



State - Gujrat

SATHEE

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• SH. R M SHUKLA• SH. ASHVIN MODI• SH. LOKRAJ | 148 |



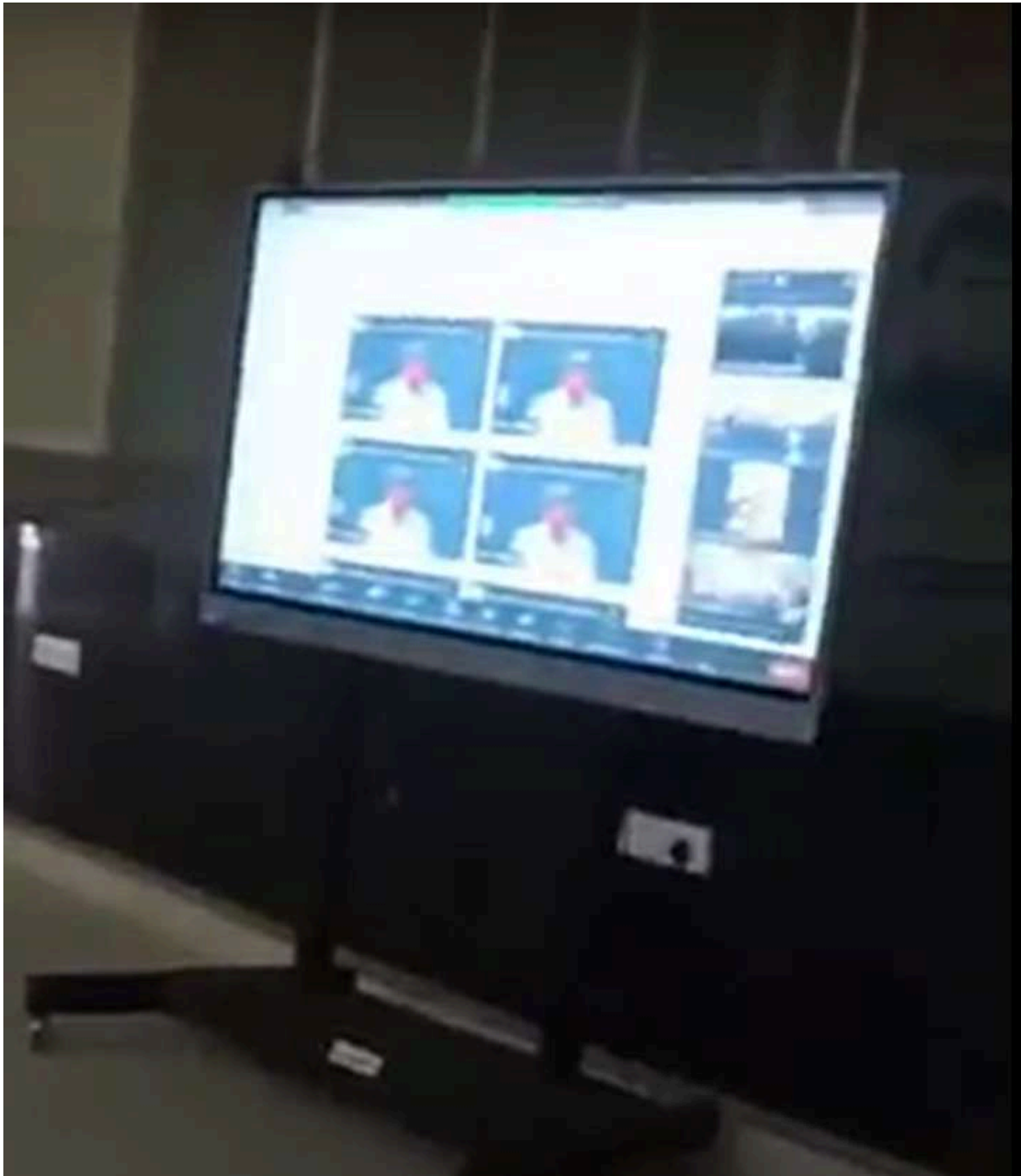
| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">Shailendra MakwanaDr Sangeeta Lamba | 21 |



| Teachers Name | Participated Students | Asked Question by |
|---|-----------------------|---|
| <ul style="list-style-type: none">Ragedhu S.P | 67 | <ul style="list-style-type: none">Mathew Dennis |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• SMT. SEEMA SUROLIA• SH. TEEKAM CHAND AGRAWAL• SH. PREMLATA JAIN | 145 |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Smt. Prerana Shukla• Ms. Bhakti Joshi• Smt. Nirmala | 46 |



School Name: K.V Ahmdabad cantt (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Ms. NEHA SARGIYA• SH. BALWANT, KUMAR• SH. BHUPESH NAGODA | 286 |



School Name: K.V Sabarmati (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• SH.KIRIT CHAUHAN• SH.R.B.MEENA• SH.RAVINDRA KUMAR KHORWAL | 142 |



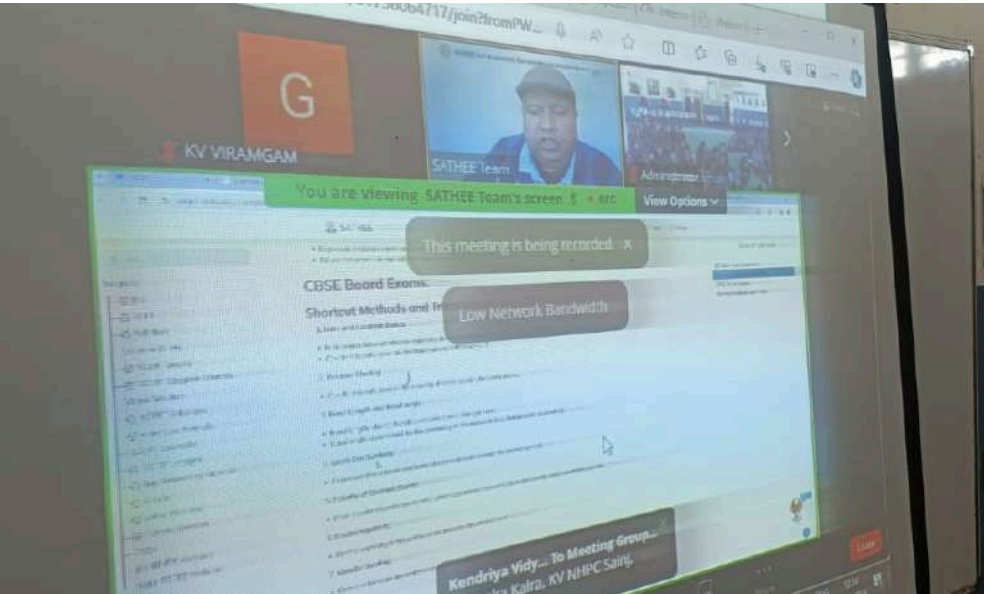
School Name: K.V AFS Wadsar (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• N.R.KOORIYA• BALBIR SINGH | 62 |



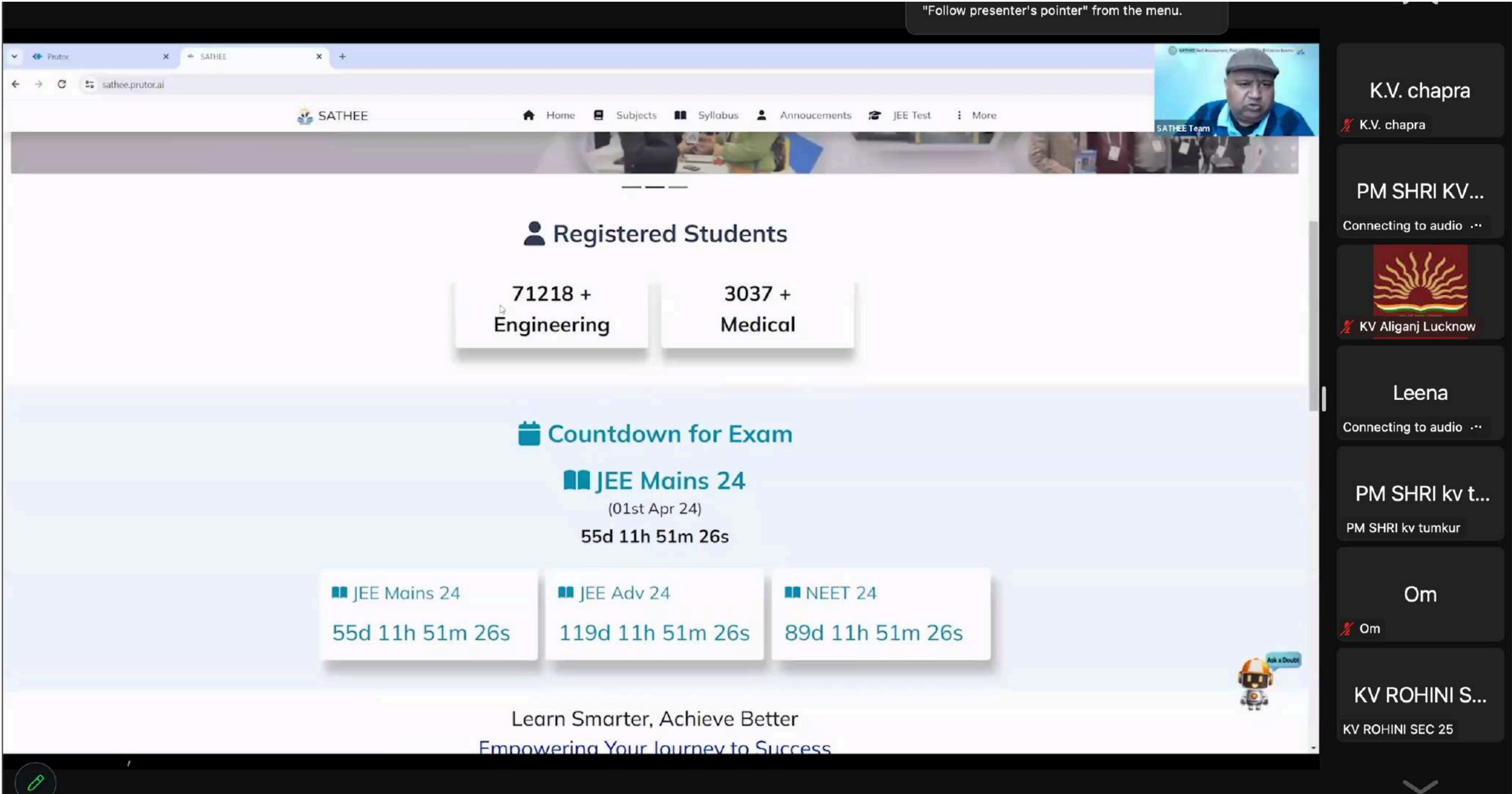
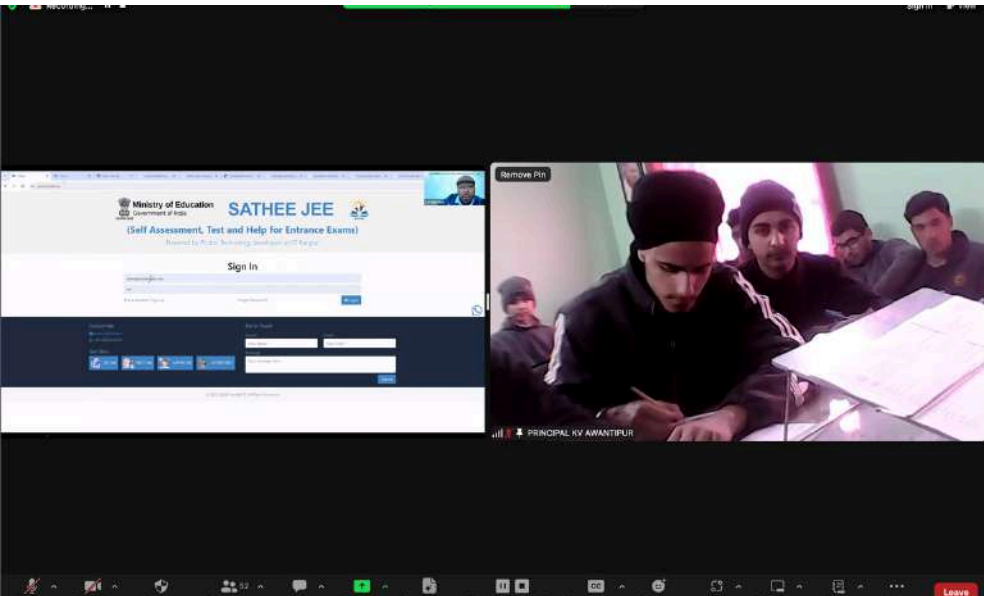
School Name: K.V Viramgam (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Sh Lakma Ram• Smt Sneh Lata• Smt Sonika Chaudhary | 58 |

