

# ICT TOOLS USAGE IN CURRICULUM

## DEPARTMENT OF PHYSICS

<b>S.No</b>	<b>Name of the Faculty</b>	<b>Page</b>
<b>1.</b>	<b>CHANDANA N</b>	
<b>2.</b>	<b>A SUDARSHAN</b>	
<b>3.</b>	<b>K HARIKA</b>	

<b>Tool Used</b>
<b>YouTube Channel</b>
<b>PPTs</b>
<b>Google classroom</b>
<b>Zoom meetings</b>
<b>WhatsApp</b>
<b>Telegram</b>
<b>Google forms</b>

## Introduction

In India, since last five decades there has been an exponential increase in Higher education systems to meet the demands of quality education for all. There is a drastic swift in the system due to random advancements in Information and Communication Technology (ICT). To increase the access to higher education and improving its reach to the remotest parts of the country, contribution of open and distance learning facilities is on the increase. In addition, it is catering to life-long learning aspirations and that too at an affordable cost.

ICTs in higher education are being used for developing course material; delivering content and sharing content; communication between learners, teachers, and the outside world; creation and delivery of presentation and lectures; academic research; administrative support, student enrolment etc.

Across the globe, ICT in teaching and learning has become more prominent during the COVID-19 pandemic situation. All the teaching faculty across entire India started getting themselves to engage with the ICT tools in more prominent way to meet the student needs in course of the arised pandemic situation in March 2020.

Our honorable Commissioner Sri.Navin Mittal, IAS has initiated many important measures to train the faculty in ICT tools in video lesson preparation and delivering mechanisms in all the Government Degree Colleges of Telangana. All the faculty were seriously involved and evolved in learning various tools to reach the students in online mode like, video lesson recording and uploading it in YouTube, engaging online classes using various platforms like Zoom meetings, Google meet, Cisco Webex meetings.

Through google forms and google classroom the evaluation and assessment of the students was made. The students also got registered in various online courses and got benefitted.

The department maintains:

- A **Telegram group of 410 members conducting a poll everyday on General Science and Physics**, very much useful for their PG Entrance and other Competitive examinations.
- The **Google classroom** to share the study materials and video lessons.
- The **Google forms** to conduct quick quiz and surveys.
- The **WhatsApp groups** to communicate all the information on academics and co-curricular activities of the college.
- **YouTube channels** for each lecturer to prepare and share the video lessons.
- **Zoom meetings** to conduct online classes, webinars, and student webinars.
- **PPTs** are prepared with effective content to be delivered to the students while online and offline mode.
- **The I/C Department of Physics, Chandana N has prepared a promo on Government Degree College, Khairatabad in AY 2019-20**

**<https://youtu.be/Ie3qaqA6Vhs>**

**Chandana.N**

**Assistant Professor of Physics**

[chandana.hcu06@gmail.com](mailto:chandana.hcu06@gmail.com)

## 1.YouTube Channel:

List of videos uploaded to YouTube channel:

S.No	Topic of YouTube class	Uploaded date	Duration (Min)	Link	No of views
1	Solid State Physics	19/07/2020	25.34	<a href="https://youtu.be/TbTr0byuzaY">https://youtu.be/TbTr0byuzaY</a>	
2	Solid State Physics	20/07/2020	27.15	<a href="https://youtu.be/Ma5zPuWKSQ">https://youtu.be/Ma5zPuWKSQ</a>	
3	Solid State Physics	20/07/2020	26.56	<a href="https://youtu.be/TztXMhzMmg">https://youtu.be/TztXMhzMmg</a>	
4	Solid State Physics	23/07/2020	31.07	<a href="https://youtu.be/tZEytXpfnnA">https://youtu.be/tZEytXpfnnA</a>	
5	Vector Calculus	23/07/2020	31.21	<a href="https://youtu.be/oyrcSEA16QM">https://youtu.be/oyrcSEA16QM</a>	
6	Vector Calculus	23/07/2020	30.41	<a href="https://youtu.be/REvrfcDnBiA">https://youtu.be/REvrfcDnBiA</a>	
7	Vector Calculus	24/07/2020	40.15	<a href="https://youtu.be/oG5ABtC9q2o">https://youtu.be/oG5ABtC9q2o</a>	
8	Vector Calculus	24/07/2020	26	<a href="https://youtu.be/I15mIAWaT4s">https://youtu.be/I15mIAWaT4s</a>	
9	Vector Calculus	29/07/2020	36.22	<a href="https://youtu.be/FgyillxNB_g">https://youtu.be/FgyillxNB_g</a>	
10	Vector Calculus	04/08/2020	36.51	<a href="https://youtu.be/g-Rne_uhmY0">https://youtu.be/g-Rne_uhmY0</a>	
11	Solid State Physics	30/07/2020	36.41	<a href="https://youtu.be/C8mgGxAgwyU">https://youtu.be/C8mgGxAgwyU</a>	
12	Solid State Physics	30/07/2020	29.26	<a href="https://youtu.be/sUv3c9kG4CI">https://youtu.be/sUv3c9kG4CI</a>	
13	Solid State Physics	05/08/2020	26.50	<a href="https://youtu.be/A2CROWDy4DI">https://youtu.be/A2CROWDy4DI</a>	
14	Solid State Physics	05/08/2020	38.50	<a href="https://youtu.be/vm8U2Uxs6fo">https://youtu.be/vm8U2Uxs6fo</a>	
15	Vector Calculus	07/08/2020	31.20	<a href="https://youtu.be/TyaLuS6cH2k">https://youtu.be/TyaLuS6cH2k</a>	
16	Vector Calculus	07/08/2020	27.58	<a href="https://youtu.be/HmD-79Xw9YA">https://youtu.be/HmD-79Xw9YA</a>	
17	Vector Calculus	10/08/2020	32.20	<a href="https://youtu.be/wJLIvvEC4mE">https://youtu.be/wJLIvvEC4mE</a>	
18	Mechanics	11/08/2020	29.46	<a href="https://youtu.be/jrQfTKKWF5I">https://youtu.be/jrQfTKKWF5I</a>	
19	Mechanics	13/08/2020	35.12	<a href="https://youtu.be/3e5A5f-fu14">https://youtu.be/3e5A5f-fu14</a>	
20	Vector calculus	13/08/2020	28.56	<a href="https://youtu.be/8fSAtbWkGmQ">https://youtu.be/8fSAtbWkGmQ</a>	

