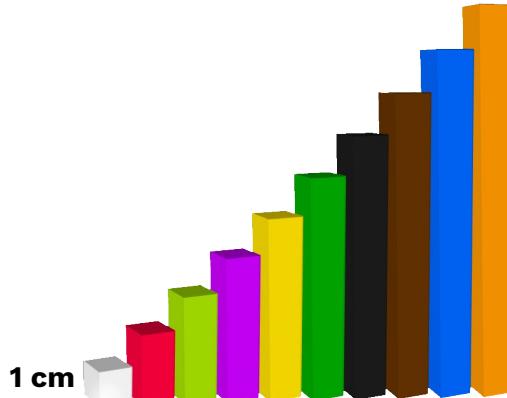


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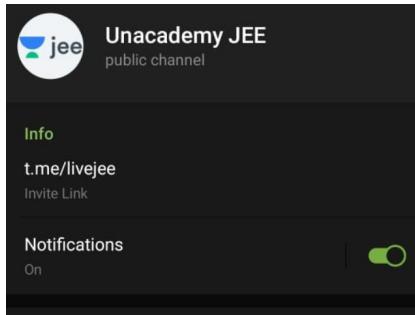
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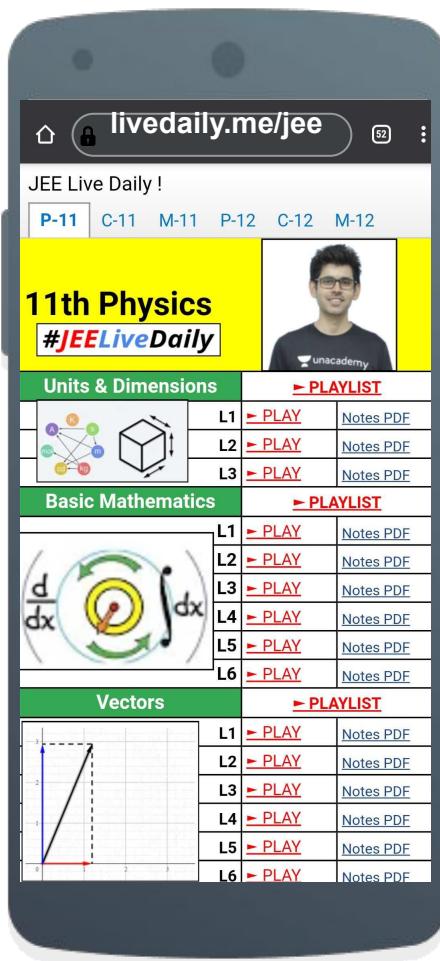
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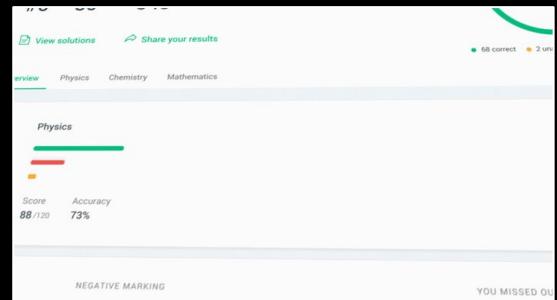
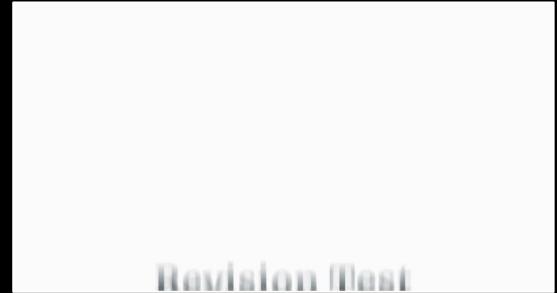
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The collage consists of three panels:

- Top Left:** A screenshot of a physics question about projectile motion. It shows a shell fired from point O at 60 degrees with a speed of 40 m/s, hitting point A. Below is a video feed of a teacher.
- Top Right:** A screenshot of a physics lesson on "Self Inductance". It shows a circular loop with current I flowing clockwise. Text explains that emf is induced because of the change in magnetic flux through the loop. A formula $\epsilon = -L \frac{di}{dt}$ is shown.
- Bottom:** A screenshot of a physics quiz. It shows a diagram of a rectangular loop with vertices labeled P_{ext}, P_{int}, Q_{ext}, and Q_{int}. A handwritten note says "P_{ext} = 4". Below the diagram is a text box: "You can only comment during a live class."