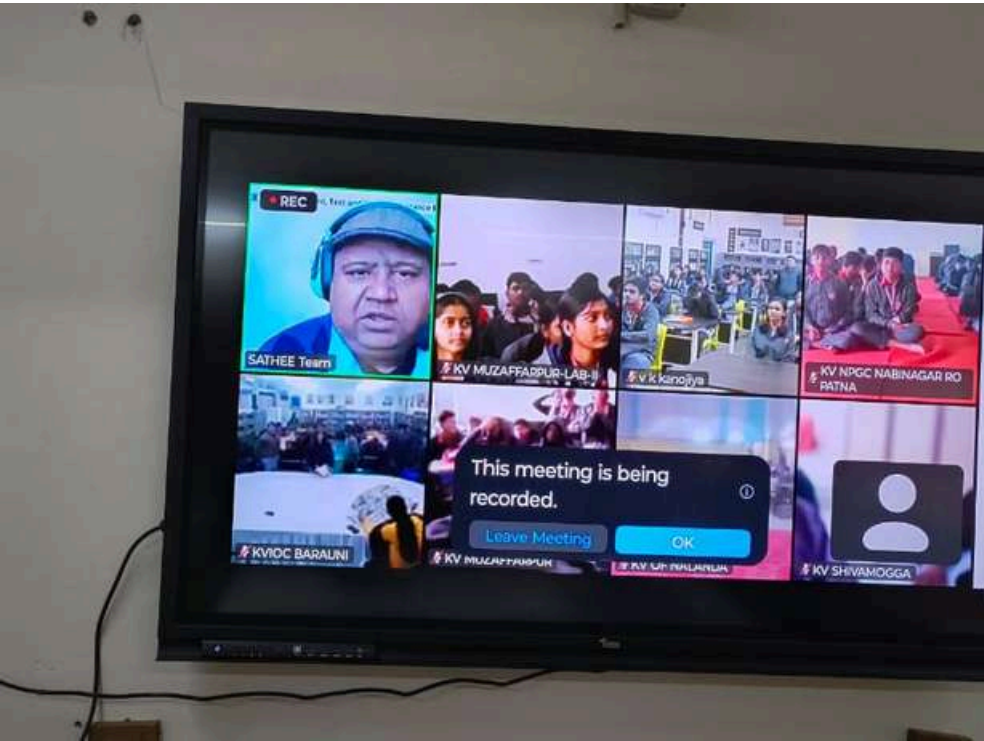


School Name: K.V Sec.30 G'nagar (Gujarat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <div><ul style="list-style-type: none">• SH SANDEEP KUMAR KOHLI• SMT UZMA KHAN,• SH AANAD KUMAR MNA</div> | 35 |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Shri Chaitanya Kumar Shukla• Shri Santosh Kumar Soni• Shri Mahendra Prasad Dabi | 83 |



| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Kapil Mahajan• Anju Kumari• Mayank Saini | 87 |



| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Pratibha Sharma• Pragati Sharma• Vanita Kapoor | 112 |

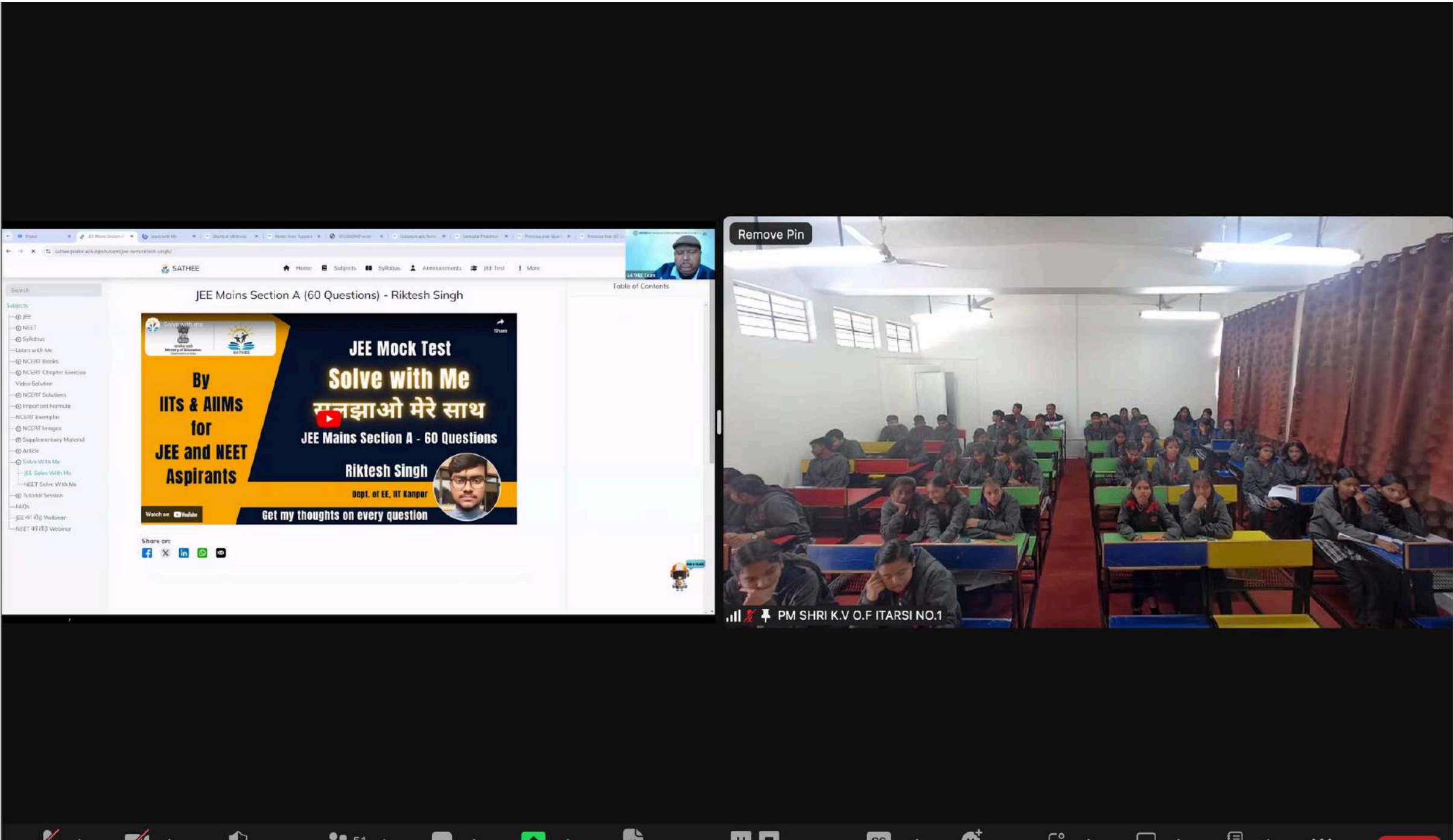
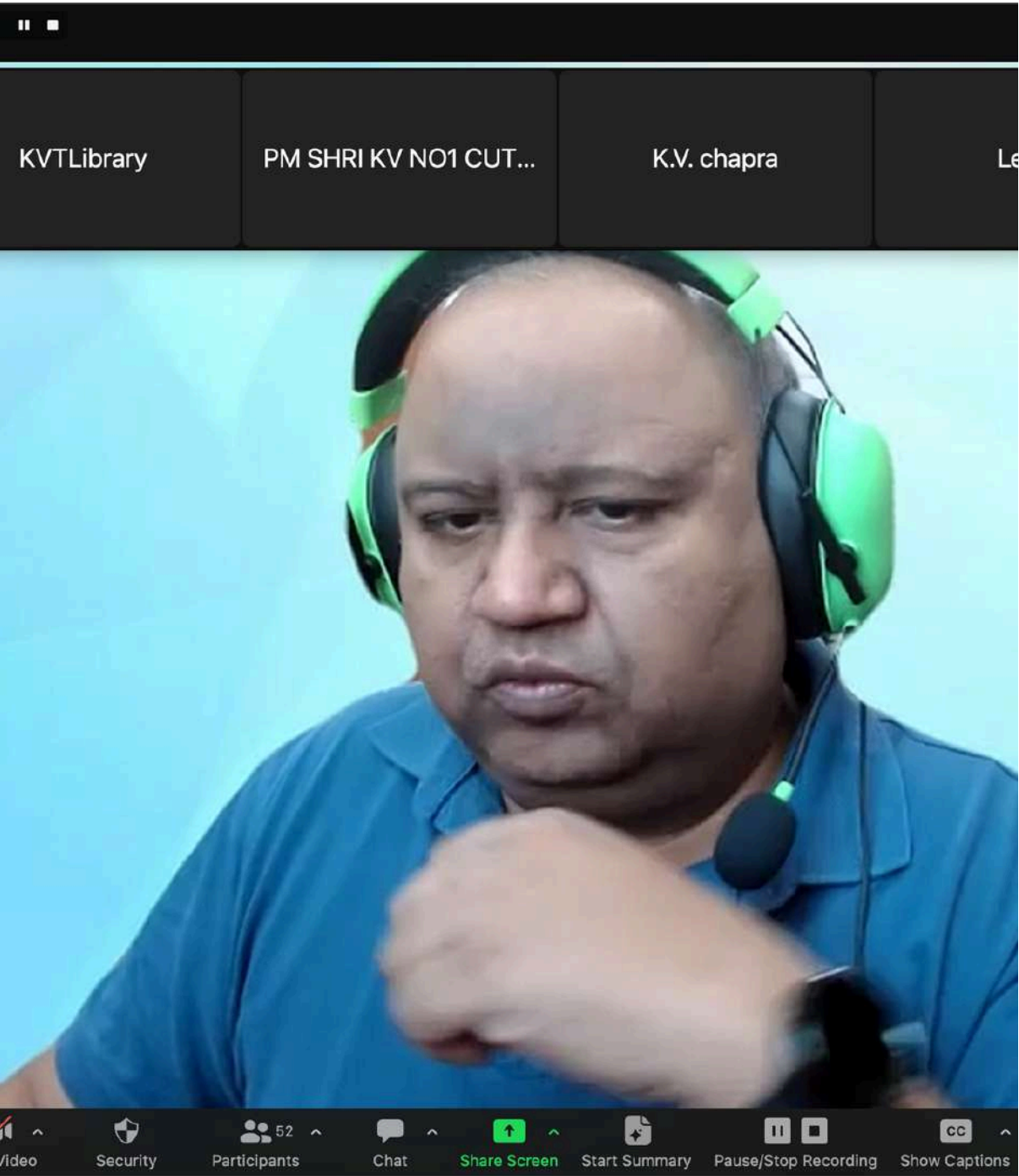


| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr. Dilip• Mr. Ritesh Sharma• Smt. Yogita Sharma | 55 |



School Name: K.V ONGC Mehsana (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">Lokesh SurediaAchleshwar SankhlaLeena Wadhwani | 114 |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mr.Milandeep Sharma• Mrs.Mandavi Pandey• Mrs.varsha | 45 |



School Name: K.V AFS Bhuj (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• MR. SHABBIR• MR. JAYESH• MR. SAURABH | 126 |



School Name: K.V Army Bhuj (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr. Jitendra Singh Rawat• Mr. Sahil Aneja• Mr. Vinod kumar Yadav | 148 |



School Name: K.V Dhrangadhra (Gujrat)

| Teachers Name | Participated Students |
|-------------------|-----------------------|
| • Mr SANJAY SAINI | 102 |