21	Solid State Physics	16/08/2020	46.15	<a href="https://youtu.be/aXiwGIHOG-M">https://youtu.be/aXiwGIHOG-M</a>	
22	Solid State Physics	18/08/2020	36.45	<a href="https://youtu.be/1EgaOly4d54">https://youtu.be/1EgaOly4d54</a>	
23	Solid State Physics	18/08/2020	29.40	<a href="https://youtu.be/R8I3uaLhLhw">https://youtu.be/R8I3uaLhLhw</a>	
24	Mechanics	20/08/2020	26.45	<a href="https://youtu.be/rOqyVsfbFSc">https://youtu.be/rOqyVsfbFSc</a>	
25	Mechanics	20/08/2020	27.54	<a href="https://youtu.be/vfJCVUdDdtA">https://youtu.be/vfJCVUdDdtA</a>	
26	Mechanics	25/08/2020	19.20	<a href="https://youtu.be/uKC_JlmPrIU">https://youtu.be/uKC_JlmPrIU</a>	
27	Mechanics	25/08/2020	24.06	<a href="https://youtu.be/t3kWEkaHm24">https://youtu.be/t3kWEkaHm24</a>	
28	Mechanics	25/08/2020	29.46	<a href="https://youtu.be/GRpkUoHmcRo">https://youtu.be/GRpkUoHmcRo</a>	
29	Solid State Physics	27/08/2020	30.47	<a href="https://youtu.be/eyEUOKzxPVU">https://youtu.be/eyEUOKzxPVU</a>	
30	Solid State Physics	27/08/2020	20.00	<a href="https://youtu.be/t-DY8cjkEII">https://youtu.be/t-DY8cjkEII</a>	

The screenshot displays a YouTube channel page for 'chandana N', which has 184 subscribers. The channel's navigation menu includes Home, Explore, Shorts, Subscriptions, and Library. A video titled 'GDC KHAIRATABAD HYDERABAD' is featured, with 2.9K views and a duration of 5:45. The video description reads 'ABOUT THE INSTITUTION...'. The browser address bar shows the channel URL: [youtube.com/channel/UCM5sJ9mBzHrM\\_9hND5W4EGw](https://www.youtube.com/channel/UCM5sJ9mBzHrM_9hND5W4EGw). The system tray at the bottom indicates a temperature of 26°C, weather 'Partly cloudy', and the date '12-04-2022'.

The screenshot shows the YouTube Studio interface for a channel named 'chandana N'. The 'Content' tab is selected, displaying a list of videos. The table below summarizes the visible video entries:

Video	Visibility	Restrictions	Date	Views	Comments
<input type="checkbox"/> SALT-PHYSICS APPROACH - PHYSICS ... Add description 8:38	Unlisted	None	Dec 30, 2021 Uploaded	237	0
<input type="checkbox"/> SSP VIDEO 8 revision Add description 36:58	Unlisted	None	Jul 8, 2021 Uploaded	3	0
<input type="checkbox"/> 05 07 2021   YEAR Add description 52:27	Unlisted	None	Jul 8, 2021 Uploaded	3	0
<input type="checkbox"/> 03 07 2021   YEAR Add description 36:37	Unlisted	None	Jul 8, 2021 Uploaded	0	0

### **WIKI PAGE LINK**

[https://youneedawiki.com/app/page/1wx8wwG-K5rN5THbDIrBG0qYfiw\\_Jo9U4ze6j9atzi64?p=1gzB6dzlWc-QH0MRDaStxxg4XX87dJXiy](https://youneedawiki.com/app/page/1wx8wwG-K5rN5THbDIrBG0qYfiw_Jo9U4ze6j9atzi64?p=1gzB6dzlWc-QH0MRDaStxxg4XX87dJXiy)

### **Faculty profile**

<https://sites.google.com/view/chandana-nakka/home>

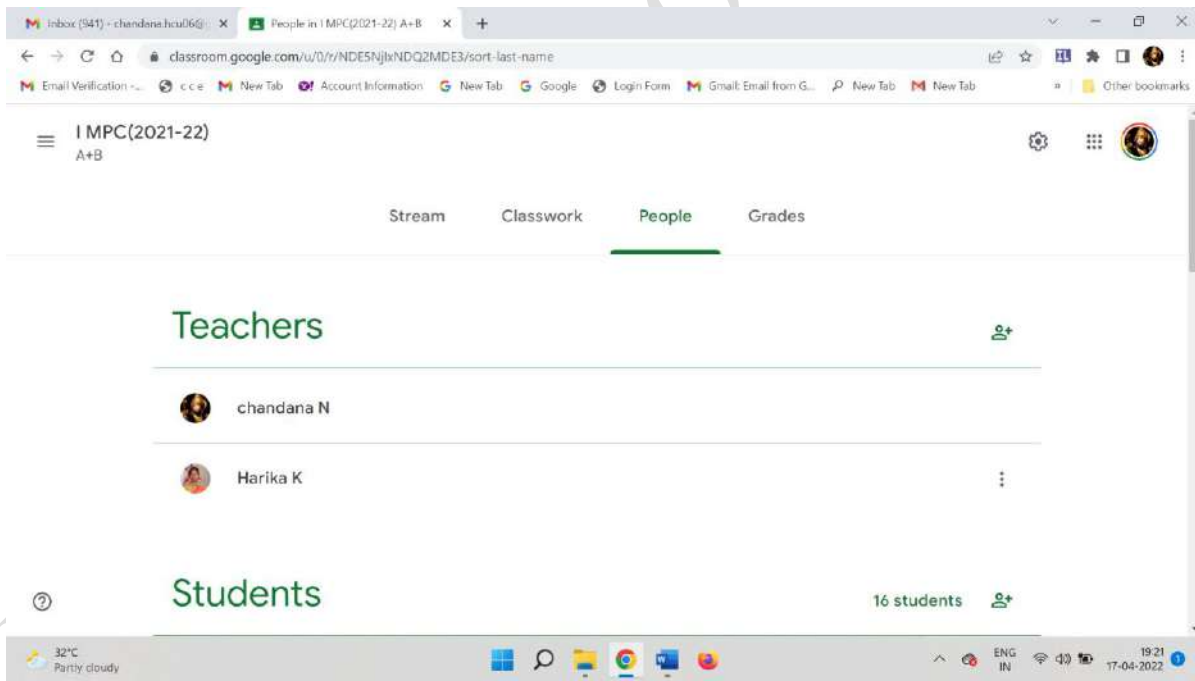
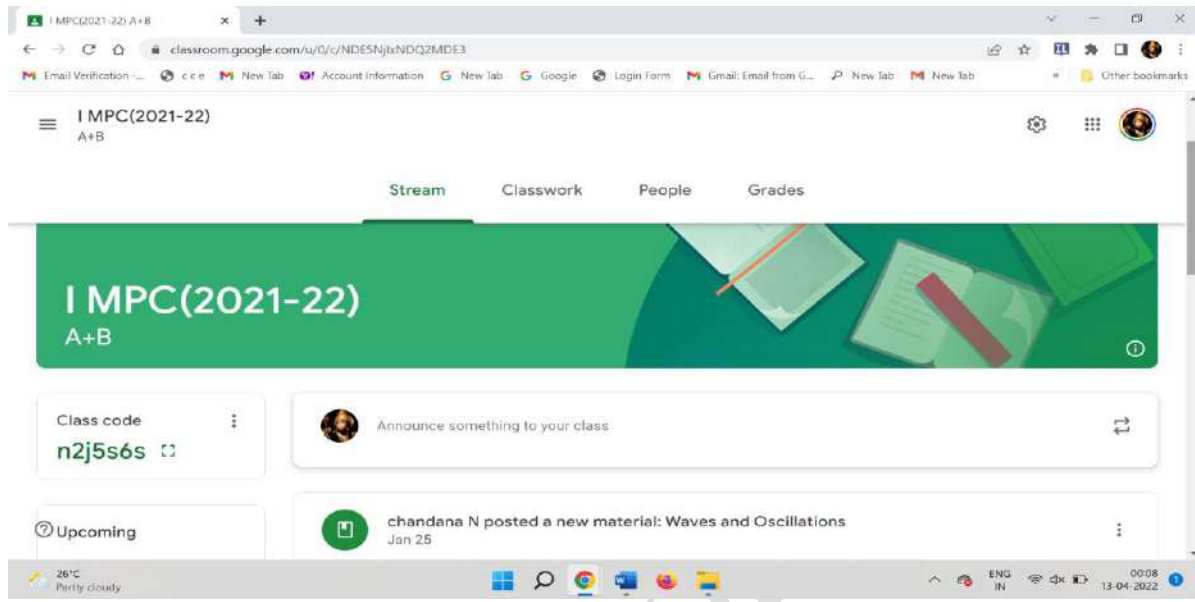
### **Course home page**

