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

Started on Nov 30

Siddharth Sabharwal and 1 more

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Target ESE Prelims 2021 (Electrical) - Batch C

Started on Nov 20

Vishal Soni and 1 more

BATCH



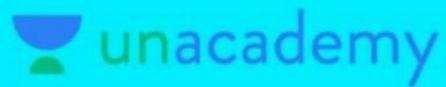
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Rank Booster Batch for GATE 2021 (Electrical) - Batch B

Started on Nov 16

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& Ascend for GATE
2023 EE & ECE**

Ankit Goyal Sir

 **Network Analysis**

25th JAN | 8:30AM - 10:30AM

Vishal Soni Sir

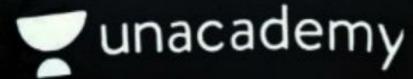
 **Signal and Systems**

18th JAN | 8:30PM - 10:30PM

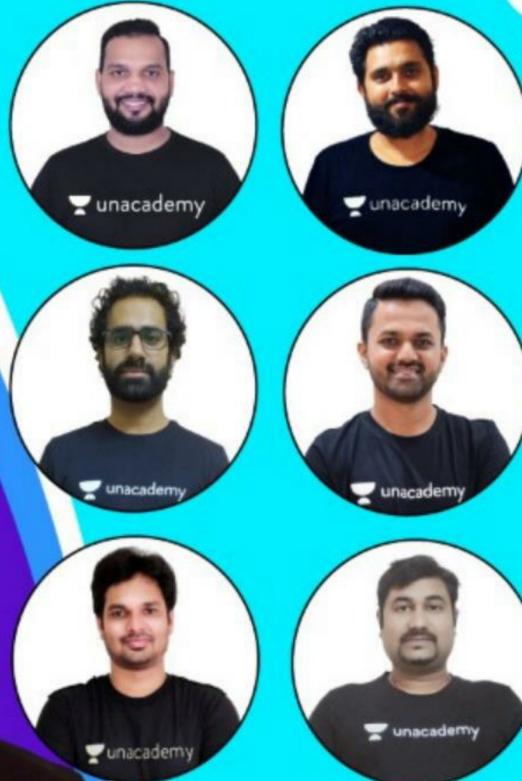
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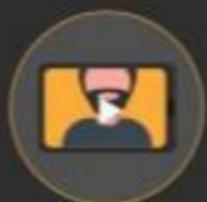
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- Group Rotation - Two Dimensional
- Combining Two Dimensional Shapes

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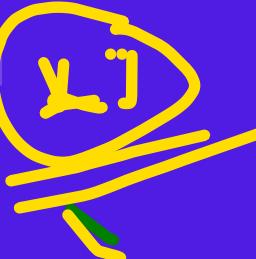
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Verbal
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Spatial
Aptitude



- 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
Avinash Singh	Quantitative + Reasoning + Maths	25th Jan	24th April	7:30 PM
Vishal Soni	Maths & Physics	1st Feb	24th April	5:00 PM
Saket Verma	Physics	15th Feb	3rd March	2:30 PM

Analytical Aptitude

- Venn Diagram
- Syllogism
- Series
- Coding & Decoding
- Clock & Calendar
- Distance & Direction
- Blood Relation
- Seating Arrangements
- Puzzle

Quantitative Aptitude

- Time & Work
- Pipes & Cisterns
- Ratio & Proportion
- Number System
- Sequence & Series
- Average
- Time, Speed & Distance
- Percentage
- Profit, Loss & Discount
- Allegation & Mixture
- Powers, exponents and logarithms
- Algebra
- Permutation & Combination
- Probability
- Data Interpretation
- Mensuration and geometry

Spatial Aptitude

- Shape Matching - Two Dimensional
- Visual Comparison – Two Dimensional
- Group Rotation – Two Dimensional
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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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Alligation

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1) In what proportion must rice that costs ₹20/kg be mixed with rice that costs ₹25/kg so that the mixture is worth ₹22/kg?