+ LIVE Class Environment

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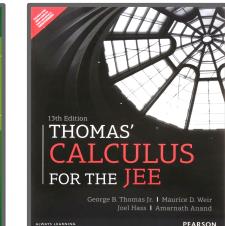
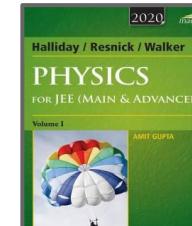
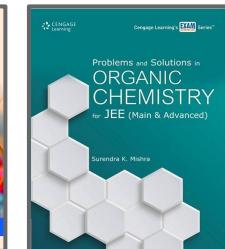
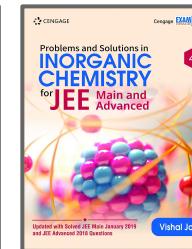
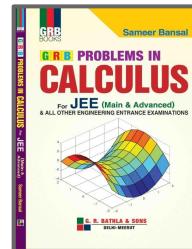
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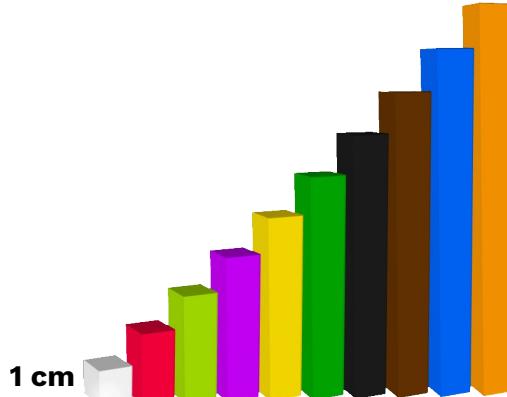
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Sequences & Series

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Let S_k , $k = 1, 2, \dots, 100$, denote the sum of the infinite geometric series whose first term is $\frac{k-1}{k!}$ and the common

ratio is $\frac{1}{k}$. Then the value of $\frac{100^2}{100!} + \sum_{k=1}^{100} |(k^2 - 3k + 1)S_k|$

is

JEE Adv. 2010



Let $a_1, a_2, a_3, \dots, a_{11}$ be real numbers satisfying

$a_1 = 15$, $27 - 2a_2 > 0$ and $a_k = 2a_{k-1} - a_{k-2}$ for $k = 3, 4, \dots, 11$.

if $\frac{a_1^2 + a_2^2 + \dots + a_{11}^2}{11} = 90$, then the value of

$\frac{a_1 + a_2 + \dots + a_{11}}{11}$ is equal to



A pack contains n cards numbered from 1 to n . Two consecutive numbered cards are removed from the pack and the sum of the numbers on the remaining cards is 1224. If the smaller of the numbers on the removed cards is k , then $k - 20 =$



Let X be the set consisting of the first 2018 terms of the arithmetic progression 1, 6, 11, ..., and Y be the set consisting of the first 2018 terms of the arithmetic progression 9, 16, 23, Then, the number of elements in the set $X \cup Y$ is ____.



Let $S_n = \sum_{k=1}^{4n} (-1)^{\frac{k(k+1)}{2}} k^2$. Then S_n can take value(s)

JEE Adv. 2013

- (a) 1056 (b) 1088 (c) 1120 (d) 1332



Passage:

Let V_r denote the sum of first r terms of an arithmetic progression (A.P.) whose first term is r and the common difference is $(2r - 1)$.

Let $T_r = V_{r+1} - V_r - 2$ and $Q_r = T_{r+1} - T_r$ for $r = 1, 2, \dots$

JEE Adv. 2007

Q-1. The sum $V_1 + V_2 + \dots + V_n$ is

- (a) $\frac{1}{12}n(n+1)(3n^2 - n + 1)$
- (b) $\frac{1}{12}n(n+1)(3n^2 + n + 2)$
- (c) $\frac{1}{2}n(2n^2 - n + 1)$
- (d) $\frac{1}{3}(2n^3 - 2n + 3)$



Passage:

Let V_r denote the sum of first r terms of an arithmetic progression (A.P.) whose first term is r and the common difference is $(2r - 1)$.