<https://sites.google.com/view/chandana-n/home>

# Google classroom

For sharing material, notes, PPTs and video lessons, quiz and assignments

## I MPC : 2021-22



# IMPCs : 2021-22

The screenshot shows the 'Stream' tab of a Google Classroom. At the top, the class name 'IMPCs(2021-22) A+B' is displayed. Below the navigation tabs (Stream, Classwork, People, Grades), there is a blue banner with the class name and a graduation cap icon. A 'Class code' box shows 'dit2tub'. Below this, there is an announcement area with a profile picture and the text 'Announce something to your class'. A post from 'chandana N' is visible, stating 'posted a new material: Waves and Oscillations'. The system tray at the bottom shows a temperature of 36°C and the date 16-04-2022.

The screenshot shows the 'People' tab of the same Google Classroom. The 'Teachers' section lists two individuals: 'chandana N' and 'Harika K'. The 'Students' section indicates there are '116 students'. The system tray at the bottom shows a temperature of 32°C and the date 17-04-2022.

# MPC+MPCs -FALAKNUMA : 2021-22

This screenshot shows the 'Stream' tab of a Google Classroom page for 'II Physics GDC Falaknuma'. The page features a blue header with the class name and a navigation menu with 'Stream', 'Classwork', 'People', and 'Grades'. Below the header is a large blue banner with the class name and a graphic of paper clips. A 'Class code' box displays 'uavhwlt'. An announcement box contains the text 'Announce something to your class'. The bottom of the page shows a Windows taskbar with a weather widget for Huzur at 33°C and a system clock showing 18:50 on 17-04-2022.

This screenshot shows the 'People' tab of the same Google Classroom page. The 'Teachers' section lists two individuals: 'chandana N' and 'Harika K'. The 'Students' section indicates there are '21 students'. The Windows taskbar at the bottom shows a weather widget for Huzur at 32°C (Partly cloudy) and a system clock showing 19:22 on 17-04-2022.



# II MPCs : 2021-22

The screenshot shows the Google Classroom interface for a class named "II MPCs(2021-22) A+B". The browser tabs include "Inbox (941) - chandana.hcu06@..." and "II MPCs(2021-22) A+B". The address bar shows the URL "classroom.google.com/u/0/c/MjQwOTg2OTc0NTQ0". The navigation menu includes "Stream", "Classwork", "People", and "Grades". A large blue banner at the top displays the class name "II MPCs(2021-22) A+B" with a background image of paper clips. Below the banner, there is a "Class code" section showing "cfa4w5n" and a "WhatsApp Image...jpeg" thumbnail. A text box prompts the user to "Announce something to your class". The system tray at the bottom shows a temperature of 33°C, weather "Haze", and the date "17-04-2022".

The screenshot shows the "People" page in Google Classroom for the class "II MPCs(2021-22) A+B". The browser tabs include "Inbox (941) - chandana.hcu06@..." and "People in II MPCs(2021-22) A+B". The address bar shows the URL "classroom.google.com/u/0/rj/MjQwOTg2OTc0NTQ0/sort-last-name". The navigation menu includes "Stream", "Classwork", "People", and "Grades". The "Teachers" section lists two individuals: "chandana N" and "Harika K". The "Students" section indicates there are "150 students". The system tray at the bottom shows a temperature of 32°C, weather "Partly cloudy", and the date "17-04-2022".

# II MPC : 2021-22

This screenshot shows the 'Stream' tab of a Google Classroom page. The page title is 'II MPC(2021-22) A+B'. The URL is 'classroom.google.com/u/0/c/MjQwOTg2OTY2NjU4'. The class code is '7pym3t3'. There is an announcement box with a profile picture and the text 'Announce something to your class'. The weather at the bottom is 33°C Haze. The system tray shows the date as 17-04-2022 and time as 18:51.

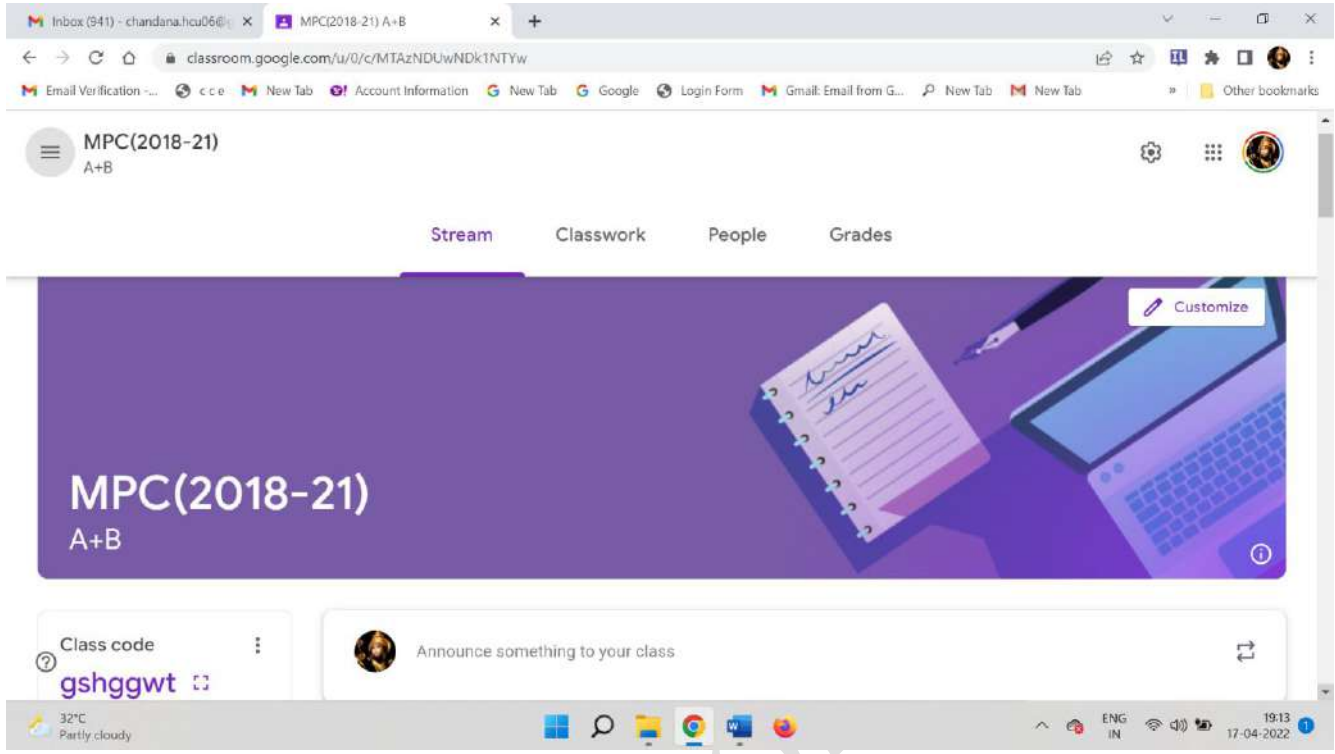
This screenshot shows the 'People' tab of the same Google Classroom page. The page title is 'II MPC(2021-22) A+B'. The URL is 'classroom.google.com/u/0/r/MjQwOTg2OTY2NjU4/sort-last-name'. The 'Teachers' section lists two teachers: 'chandana N' and 'Harika K'. The 'Students' section shows '68 students'. The weather at the bottom is 32°C Partly cloudy. The system tray shows the date as 17-04-2022 and time as 19:23.