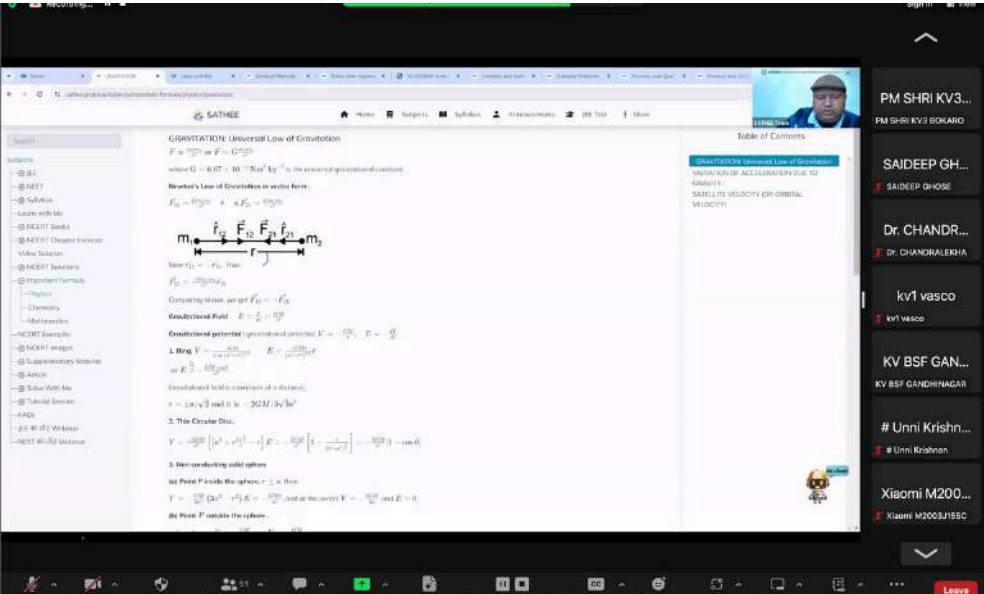
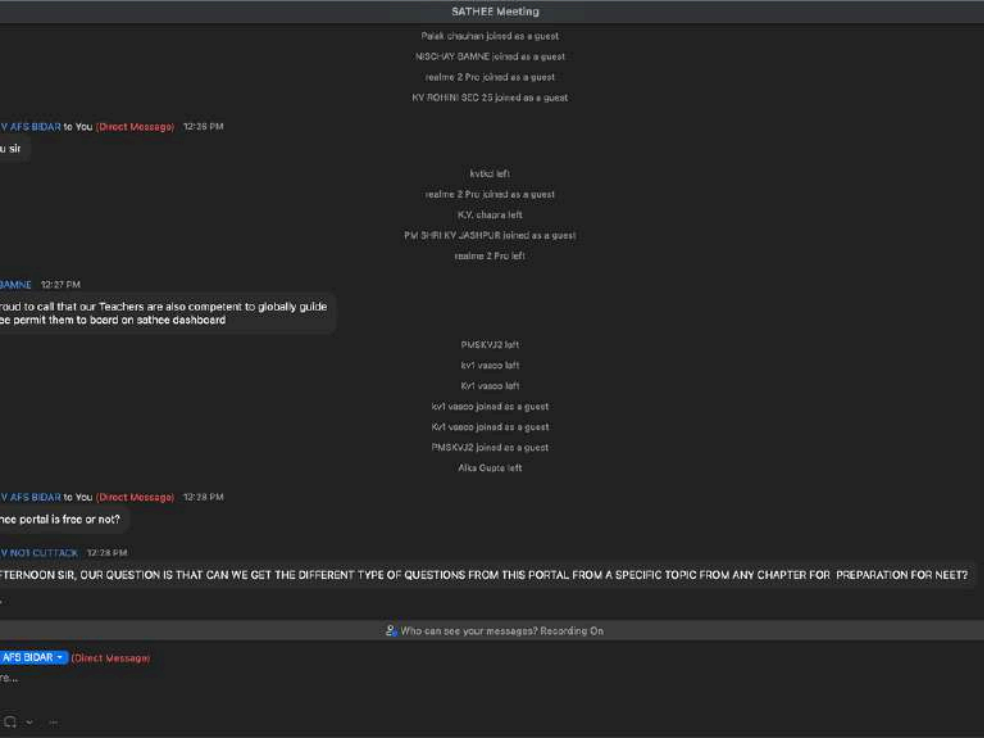


| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mr.Rakesh T. Kantiwal• Mrs.Anju Sharma• Mr. Anil Kumar Arya | 114 |



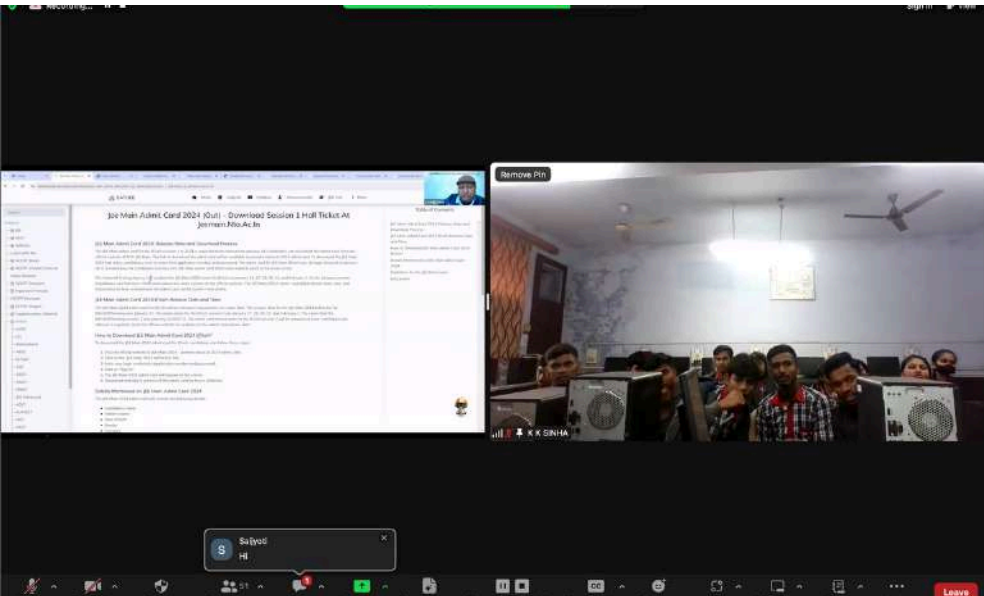
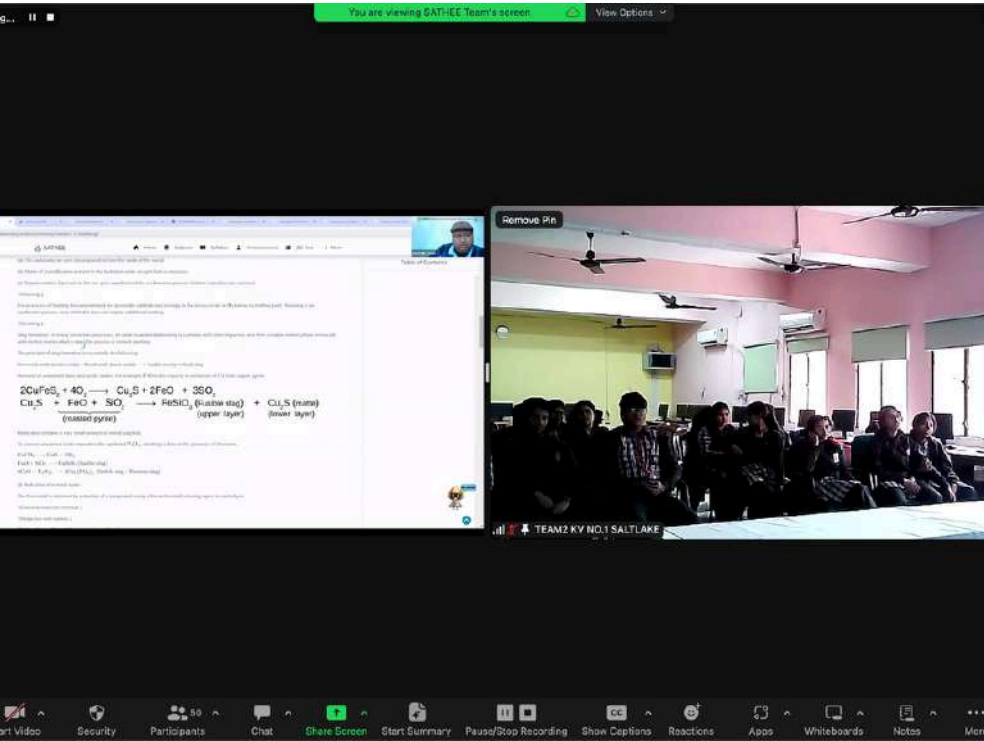
School Name: K.V Bhavnagar Para (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">Mr Prince | 27 |



School Name: K.V Rajkot (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <div>• Mr. Om prakash yadav.</div> <div>• Mr.Mukesh Soni</div> | 63 |



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71218 + Engineering 3037 + Medical

Countdown for Exam

JEE Mains 24 (01st Apr 24) 55d 11h 51m 26s

JEE Mains 24 55d 11h 51m 26s JEE Adv 24 119d 11h 51m 26s NEET 24 89d 11h 51m 26s

Learn Smarter, Achieve Better Empowering Your Journey to Success

Ask a Doubt

K.V. chapra K.V. chapra

PM SHRI KV... Connecting to audio ...

KV Aliganj Lucknow

Leena Connecting to audio ...

PM SHRI kv t... PM SHRI kv tumkur

Om Om

KV ROHINI S... KV ROHINI SEC 25

School Name: K.V Junagadh (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Ms. Pooja Dahiya• Mrs. Pooja Bhadoriya | 48 |



School Name: K.V DIU (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">GOVIND SAINI | 12 |

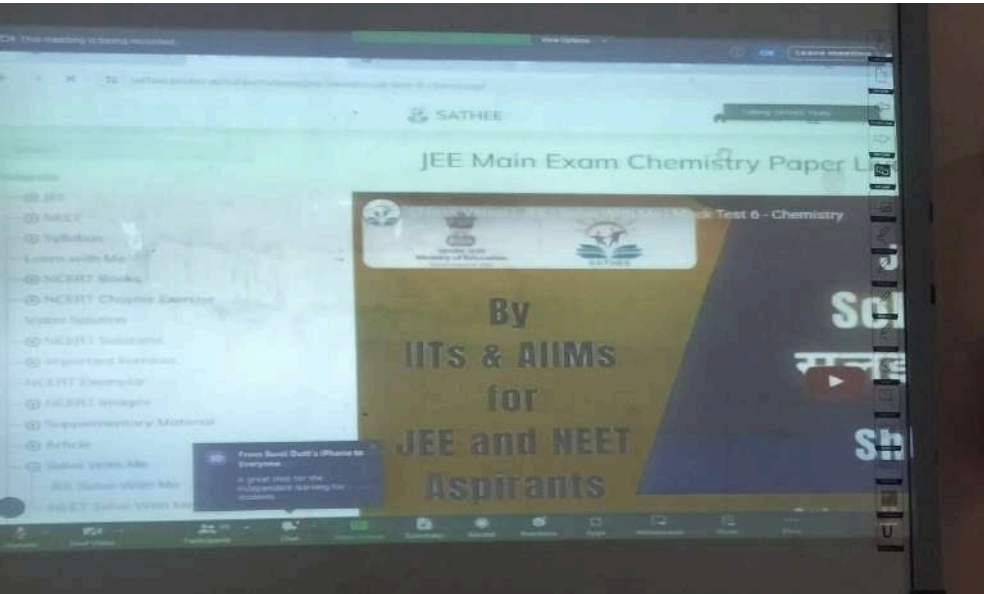


School Name: K.V Jetpur (Gujarat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mr. Dhiren Meshvaniya• Mrs. Garima Vij | 72 |