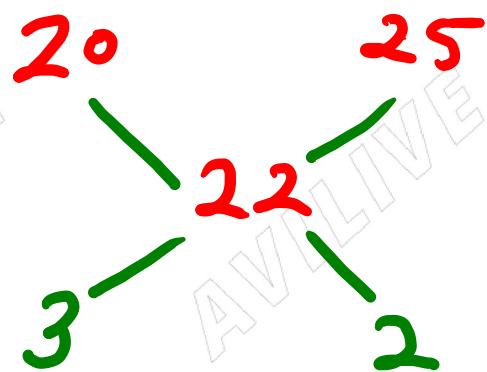
[ONGC 2014]

A) 1:3

B) 3:1

C) 2:3

D) 3:2



$$\frac{R_{20}}{R_{25}} = \frac{3}{2}$$

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2) In two alloys, the ratio of Zinc and Tin are 2:3 and 3:2 respectively. In what ratio must the two alloys be mixed so as to form a new alloy with Zinc and tin in ratio equal to 9:11?

A) 3:1

B) 1:3

C) 2:3

D) 3

$$\left(\frac{Z}{T}\right)_1 = \frac{2}{3}$$

$$\left(\frac{Z}{T}\right)_2 = \frac{3}{2}$$

$$\left(\frac{Z}{T}\right)_3 = \frac{9}{11}$$

Diagram showing the mixing of two alloys:

- Alloy 1 (Z:T = 2:3) has 5kg of Zinc and 7.5kg of Tin.
- Alloy 2 (Z:T = 3:2) has 20kg of Zinc and 11kg of Tin.
- The final mixture (Z:T = 9:11) has 20kg of Zinc and 11kg of Tin.

$$\frac{2}{5} \quad \frac{3}{5}$$

$$\frac{3}{20} \quad \frac{9}{20}$$

$$\frac{1}{20}$$

Diagram showing the calculation of the ratio:

- Alloy 1: $\frac{2}{5}$
- Alloy 2: $\frac{3}{5}$
- Final mixture: $\frac{9}{20}$
- Ratio of Alloys: $\frac{3}{20} : \frac{1}{20}$
- Final ratio: $3:1$

3) Vessel A contains milk and water in the ratio 4:5. Vessel B contains milk and water in the proportion 5:1. In what proportion should quantities be taken from A & B to form a mixture in which milk and water are in the ratio 5:4?