# MPCs+MPC -FALAKNUMA 2021-22

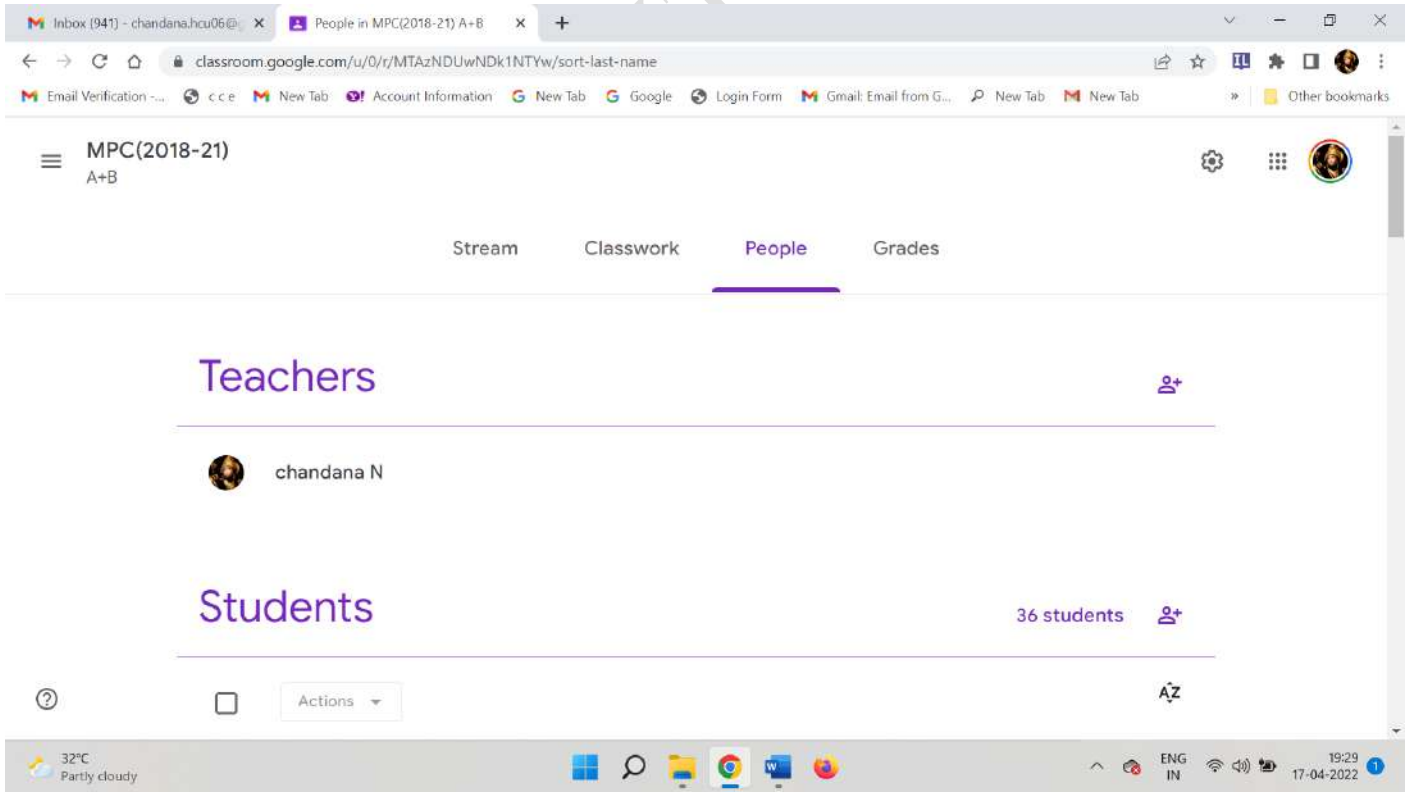
This screenshot shows the Google Classroom interface for the class 'FALAKNUMA(2018-21) MPCs and MPC'. The browser tabs include 'Inbox (341) - chandana.hcu06@...' and 'FALAKNUMA(2018-21) MPCs and MPC'. The address bar shows 'classroom.google.com/u/0/rj/MTgzNDQyODM4MDcz'. The page header includes the class name and navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. A large teal banner at the top displays the class name and subject. Below the banner, there is a 'Class code' field showing 'swlrnio' and an announcement box with the text 'Announce something to your class'. A 'WhatsApp Image...jpeg' thumbnail is visible. The Windows taskbar at the bottom shows a temperature of 33°C, 'Haze' weather, and the date '17-04-2022'.

This screenshot shows the 'People' page in Google Classroom for the class 'FALAKNUMA(2018-21) MPCs and MPC'. The browser tabs include 'Inbox (941) - chandana.hcu06@...' and 'People in FALAKNUMA(2018-21)'. The address bar shows 'classroom.google.com/u/0/rj/MTgzNDQyODM4MDcz/sort-last-name'. The page header includes the class name and navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. The 'People' tab is active, showing a 'Teachers' section with one teacher listed: 'chandana N'. Below this is a 'Students' section showing '10 students'. At the bottom, there is an 'Actions' dropdown menu and a search icon. The Windows taskbar at the bottom shows a temperature of 32°C, 'Partly cloudy' weather, and the date '17-04-2022'.