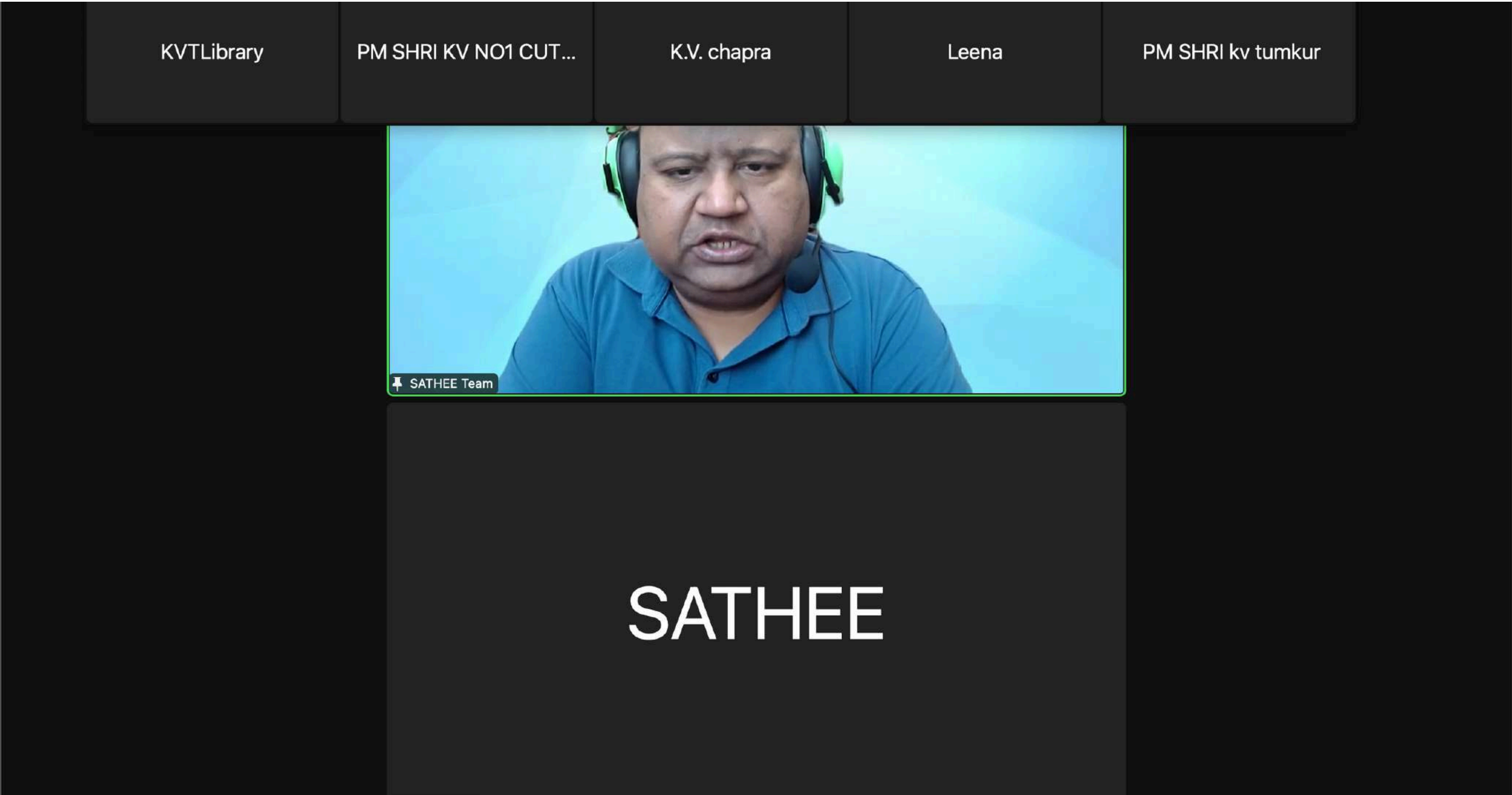
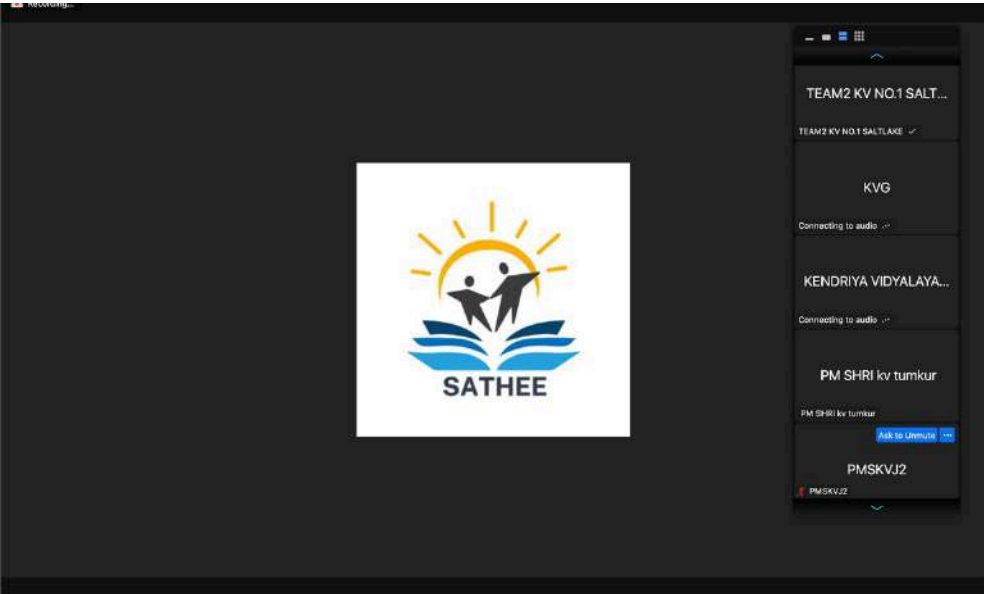
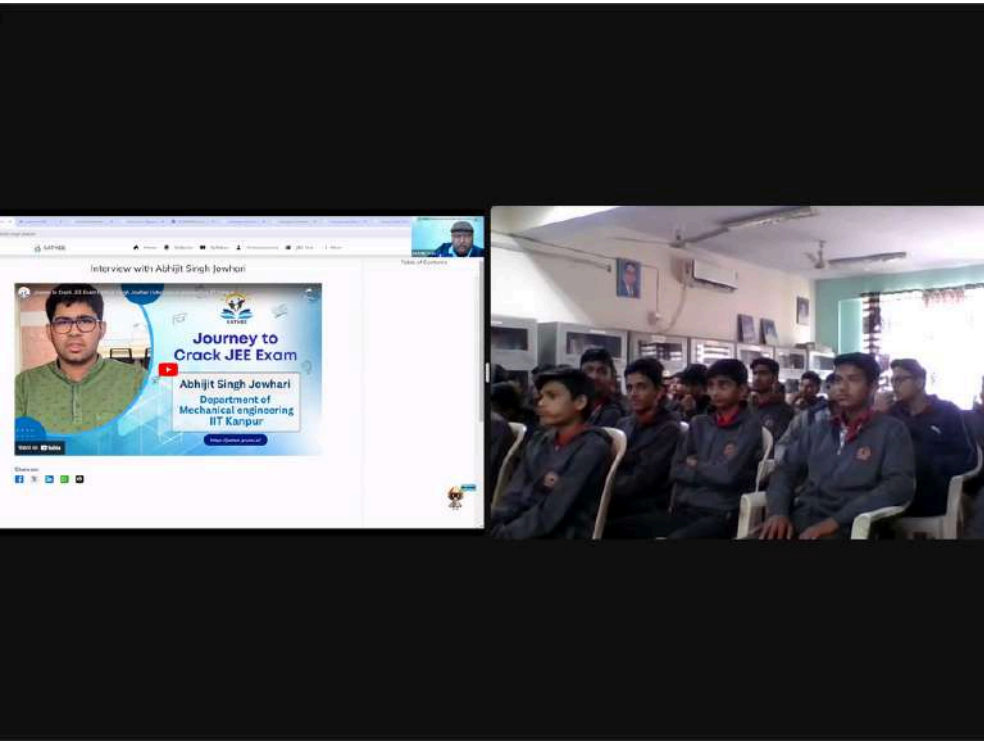


| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• MRS. RAKHI JAIN• MR. SANJEEV CHADHA• MS. SHAMINDER KAUR | 110 |



School Name: K.V No.2 INF Jamnagar (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr. Amit Kumar Meena• Ms. Muskaan Kejriwal• Mr. Yogesh Chauhan | 97 |



School Name: K.V No.3 AF II Jamnagar (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none"> • MR. KAMLESH AMIN • MS. SNEHAL BALPANDE | 67 |

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr. Mohit Bansal• Mr. Jitendra Shakyawar• Mrs. Sarita Bhardwaj | 16 |



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SATHEE







School Name: K.V INS Valsura (Gujarat)

| Teachers Name | Participated Students |
|---------------------|-----------------------|
| <div>• Mr Ram</div> | 85 |

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Countdown for Exams

JEE Mains 24

48d 11h 35m 52s

JEE Adv 24

112d 11h 35m 52s

NEET 24

82d 11h 35m 52s

TEAM2 KV NO.1 SALLAKE

PM SHRI KV

kv jodhpur doda

K K SINHA

PRINCIPAL KV AWANTIPUR

PM SHRI KV A

PM SHRI KV NO1 CUTTACK

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VARIATION OF ACCELERATION DUE TO GRAVITY :

SATELLITE VELOCITY (OR ORBITAL VELOCITY)

GRAVITATION: Universal Law of Gravitation

$F \propto \frac{m_1 m_2}{r^2}$ or $F = G \frac{m_1 m_2}{r^2}$

where $G = 6.67 \times 10^{-11} \text{Nm}^2 \text{kg}^{-2}$ is the universal gravitational constant.

Newton's Law of Gravitation in vector form :

$\vec{F}_{12} = \frac{Gm_1 m_2}{r^2} \hat{r}_{12}$ & $\vec{F}_{21} = \frac{Gm_2 m_1}{r^2} \hat{r}_{21}$

$\vec{F}_{12} = -\vec{F}_{21}$, Thus

$\vec{F}_{21} = -\frac{Gm_1 m_2}{r^2} \hat{r}_{12}$

Comparing above, we get $\vec{F}_{12} = -\vec{F}_{21}$

Gravitational Field $E = \frac{F}{m} = \frac{GM}{r^2}$

Gravitational potential: gravitational potential, $V = -\frac{GM}{r}$, $E = -\frac{dV}{dr}$

1. Ring, $V = \frac{-GM}{x \text{ or } (a^2 + r^2)^{1/2}}$, $E = \frac{-GMx}{(a^2 + r^2)^{3/2}}$

or $E = \frac{GM \cos \theta}{x^2}$

Gravitational field is maximum at a distance,

$r = \pm a/\sqrt{2}$ and it is $-2GM/3\sqrt{3}a^2$

2. Thin Circular Disc,

$V = \frac{-2GM}{a^2} \left[(a^2 + r^2)^{1/2} - r \right]$, $E = \frac{-2GM}{a^2} \left[1 - \frac{r}{(a^2 + r^2)^{1/2}} \right] = \frac{-2GM}{a^2} [1 - \cos \theta]$

3. Non conducting solid sphere

(a) Point P inside the sphere, $r \leq a$, then

$V = -\frac{GM}{2a^3} (3a^2 - r^2)$, $E = -\frac{GM}{a^3} r$, and at the centre $V = -\frac{3GM}{2a}$ and $E = 0$

(b) Point P outside the sphere .