A) 2:5

B) 3:2

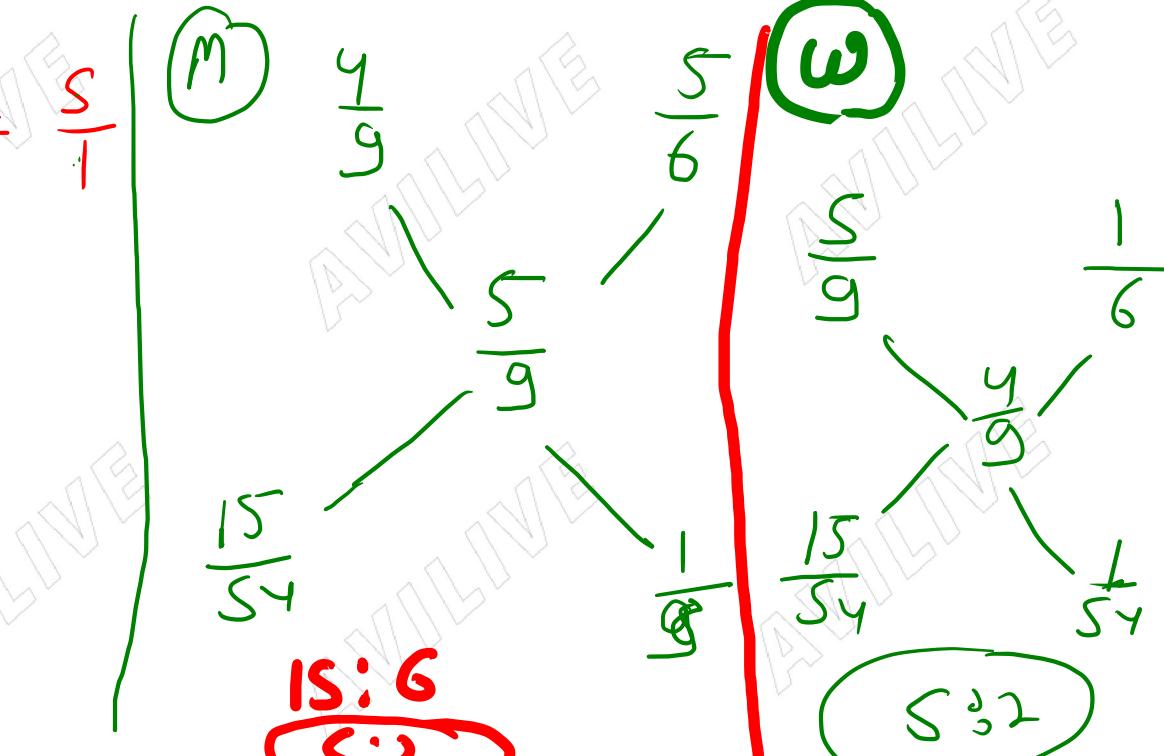
C) 2:3

D) 5:2

$$\left(\frac{M}{W}\right)_1 = \frac{4}{5}$$

$$\left(\frac{M}{W}\right)_2 = \frac{5}{1}$$

$$\left(\frac{M}{W}\right)_3 = \frac{5}{4}$$



Pattern

Total 10 Questions

1) Five Question
Each question 1 mark

2) Five Question
Each question 2 mark

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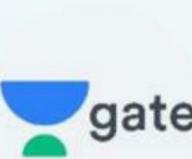
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Educator highlights