# MPC (2018-21)



This screenshot shows the Google Classroom interface for the class MPC(2018-21) A+B. The browser address bar shows the URL classroom.google.com/u/0/c/MTAzNDUwNDk1NTYw. The page features a purple header with the class name and a 'Customize' button. Below the header are navigation tabs for Stream, Classwork, People, and Grades. A large purple banner displays the class name and a background image of a notebook and laptop. A 'Class code' box shows 'gshggwt' with a copy icon. An 'Announce something to your class' box is also visible. The system tray at the bottom shows a temperature of 32°C, 'Partly cloudy' weather, and the date 17-04-2022 at 19:13.



This screenshot shows the 'People' page in Google Classroom for the class MPC(2018-21) A+B. The browser address bar shows the URL classroom.google.com/u/0/rj/MTAzNDUwNDk1NTYw/sort-last-name. The page has navigation tabs for Stream, Classwork, People, and Grades, with 'People' selected. The 'Teachers' section lists one teacher, 'chandana N', with a plus icon to add more. The 'Students' section shows '36 students' with a plus icon to add more. At the bottom, there is an 'Actions' dropdown menu and a sort icon 'AZ'. The system tray at the bottom shows a temperature of 32°C, 'Partly cloudy' weather, and the date 17-04-2022 at 19:29.

# III MPC (2021-22)

The screenshot shows the Google Classroom interface for the class 'III MPC(2021-22) A+B'. The browser address bar shows the URL 'classroom.google.com/u/0/c/MTAzNDUwNDk1NTA0'. The page header includes the class name and a 'Customize' button. Below the header are navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. The main content area features a blue banner with the class name and a 'Class code' box displaying 'zet336s'. To the right of the code is an 'Announce something to your class' input field. The Windows taskbar at the bottom shows the date as 17-04-2022 and the time as 19:13.

The screenshot shows the 'People' page in Google Classroom for the class 'III MPC(2021-22) A+B'. The browser address bar shows the URL 'classroom.google.com/u/0/r/MTAzNDUwNDk1NTA0/sort-last-name'. The navigation tabs are 'Stream', 'Classwork', 'People', and 'Grades', with 'People' currently selected. The page is divided into two sections: 'Teachers' and 'Students'. Under 'Teachers', two individuals are listed: 'chandana N' and 'Harika K'. Under 'Students', it indicates there are '47 students'. The Windows taskbar at the bottom shows the date as 17-04-2022 and the time as 19:30.

# MPCs (2018-21)

The screenshot shows the Google Classroom interface for the class 'MPCs(2018-21) A+B'. At the top, there are navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. Below these is a large blue banner with the class name 'MPCs(2018-21) A+B' and a 'Customize' button. Under the banner, there is a 'Class code' box displaying 'i3r3lxv' and an 'Announce something to your class' text box. The bottom of the page shows a Windows taskbar with the date '17-04-2022' and time '19:14'.

The screenshot shows the 'People' page in Google Classroom for the class 'MPCs(2018-21) A+B'. The navigation tabs at the top are 'Stream', 'Classwork', 'People', and 'Grades', with 'People' being the active tab. The page is divided into two main sections: 'Teachers' and 'Students'. Under 'Teachers', there is one teacher listed: 'chandana N'. Under 'Students', it shows '61 students'. At the bottom, there is an 'Actions' dropdown menu and a sort icon 'AZ'. The Windows taskbar at the bottom shows the date '17-04-2022' and time '19:31'.



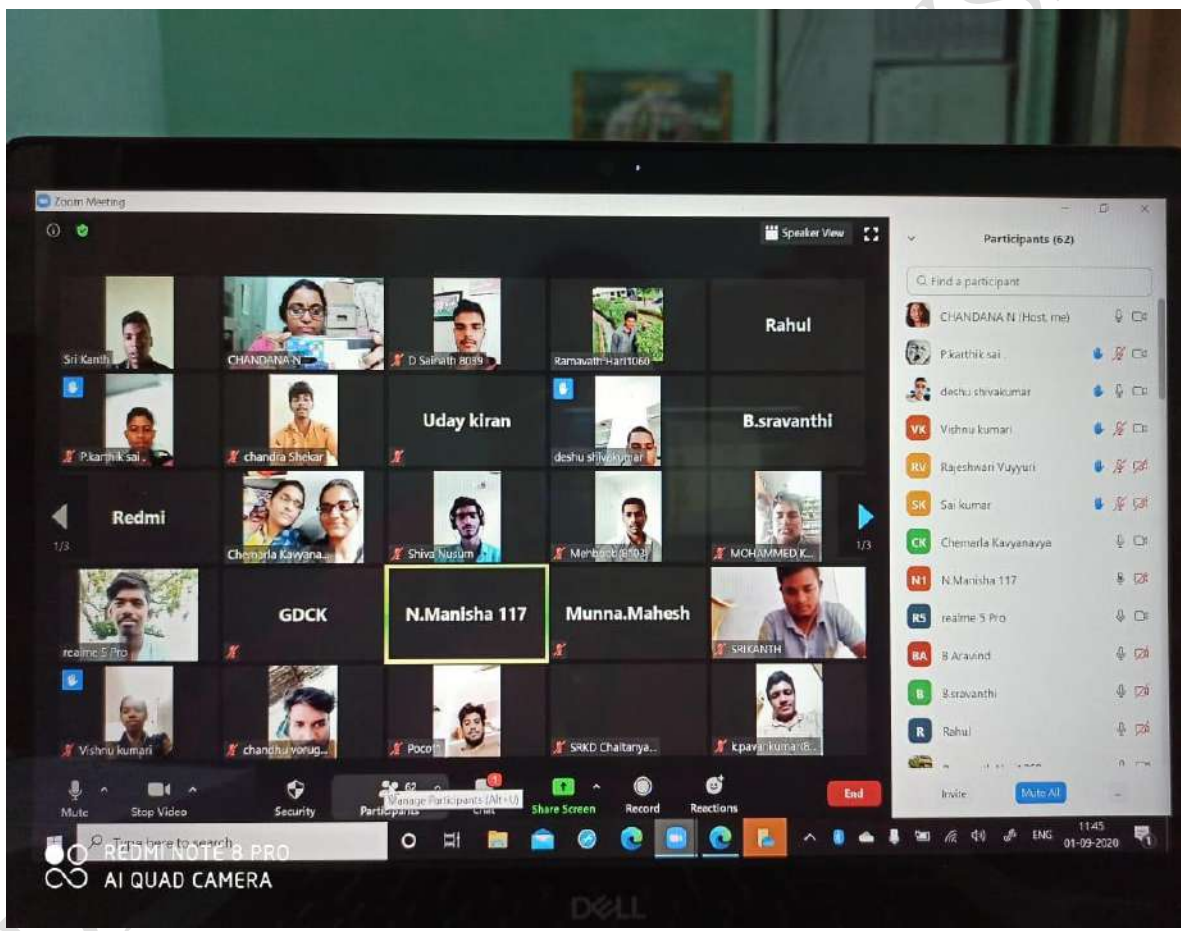
# III MPCs : 2021-22

This screenshot shows the Google Classroom interface for the class 'III MPCs(2021-22) A+B'. The browser address bar shows the URL 'classroom.google.com/u/0/c/MTAyODA1MzgwODMy'. The page features a green header with the class name and a 'Customize' button. Below the header, there are navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. A 'Class code' box displays 'kfaakv3'. An announcement box contains the text 'Announce something to your class'. The system tray at the bottom shows a temperature of 32°C, 'Partly cloudy' weather, and the date '17-04-2022'.