PM SH

PM SHRI K

SAID

SAIDEE

Dr. C

Dr. CHA

kv

kv1 vas

KV BS

KV BSF GA

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Xiaomi

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| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mrs. Erin Toppo• Mr Jignesh Parmar• Sh Amardeep Singh | 109 |



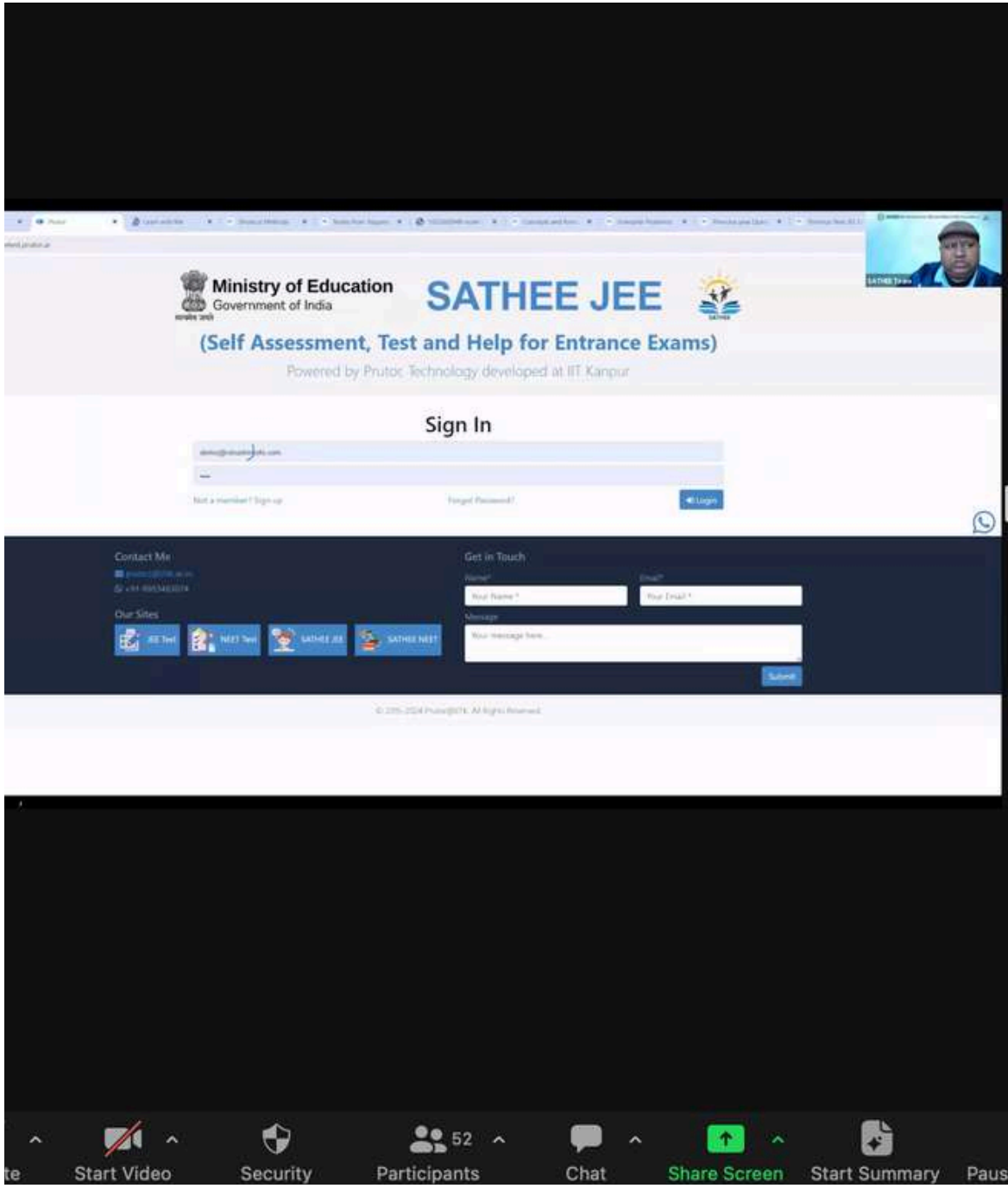
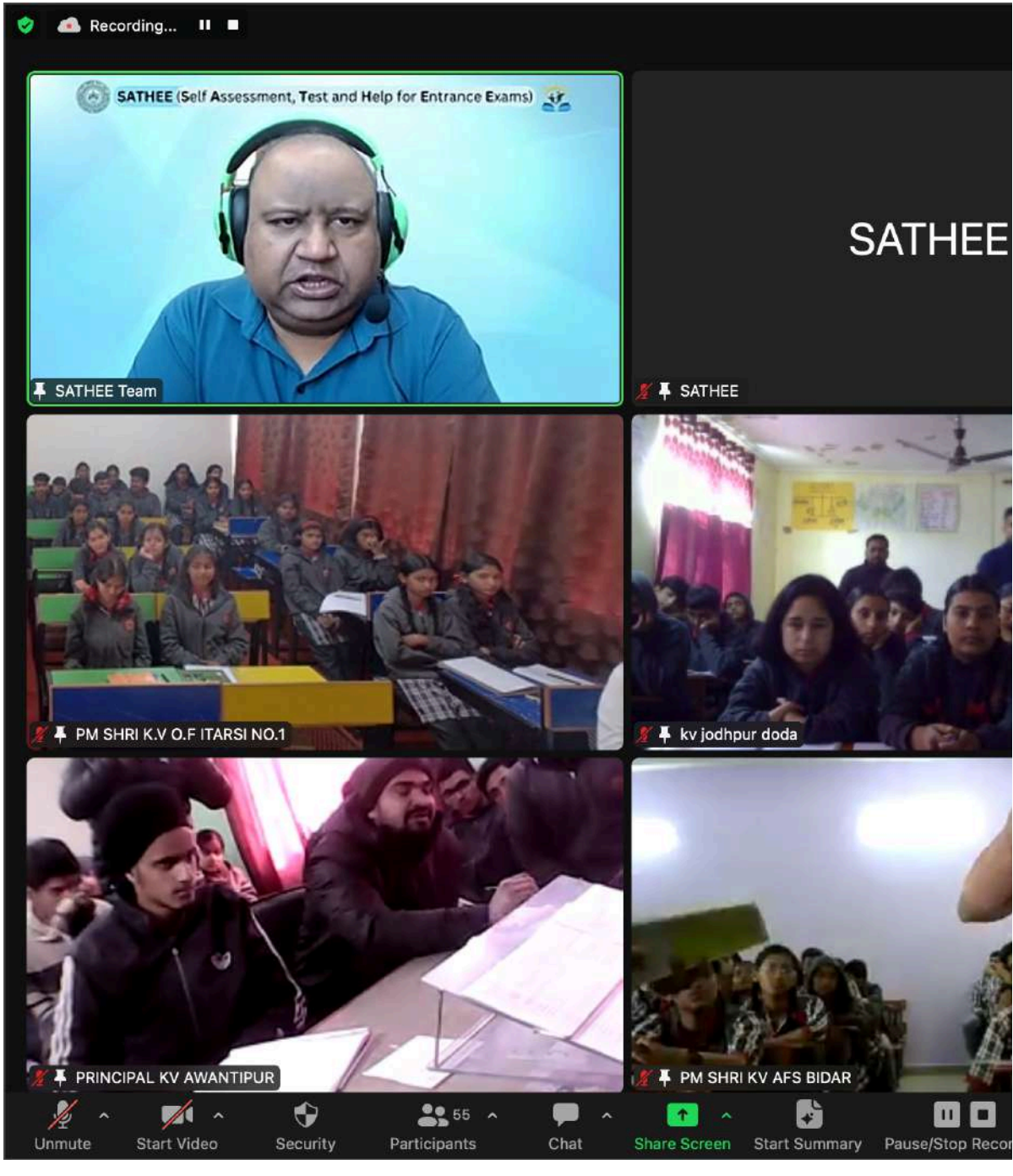
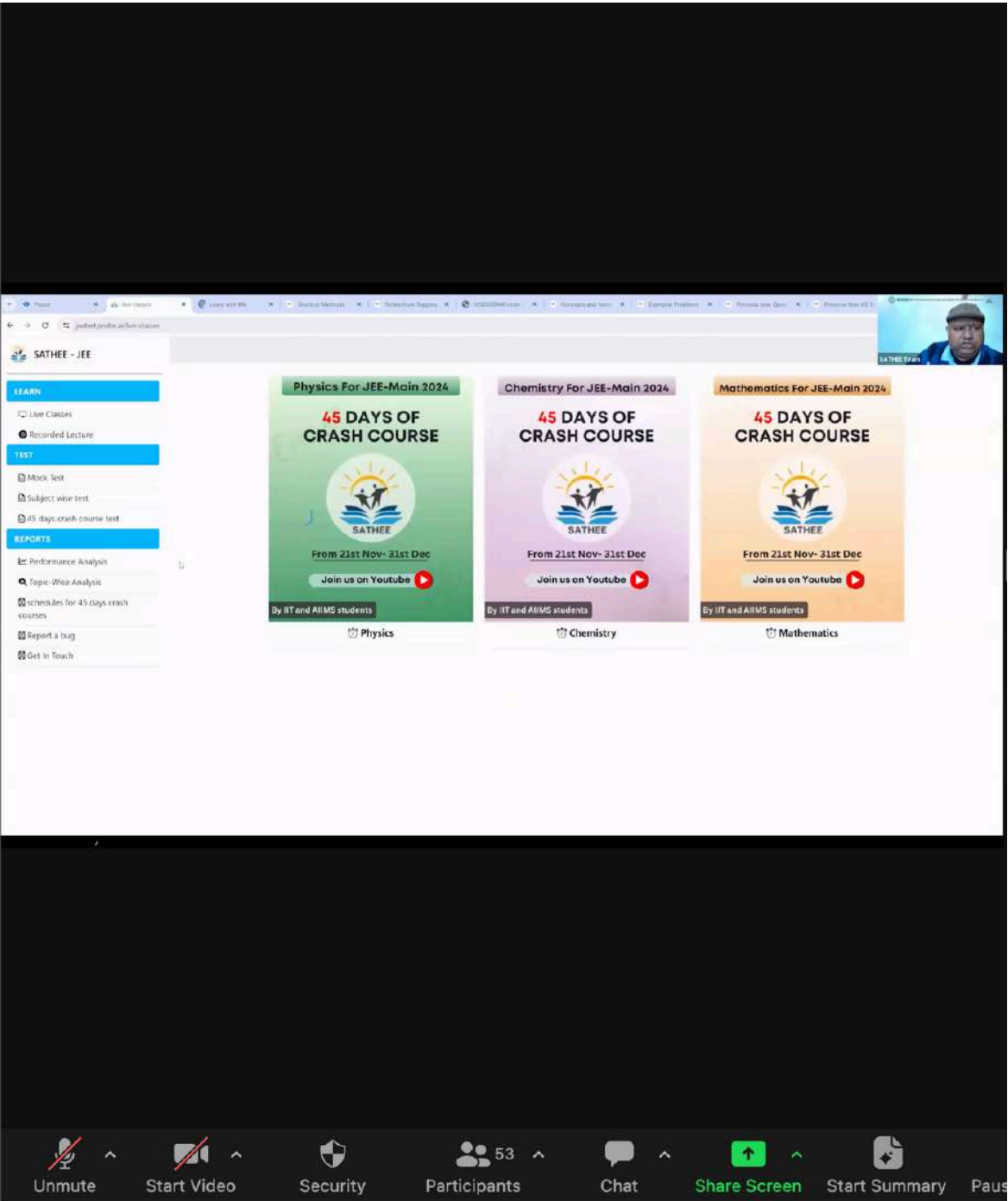
School Name: K.V Railway Gandhidham (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mr. Shrichand,• Mr. Rajesh Khateek,• Mr. Deepak• Miss. Khushbu | 86 |



School Name: K.V Okha (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr.Shrawan yadav• Mr surender Gahlot• Mr anil parmar | 83 |



School Name: K.V BARODA AFS (Gujrat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none"> • MRS JYOTI JAIN • MR AKHILESH S | 69 |



School Name: K.V ONGC Baroda (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mrs. Huma Yasmin• Dr. Taruna• Mr. Rajesh Gupta | 81 |