- ★ Worked at GATE ACADEMY
- ★ Cracked GATE Exam Multiple time
- 📍 Lives in Durg, Chhattisgarh, India
- ⌚ Unacademy Educator since 29th September, 2020
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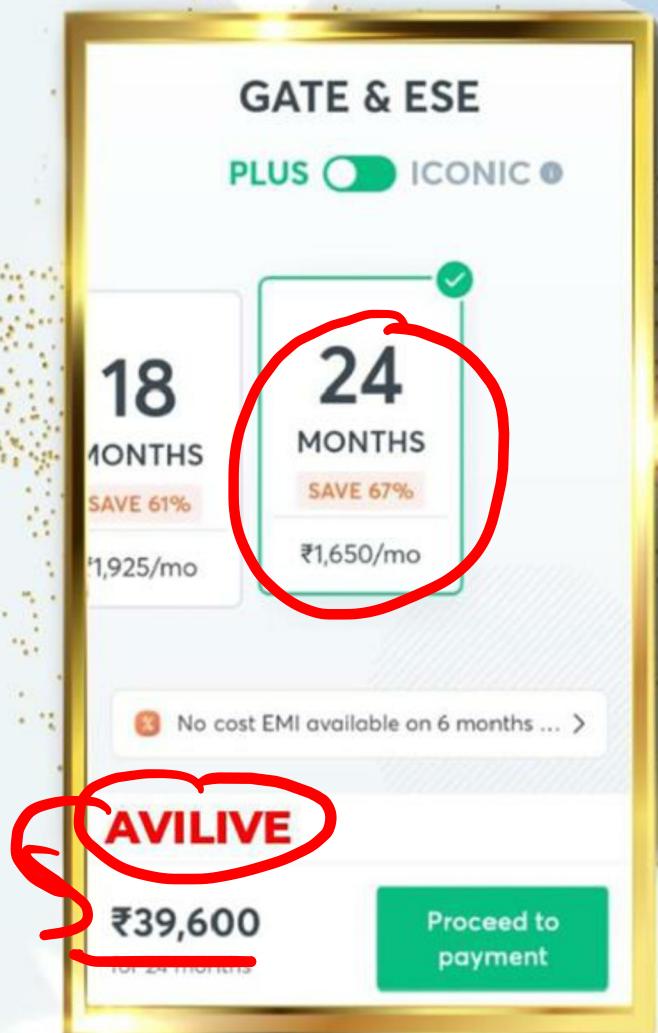
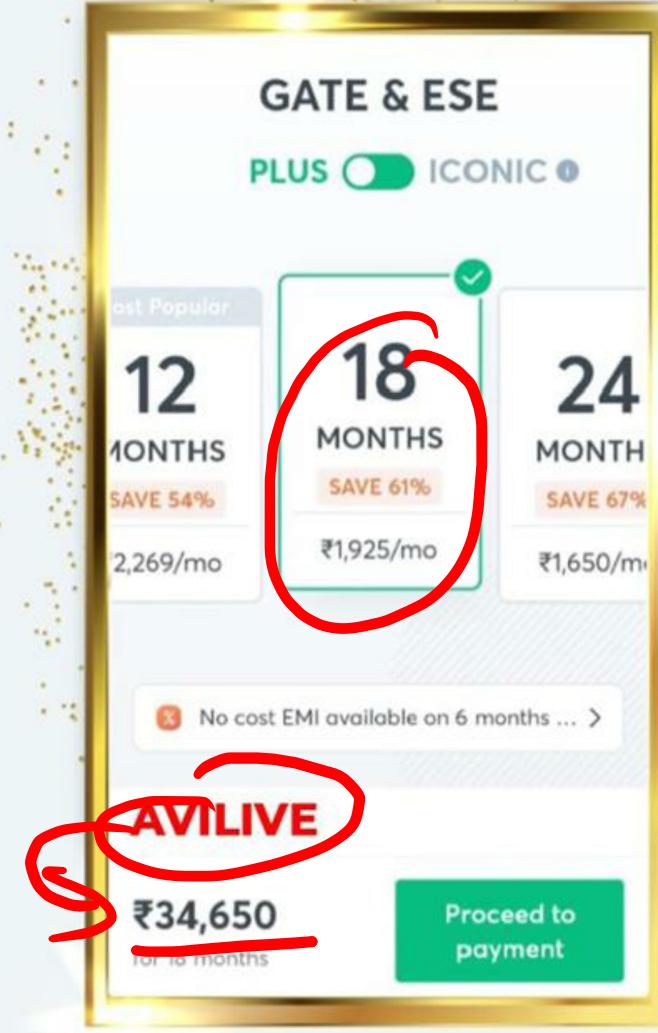
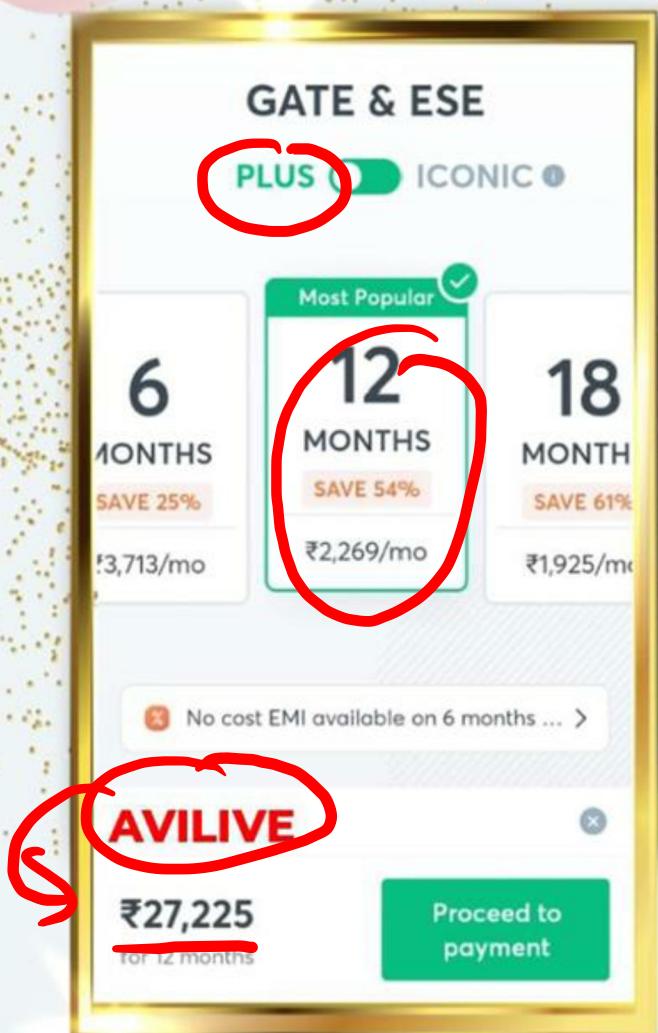
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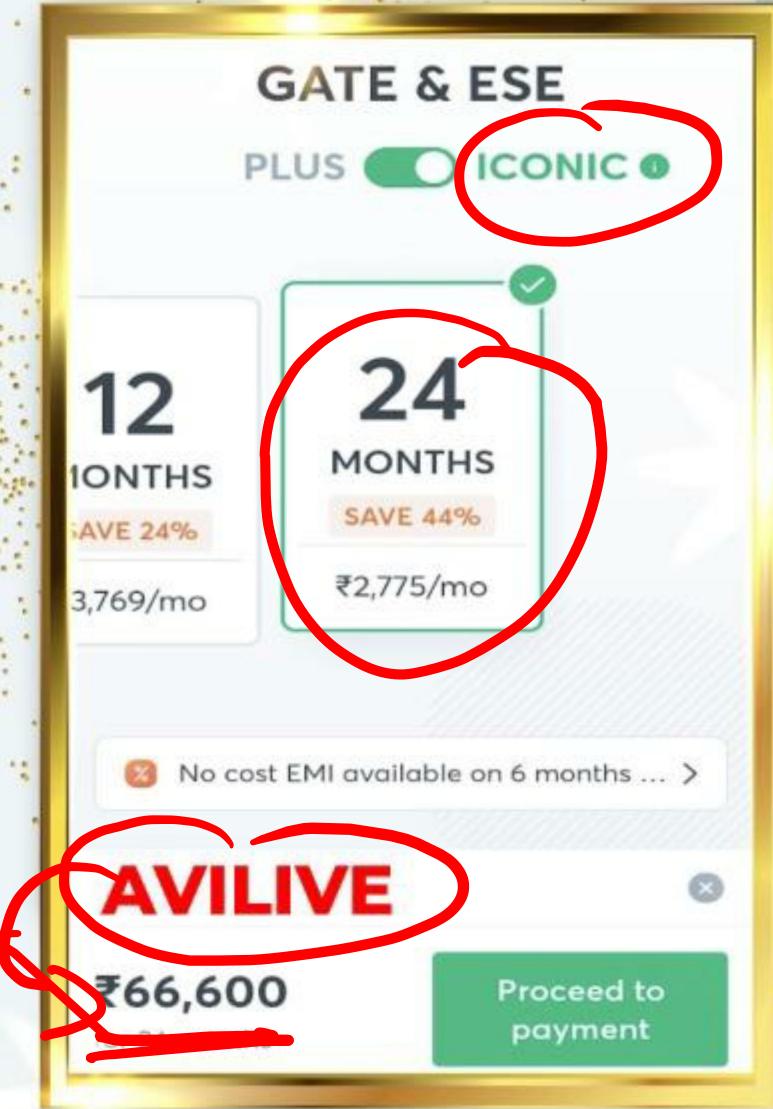