Let $T_r = V_{r+1} - V_r - 2$ and $Q_r = T_{r+1} - T_r$ for $r = 1, 2, \dots$

JEE Adv. 2007

Q-2. T_r is always

- (a) an odd number
- (b) an even number
- (c) a prime number
- (d) a composite number



Passage:

Let V_r denote the sum of first r terms of an arithmetic progression (A.P.) whose first term is r and the common difference is $(2r - 1)$.

Let $T_r = V_{r+1} - V_r - 2$ and $Q_r = T_{r+1} - T_r$ for $r = 1, 2, \dots$

Q-3. Which one of the following is a correct statement ?

- (a) Q_1, Q_2, Q_3, \dots are in A.P. with common difference 5
- (b) Q_1, Q_2, Q_3, \dots are in A.P. with common difference 6
- (c) Q_1, Q_2, Q_3, \dots are in A.P. with common difference 11
- (d) $Q_1 = Q_2 = Q_3 = \dots$



#JEELiveDaily Schedule



11th



Namo Sir | Physics

6:00 - 7:30 PM



Ashwani Sir | Chemistry

7:30 - 9:00 PM



Sameer Sir | Maths

9:00 - 10:30 PM

12th



Jayant Sir | Physics

1:30 - 3:00 PM



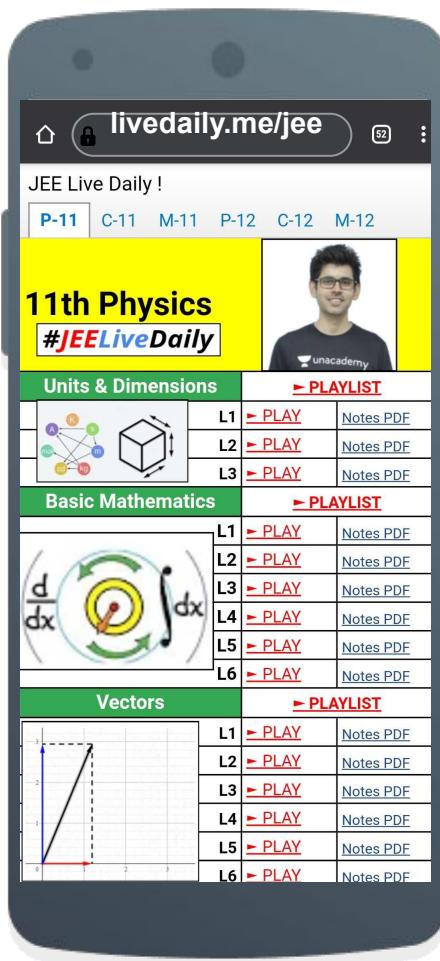
Anupam Sir | Chemistry

3:00 - 4:30 PM



Nishant Sir | Maths

4:30 - 6:00 PM



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The first screenshot shows a live class interface with a teacher video feed, student names (Brijesh, Sagar, Sonwab), and a question about projectile motion.

The second screenshot shows a physics exercise titled "Self Inductance". It includes a diagram of a circular loop with current I , text explaining self-induced emf, and the formula $e = -L \frac{di}{dt}$.

The third screenshot shows a handwritten note with a diagram of a rectangle and the text $P_{\text{ext}} = 4$.

LIVE Class Environment

- + **LIVE Polls & Leaderboard**
- + **LIVE Doubt Solving**
- + **LIVE Interaction**



The screenshot shows a test summary for Physics. It includes a bar chart for accuracy, a score of 88/120, and an accuracy of 73%. A note at the bottom says "NEGATIVE MARKING".