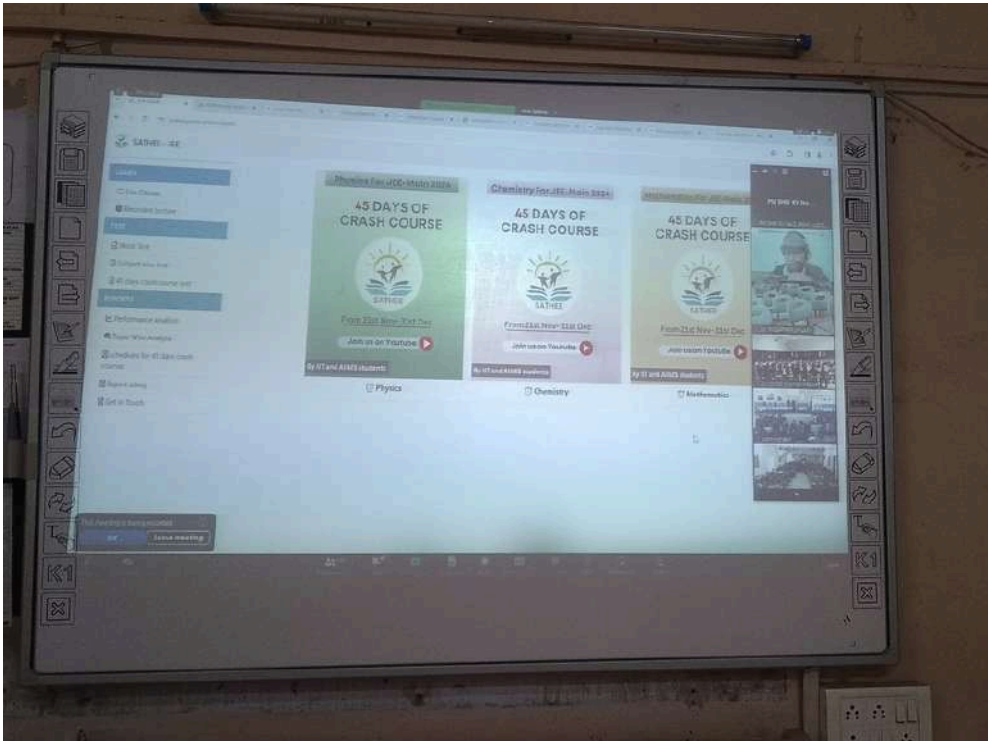


| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mrs. Seema Bai Rajput• Mrs. Maya Tanwar• Mr. Harishchandra Jadeja | 159 |



School Name: K.V No.1 Baroda (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Dr Poonam• Ms Rekha• Mr Sanjay | 70 |



School Name: K.V AFS Darjipura (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">Mr S N Sinha | 27 |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Ravi shankar• bharat solanki• shishir kumar | 55 |

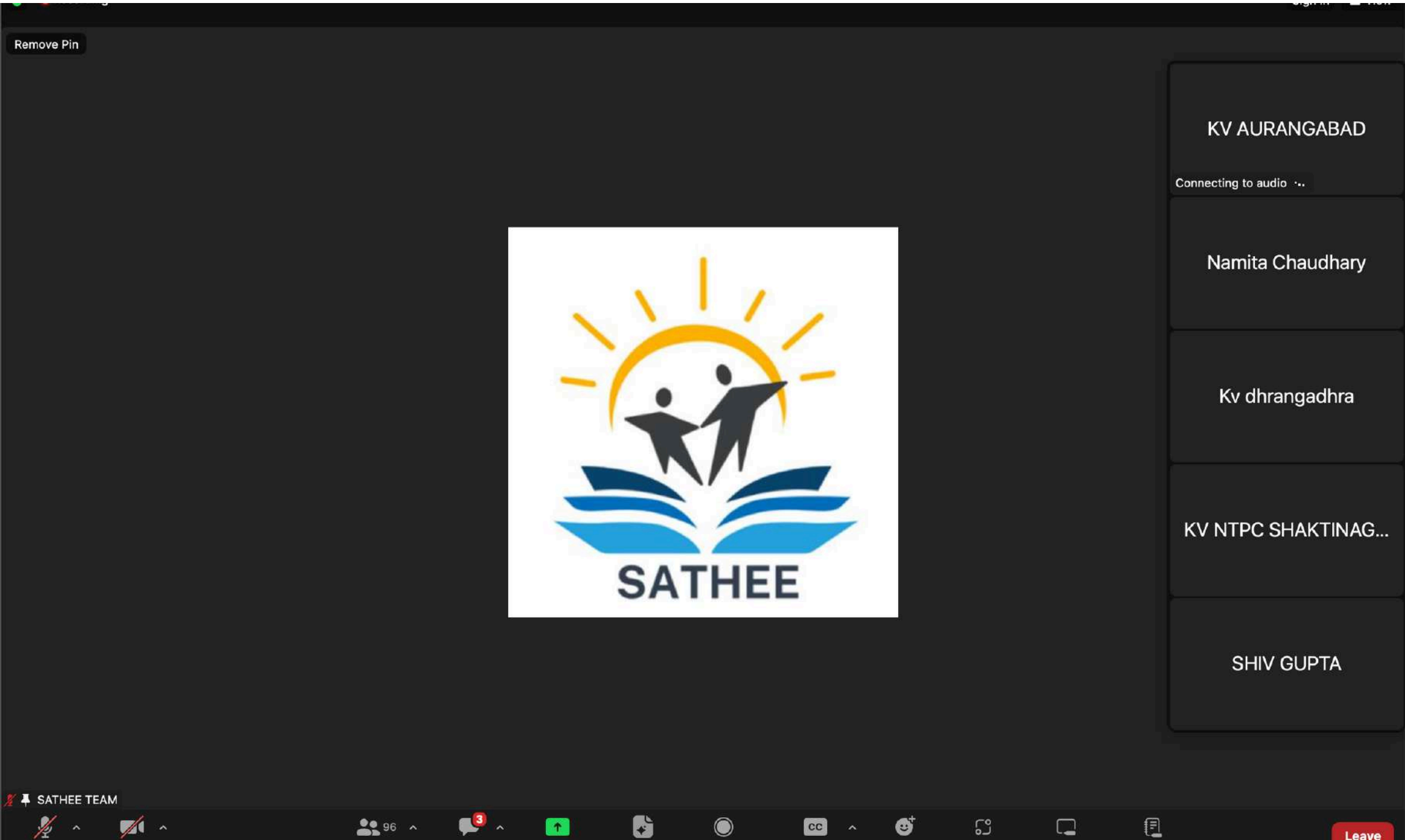
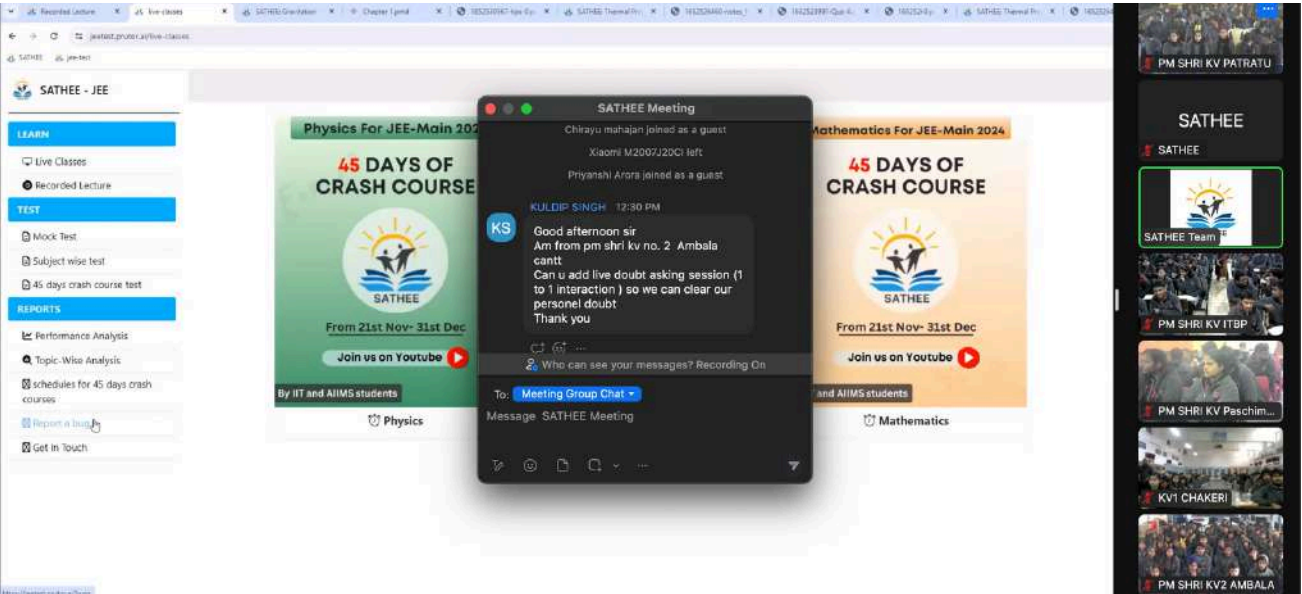
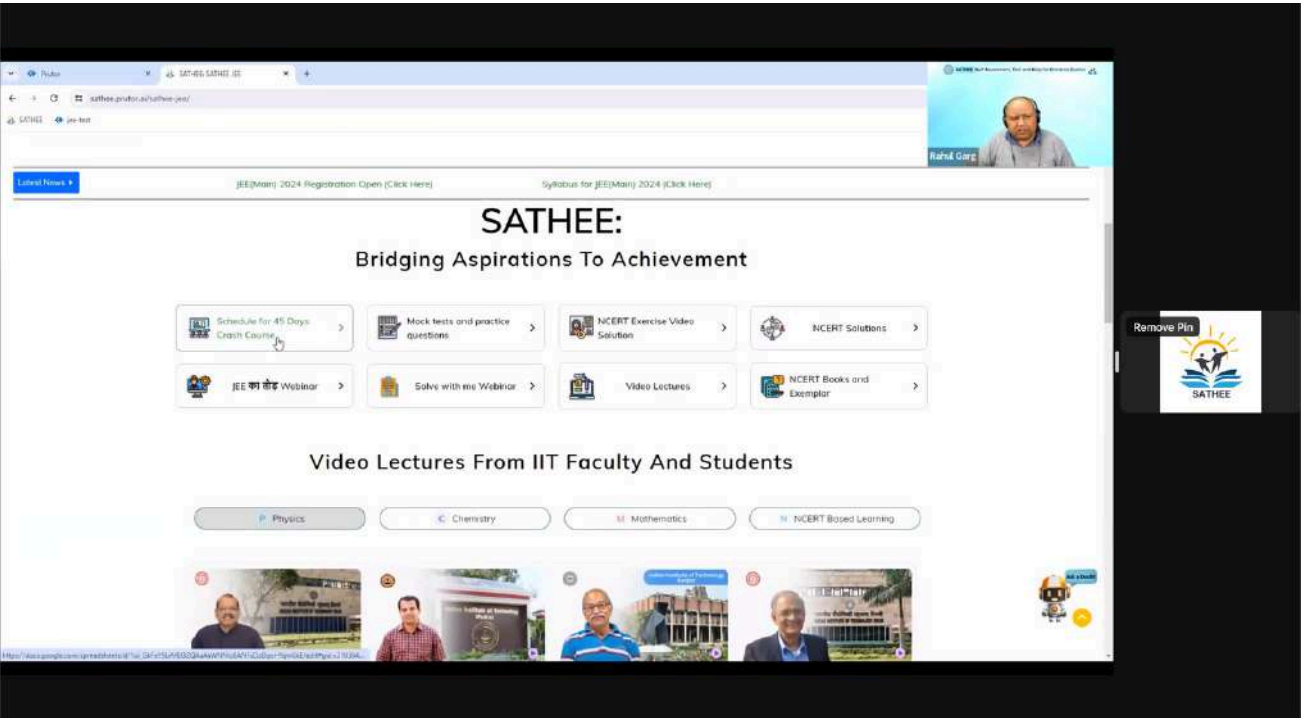


| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mrs Pushpa Prakash• Mr Bipin• Mr P K SAH | 105 |



School Name: K.V Harni Road (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <div><div></div><div>• D.S Bhati</div></div> | 24 |



School Name: K.V Godhra (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr S K YADAV• Mr Sudhir Selot | 35 |

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PM SHRI K.V O.F ITA...

kv jodhpur doda

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SATHEE

PM SHRI K.V O.F ITARSI NO.1

SATHEE Team

Welcome to SATHEE Demonstration...