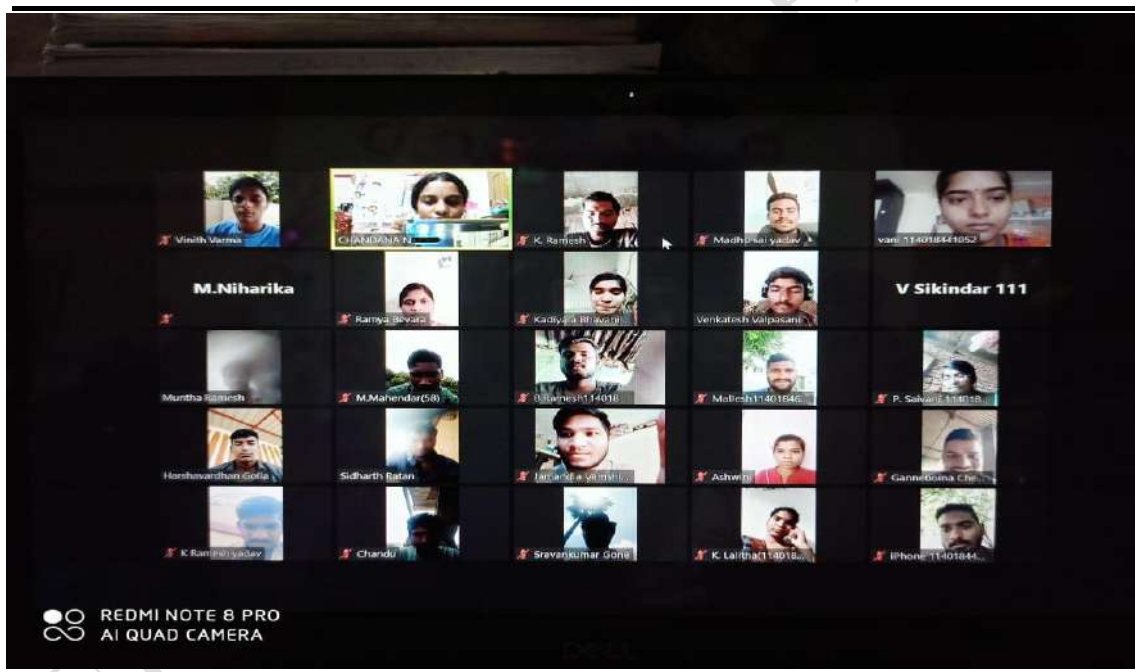
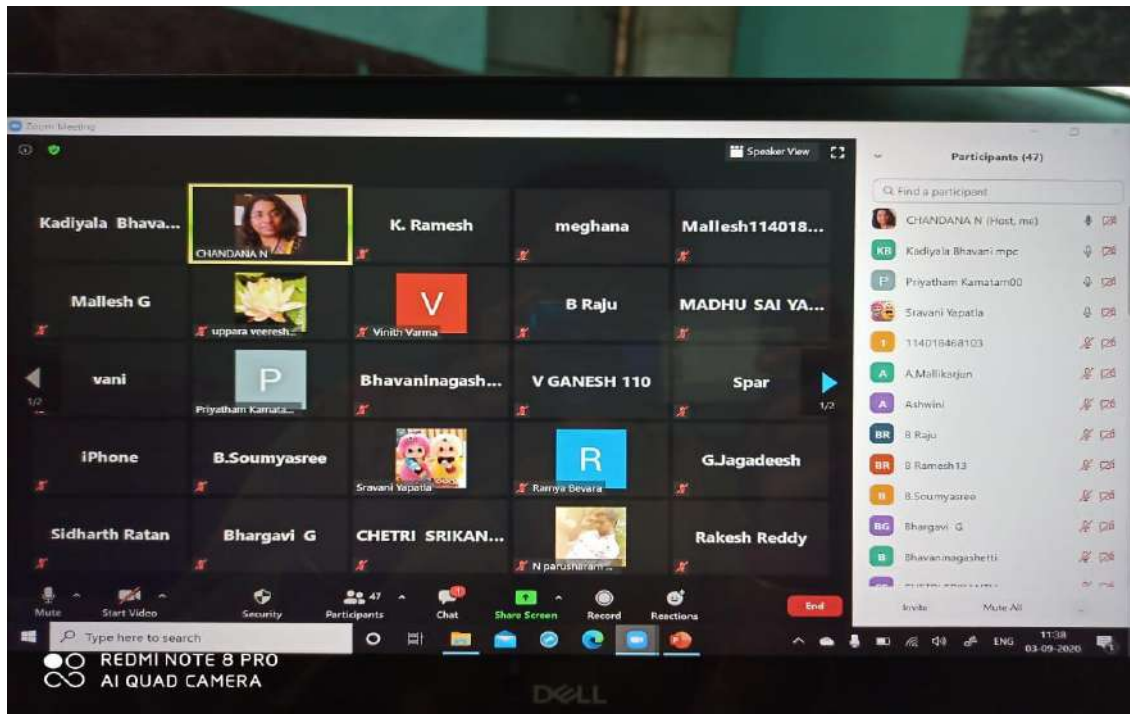
This screenshot shows the 'People' page in Google Classroom for the class 'III MPCs(2021-22) A+B'. The browser address bar shows the URL 'classroom.google.com/u/0/rj/MTAyODA1MzgwODMy/sort-last-name'. The page has navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades', with 'People' currently selected. Under the 'Teachers' section, two teachers are listed: 'chandana N' and 'Harika K'. Under the 'Students' section, it indicates there are '96 students'. The system tray at the bottom shows a temperature of 32°C, 'Partly cloudy' weather, and the date '17-04-2022'.