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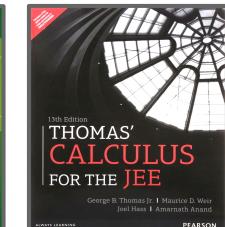
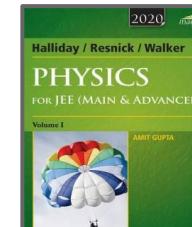
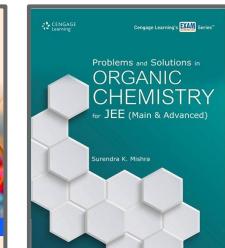
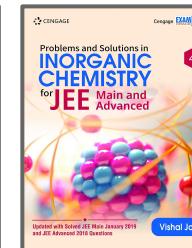
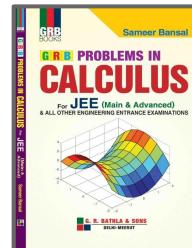
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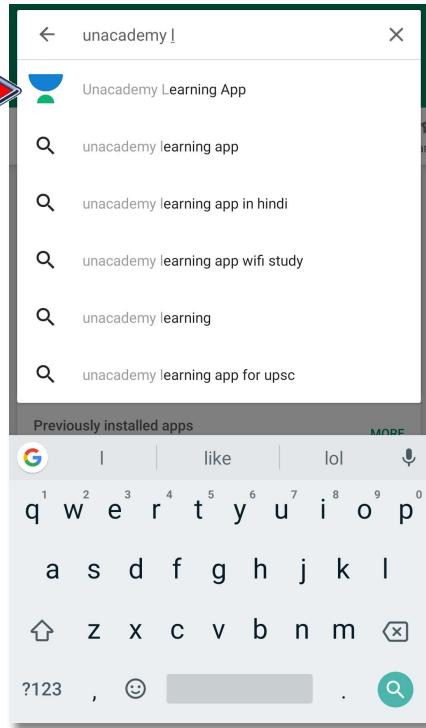


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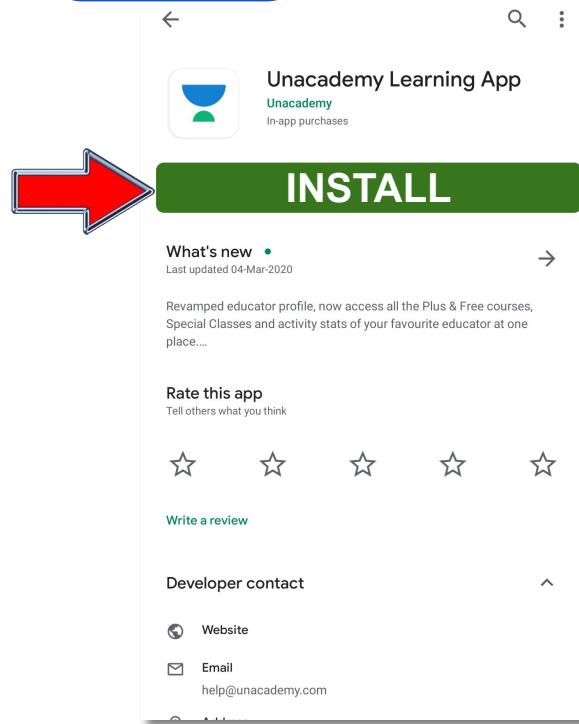


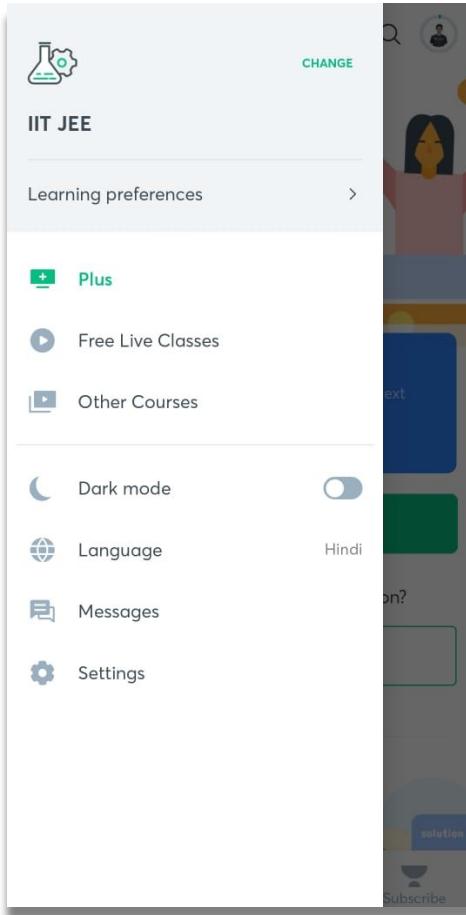
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