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">• Mr. Dinesh Kumar• Mr. Amit Baniwal• Mr. Satyendra Kumrawat | 60 |



SATHEE

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Participants

Chat

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Start Summary

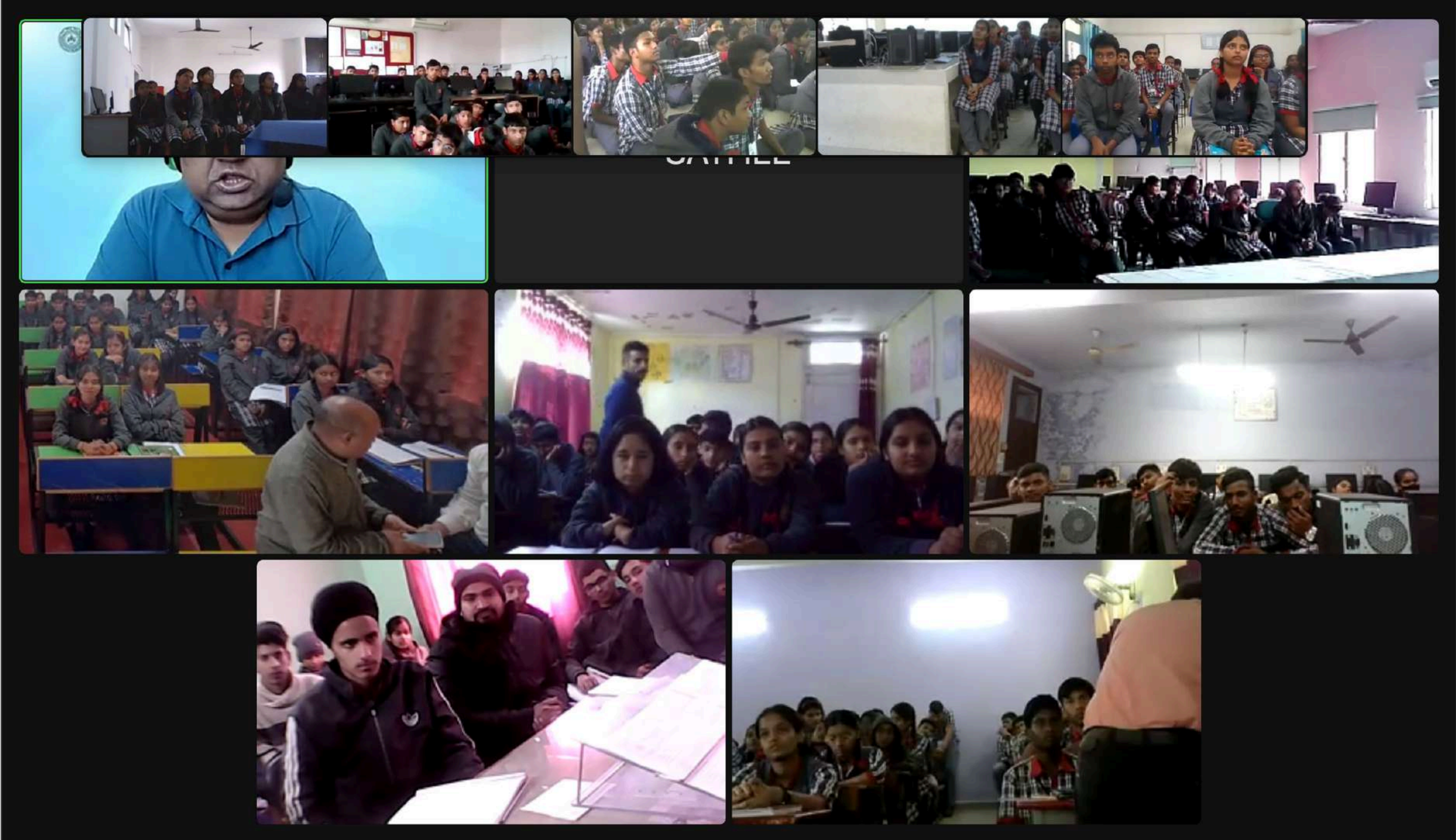
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School Name: K.V No.1 Surat (Gujrat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <ul style="list-style-type: none">Mr. Mohammed Cutpiecewala,Mr. Satish Chandra YadavMrs Neha Vatsala | 73 |

SATHEE Meeting

Palak chauhan joined as a gu

NISCHAY BAMNE joined as a g

realme 2 Pro joined as a gu

KV ROHINI SEC 25 joined as a

PM SHRI KV AFS BIDAR to You (Direct Message) 12:26 PM

PS Thank you sir

NISCHAY BAMNE 12:27 PM

NB We are proud to call that our Teachers are also competent to globally guide Will Sathee permit them to board on sathee dashboard

PM SHRI KV AFS BIDAR to You (Direct Message) 12:28 PM

PS sir, is sathee portal is free or not?

PM SHRI KV NO1 CUTTACK 12:28 PM

PS GOOD AFTERNOON SIR, OUR QUESTION IS THAT CAN WE GET THE DIFFERENT TYPE OF QUESTIONS FROM THIS PO

Who can see your messages?

To: PM SHRI KV AFS BIDAR (Direct Message)

Type message here...

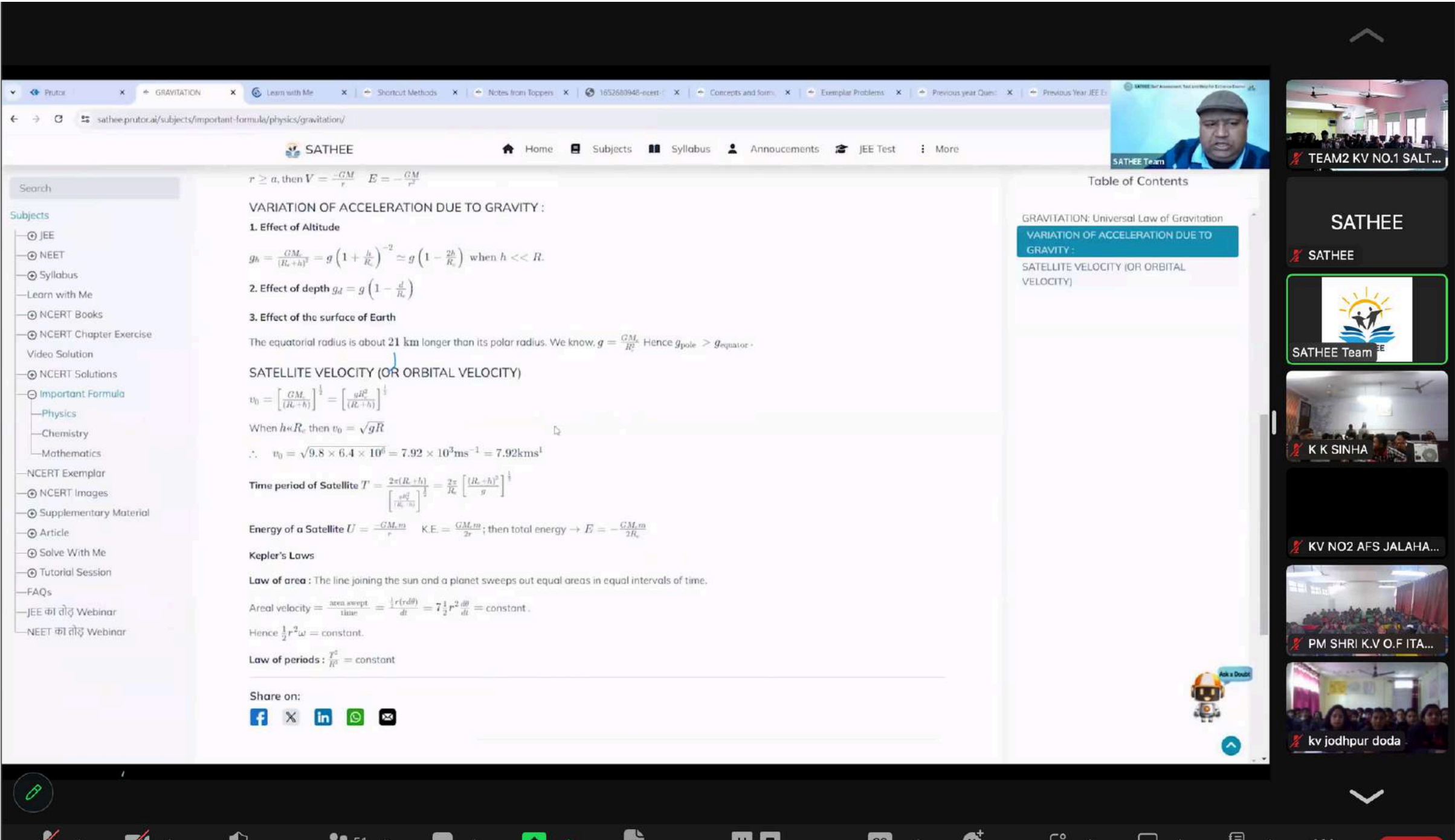
Remove Pin

SATHEE

TEAM2 KV NO.1 SALT LAKE

School Name: K.V Kribhco Surat (Gujarat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <div>• MR. KASHIRAM BILHRIYA</div> <div>• MR. ANKUR DAS</div> | 57 |



School Name: K.V ONGC Surat (Gujarat)

| Teachers Name | Participated Students |
|--|-----------------------|
| <div>• MS. PREETI</div> <div>• MRS. RUCHI</div> <div>• MRS. ANJANA</div> | 115 |

Recording... You are viewing SATHEE Team's screen

GRAVITATION

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NEET का रोड़ Webinar

VARIATION OF ACCELERATION DUE TO GRAVITY :

1. Effect of Altitude

$$g_h = \frac{GM}{(R_e + h)^2} = g \left(1 + \frac{h}{R_e}\right)^{-2} \approx g \left(1 - \frac{2h}{R_e}\right)$$
 when $h \ll R_e$.

2. Effect of depth $g_d = g \left(1 - \frac{d}{R_e}\right)$

3. Effect of the surface of Earth

The equatorial radius is about 21 km longer than its polar radius. We know, $g = \frac{GM}{R_e^2}$ Hence $g_{pole} > g_{equator}$.

SATELLITE VELOCITY (OR ORBITAL VELOCITY)

$$v_0 = \left[\frac{GM}{(R_e + h)}\right]^{\frac{1}{2}} = \left[\frac{vR_e^2}{(R_e + h)}\right]^{\frac{1}{2}}$$

When $h \ll R_e$ then $v_0 = \sqrt{gR_e}$

$$\therefore v_0 = \sqrt{9.8 \times 6.4 \times 10^6} = 7.92 \times 10^3 \text{ms}^{-1} = 7.92 \text{kms}^{-1}$$

Time period of Satellite $T = \frac{2\pi(R_e + h)}{\left[\frac{vR_e^2}{(R_e + h)}\right]^{\frac{1}{2}}} = \frac{2\pi}{R_e} \left[\frac{(R_e + h)^3}{g}\right]^{\frac{1}{2}}$

Energy of a Satellite $U = -\frac{GMm}{r}$ K.E. = $\frac{GM_m m}{2r}$; then total energy $\rightarrow E = -\frac{GM_m m}{2R_e}$

Kepler's Laws

Law of area : The line joining the sun and a planet sweeps out equal areas in equal intervals of time.

Areal velocity = $\frac{\text{area swept}}{\text{time}} = \frac{\frac{1}{2}r(r\frac{d\theta}{dt})}{dt} = \frac{1}{2}r^2 \frac{d\theta}{dt} = \text{constant}$

Hence $\frac{1}{2}r^2\omega = \text{constant}$.

Law of periods : $\frac{T^2}{R^3} = \text{constant}$

Share on:

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K.V. chapra

PM SHRI KV JASHPUR

PM SHRI KV JASHPUR ...

KV ROHINI SEC 25

Connecting to audio ...