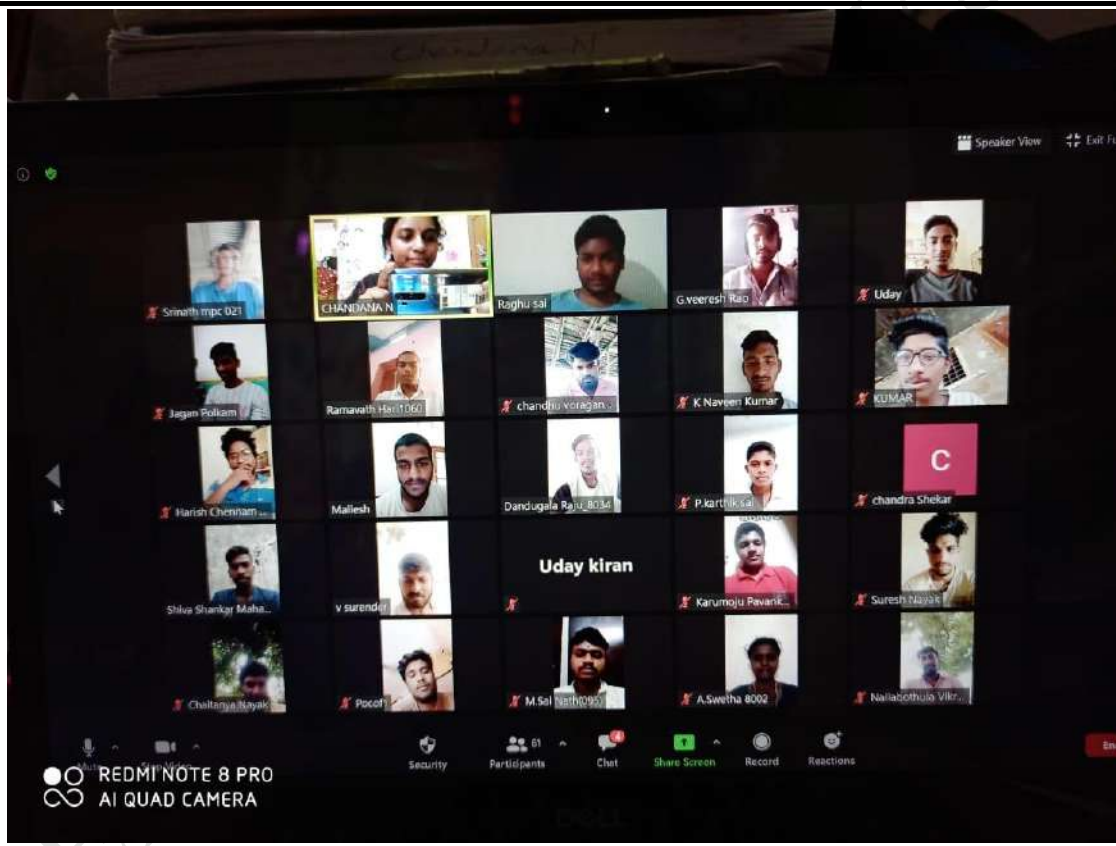
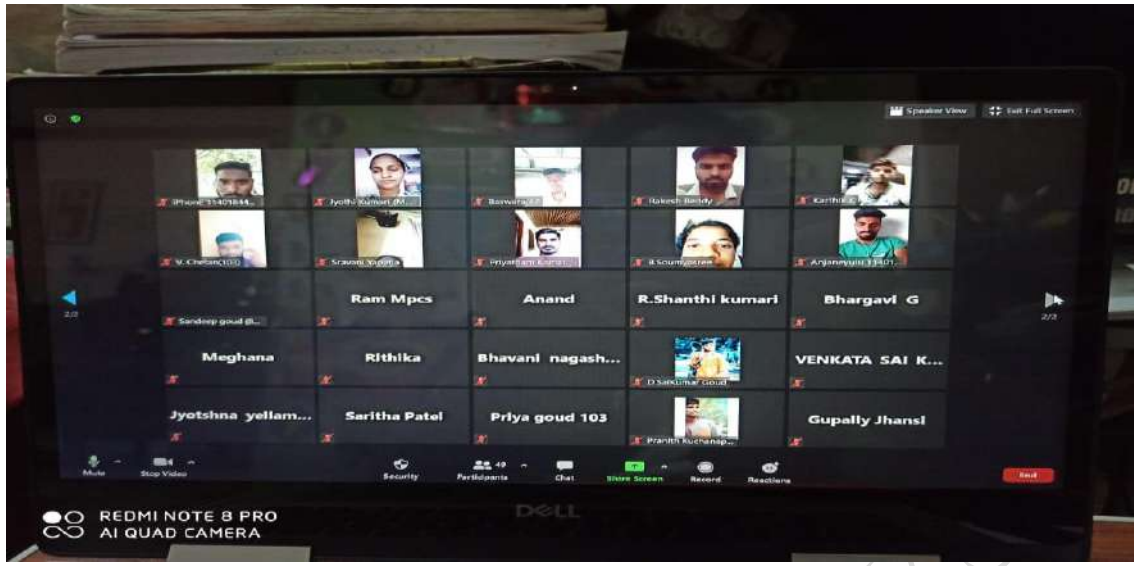
## Zoom meetings

