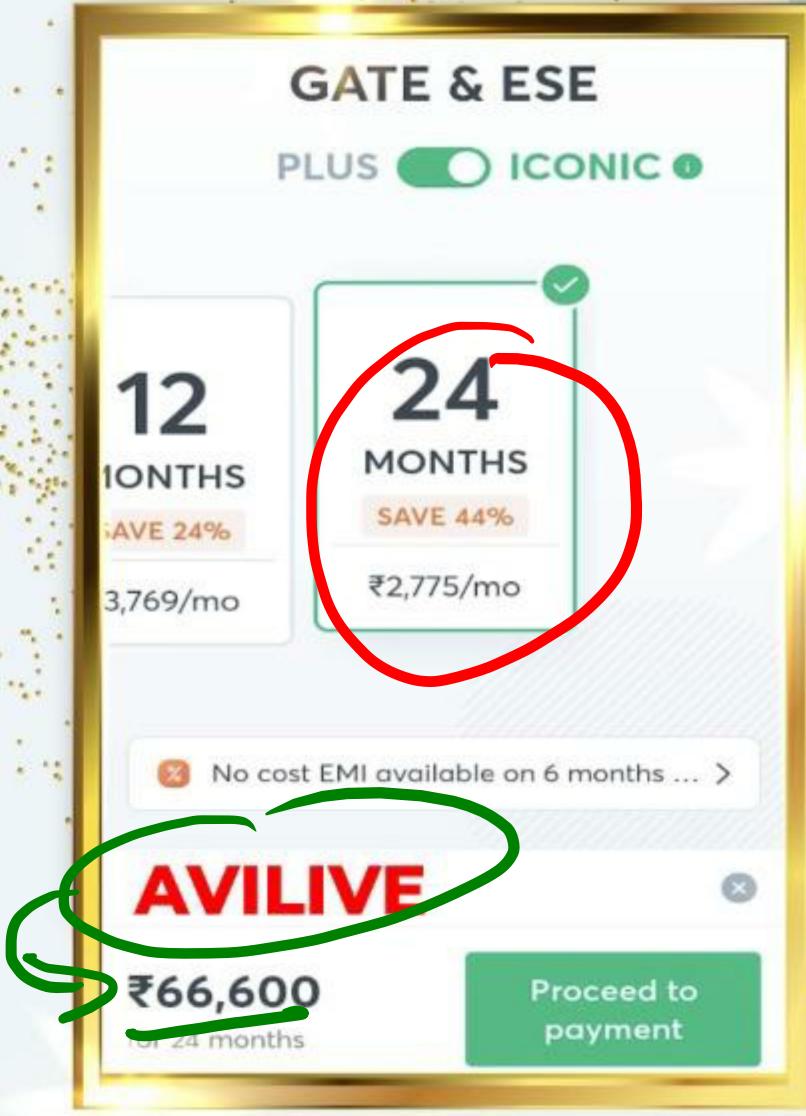
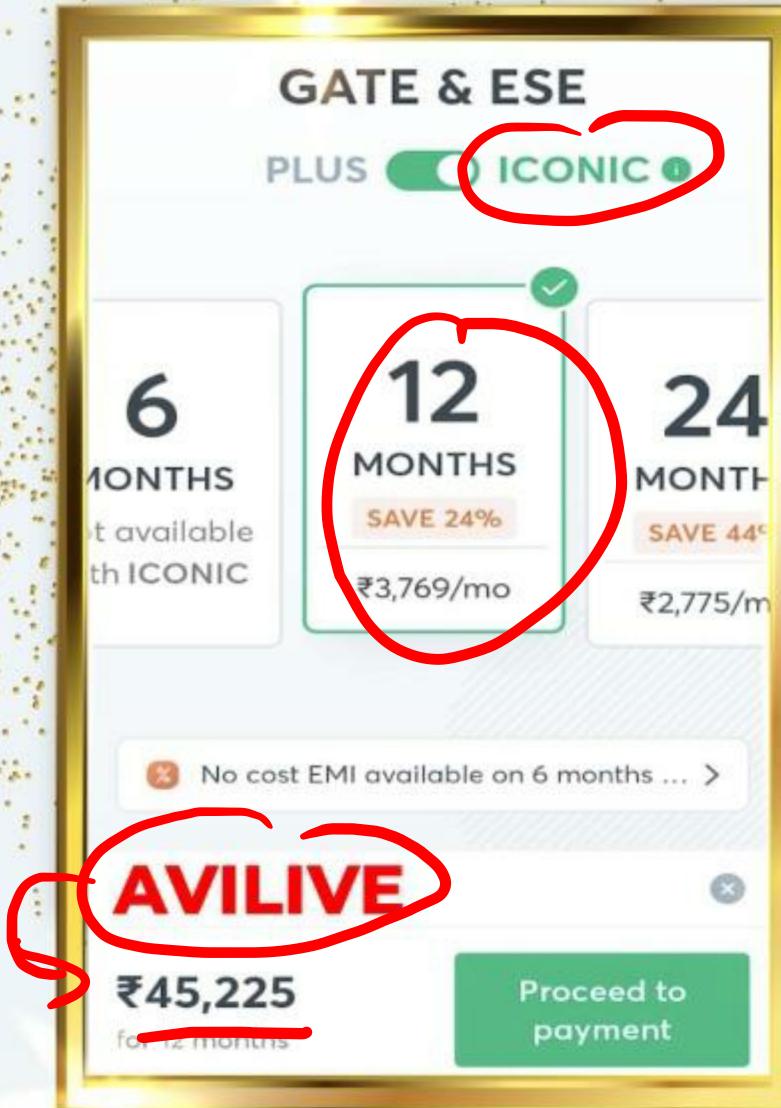
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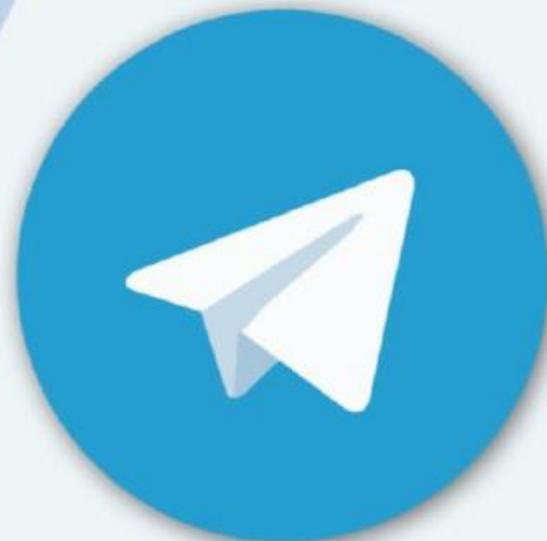
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- ★ Cracked GATE Exam Multiple time
- 📍 Lives in Durg, Chhattisgarh, India
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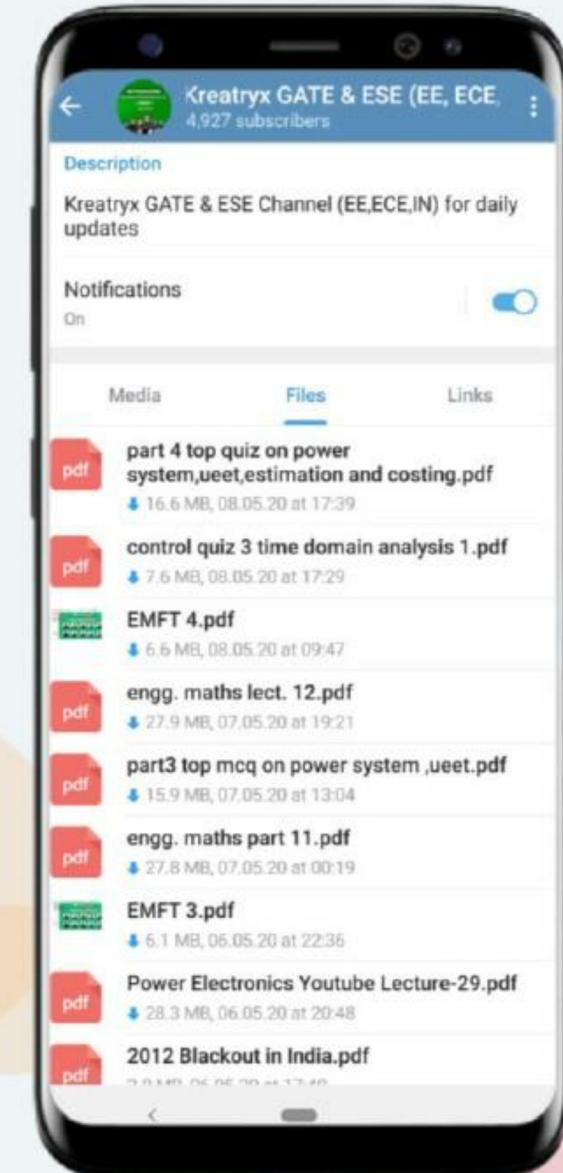
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