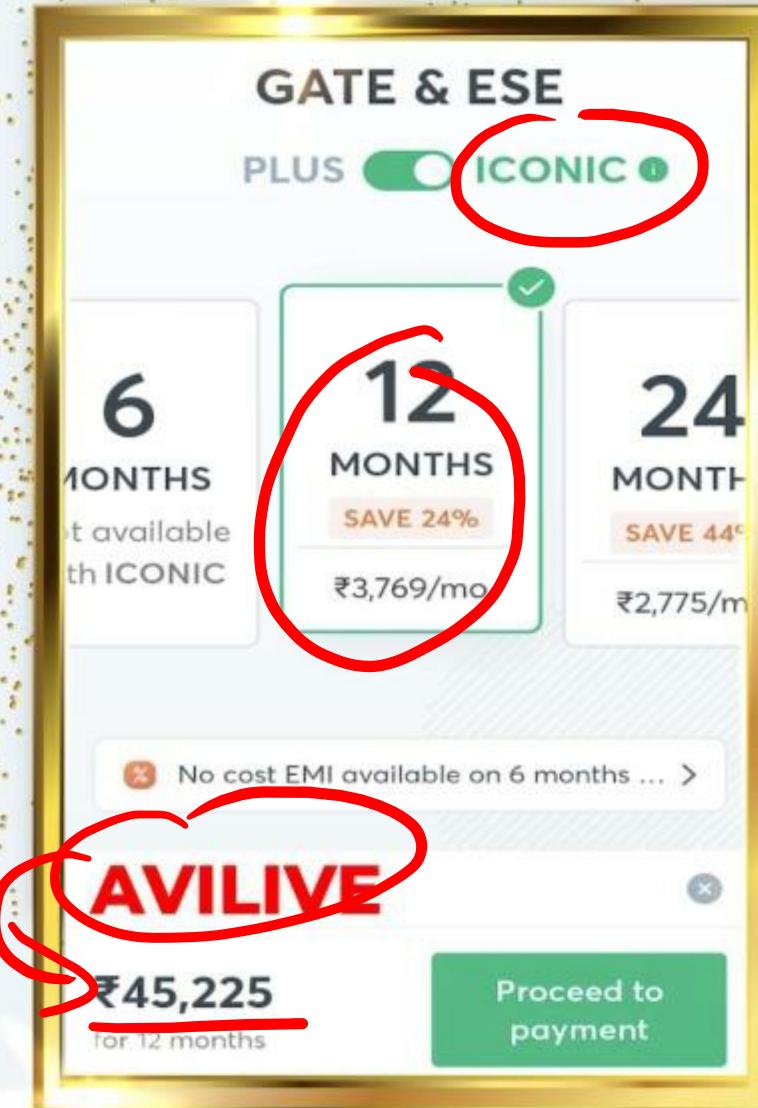
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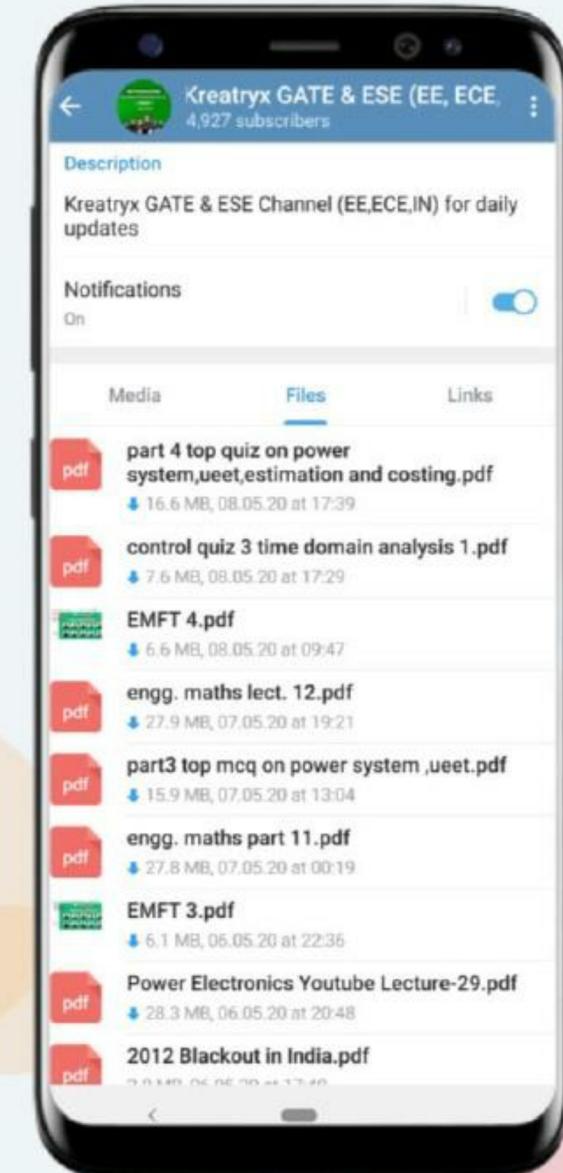








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