KV KATI HAR

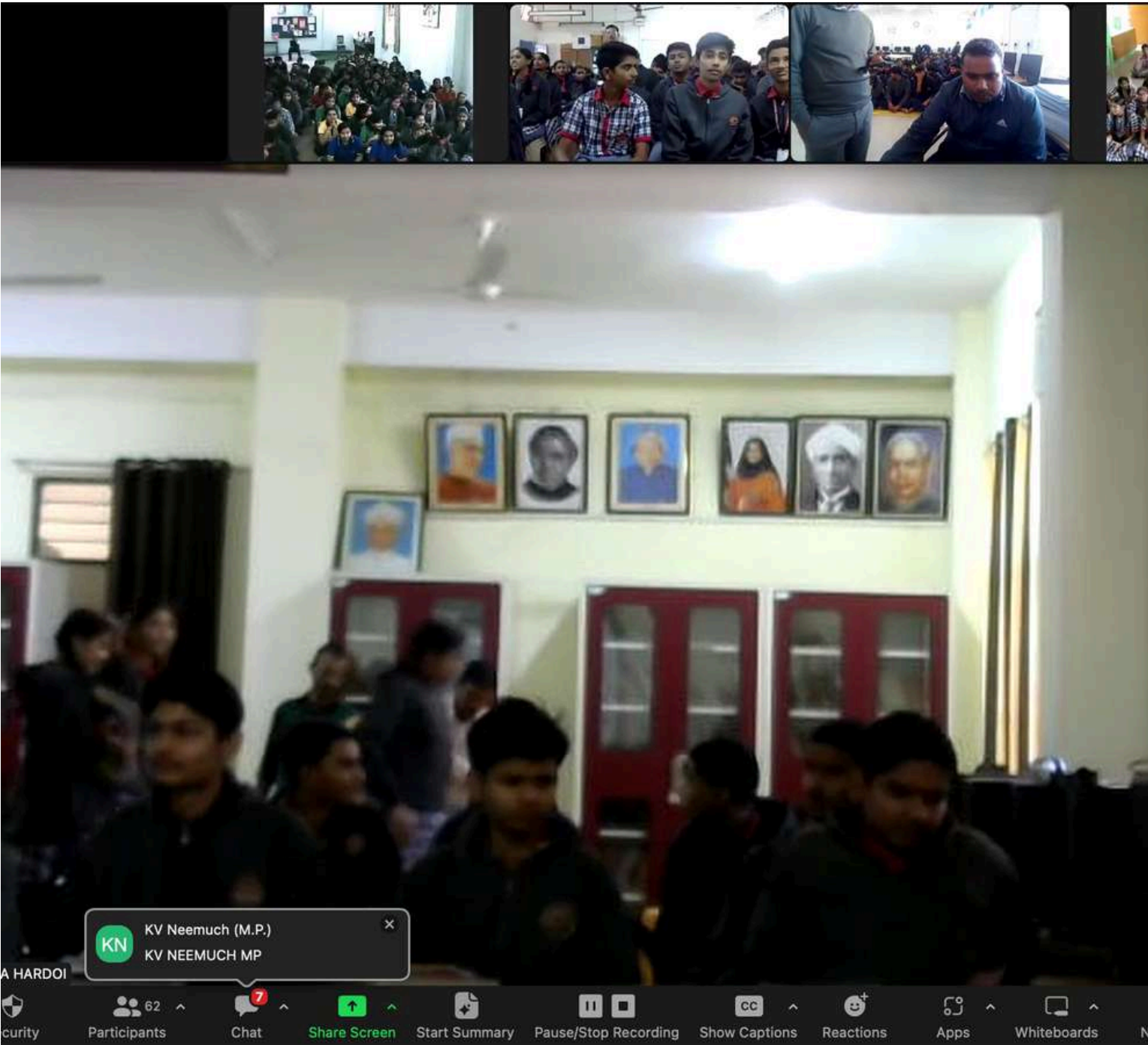
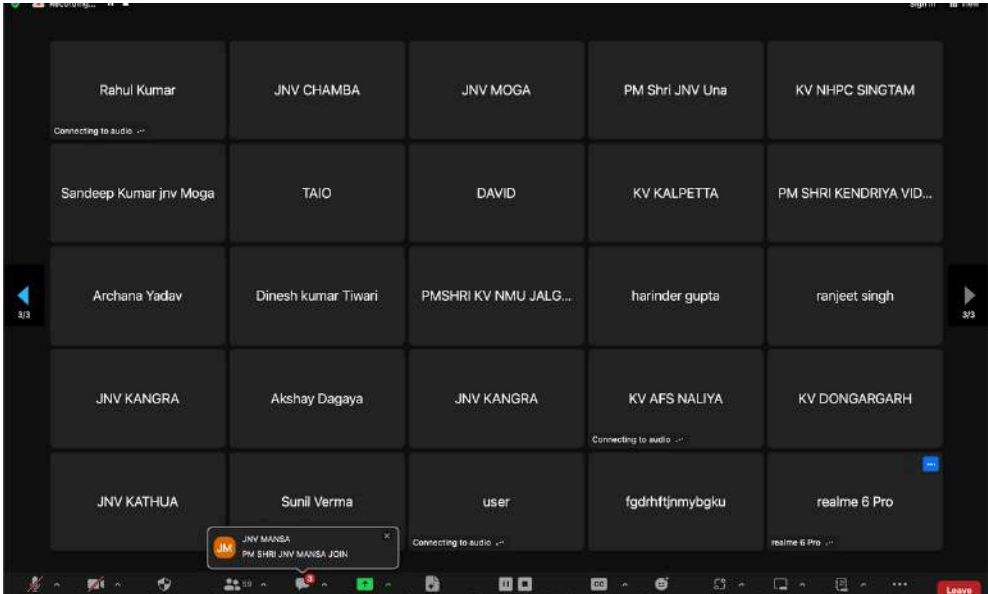
| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">VIVEK KUMAR GUPTA | 81 |



| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">• Mrs. Mayuri Patel• Mr. Manoj Kumar Jangid• Mr. Anant Pratap Singh | 145 |

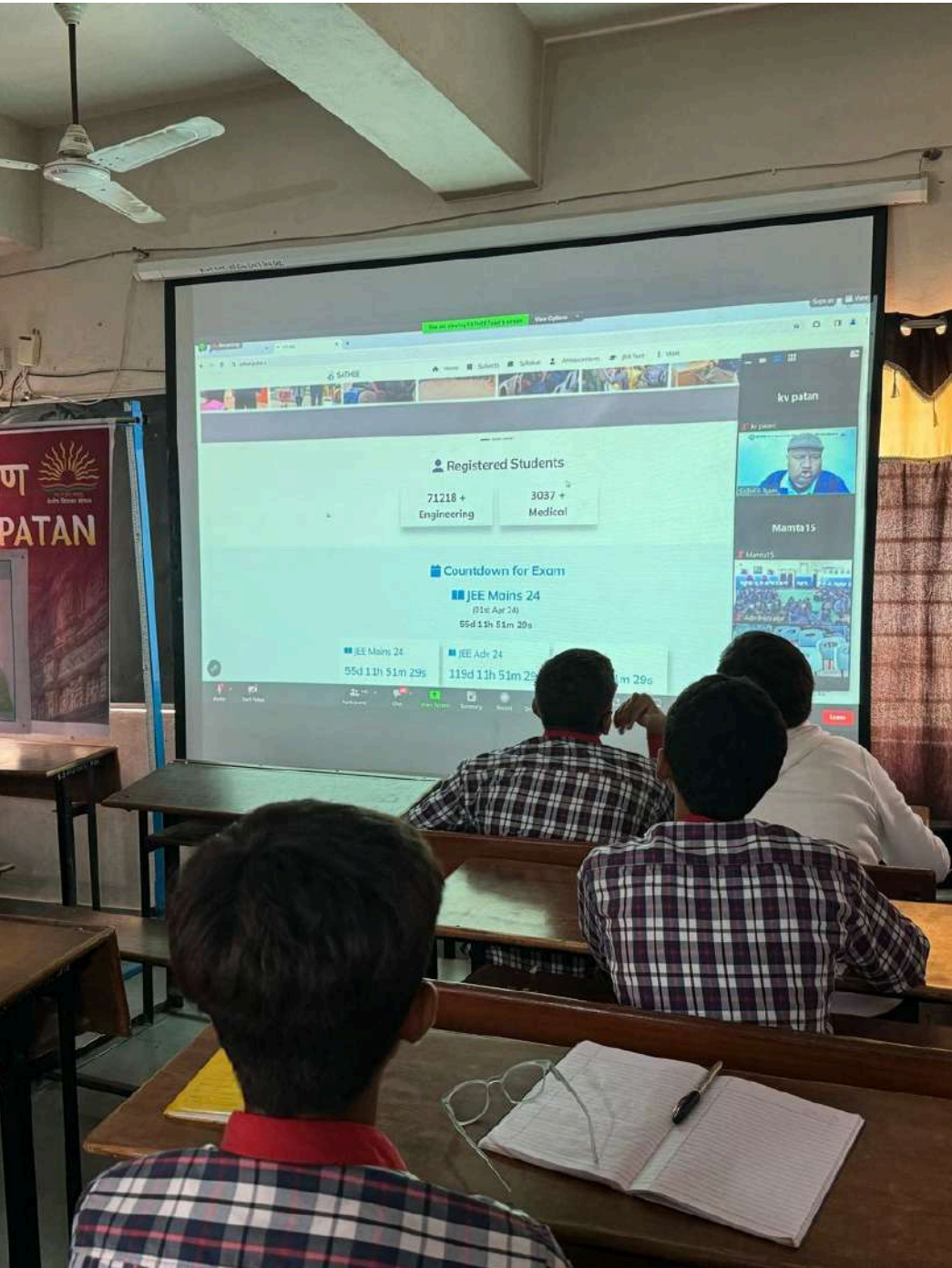


| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">Mrs Archana Yadav | 53 |




School Name: K.V Patan (Gujarat)

| Teachers Name | Participated Students |
|---|-----------------------|
| <ul style="list-style-type: none">Ms. Manvi Panchal | 30 |



School Name: K.V DPA Gandhidham (Gujrat)

| Teachers Name | Participated Students |
|------------------|-----------------------|
| • No Information | 88 |

| | | |
|--|--|---|
|  <p>Abhishek Kumar Sharma</p> | <p>KV HIRANAGAR</p> <p>Connecting to audio ...</p> | <p>KV TUMKUR</p> <p>Connecting to audio ...</p> |
| <p>PM SHRI KV JAMALPUR</p> <p>PM SHRI KV JAMALPUR</p> | <p>PM SHRI KV NO 1 O F IT...</p> <p>PM SHRI KV NO 1 O F ITARSI</p> | <p>C-T982-81-A62D-C</p> <p>C-T982-81-A62D-C</p> |
| <p>KV ROHINI SEC 25</p> <p>KV ROHINI SEC 25</p> | <p>TEAM2 KV NO.1 SALTLA...</p> <p>Connecting to audio ...</p> | <p>KVG</p> <p>Connecting to audio ...</p> |
| <p>PMSKVJ2</p> <p>Connecting to audio ...</p> | <p>K.V. chapra</p> <p>K.V. chapra</p> | <p>PM SHRI KV NO1 CUTT...</p> <p>PM SHRI KV NO1 CUTTACK</p> |
| <p>KVGGC</p> <p>KVGGC</p> | <p>PM SHRI KV JASHPUR</p> <p>Connecting to audio ...</p> | <p>Vivek Gp</p> <p>Connecting to audio ...</p> |

The image is a screenshot of a Zoom meeting interface. The central video window displays the SATHEE logo, which consists of a yellow sun with rays, two black silhouettes of people holding hands, and a blue open book, with the word "SATHEE" in bold black letters below. The right sidebar shows a list of participants: "KV HIRANAGAR", "KV TUMKUR", "Kendriya Vidyalaya No....", "PM SHRI K.V O.F ITAR...", and "PM SHRI KV JAMALPUR". Below the "KV TUMKUR" name, there is a small status indicator that says "Connecting to audio". The bottom status bar includes the text "SATHEE Team" on the left and various Zoom icons on the right.