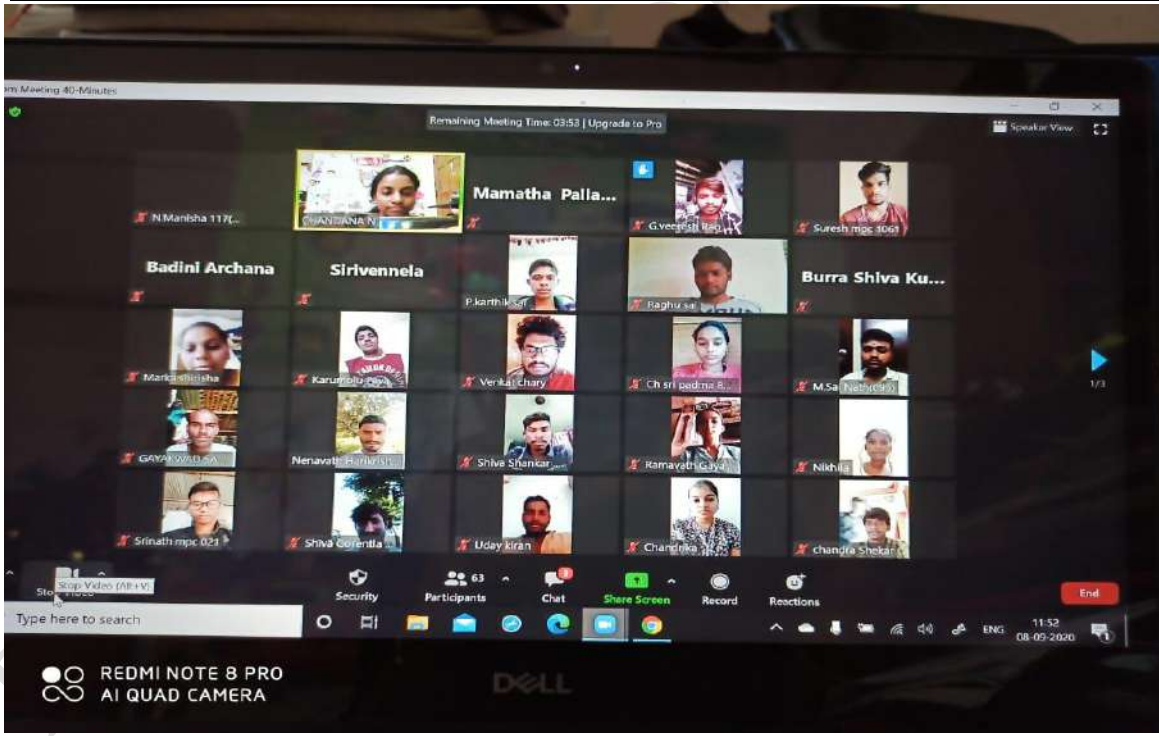
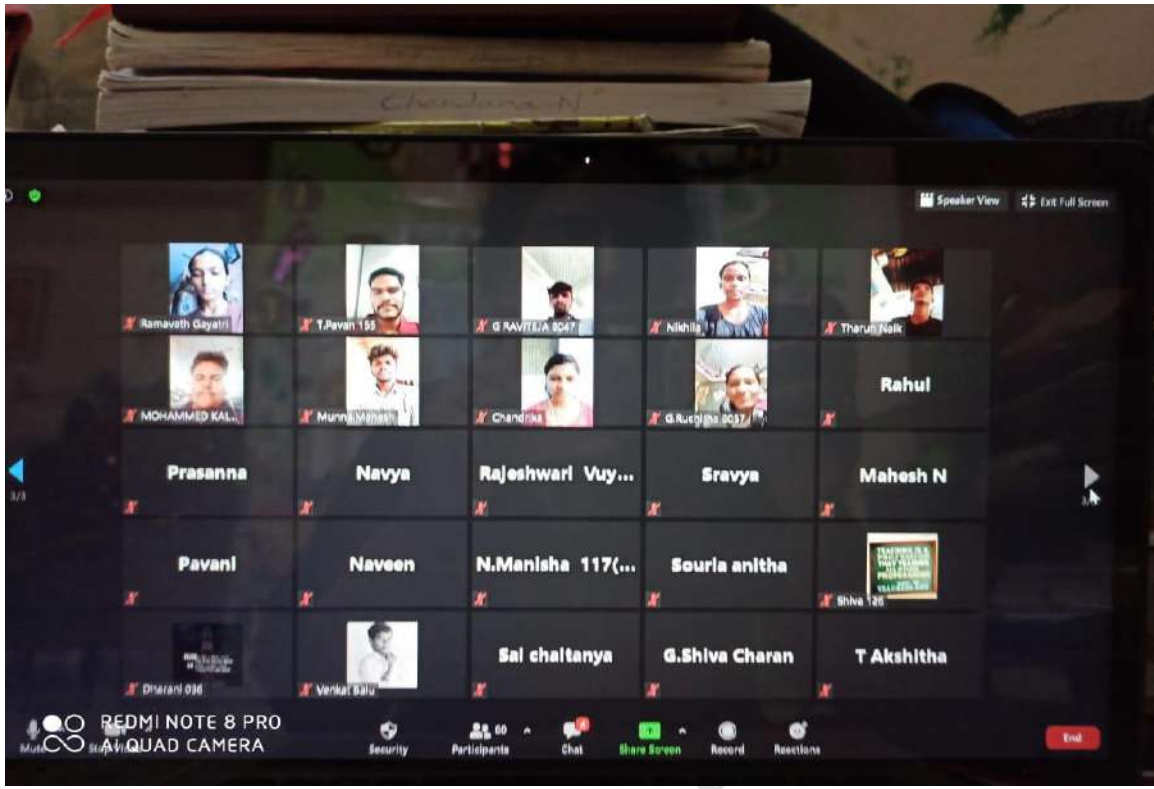
- All the online classes to the students were handled using Zoom meetings app.
- The link for joining the class was shared one day before the commencement of class.
- Each student was instructed to install the ZoomApp and were given the SoP guidelines to be followed while accessing the online content and attending the online classes.



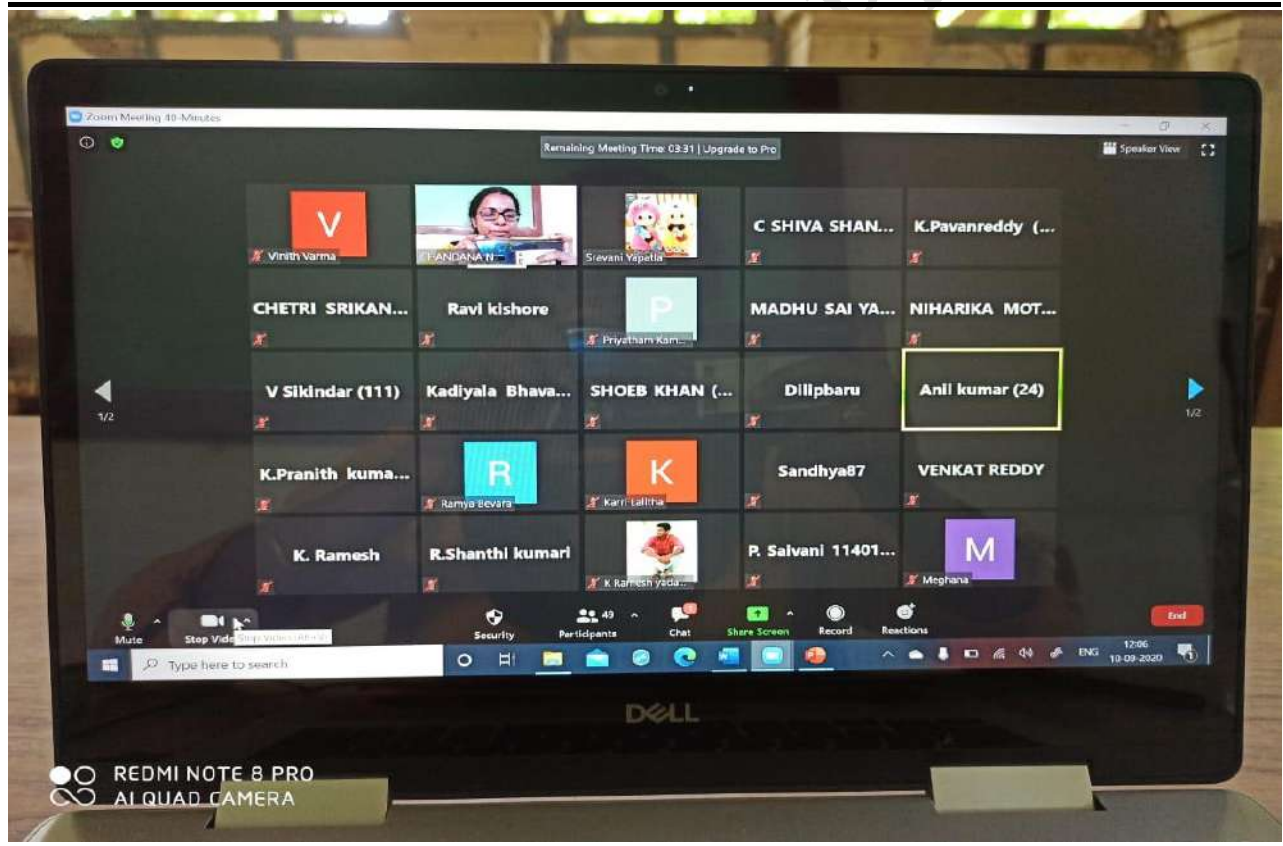
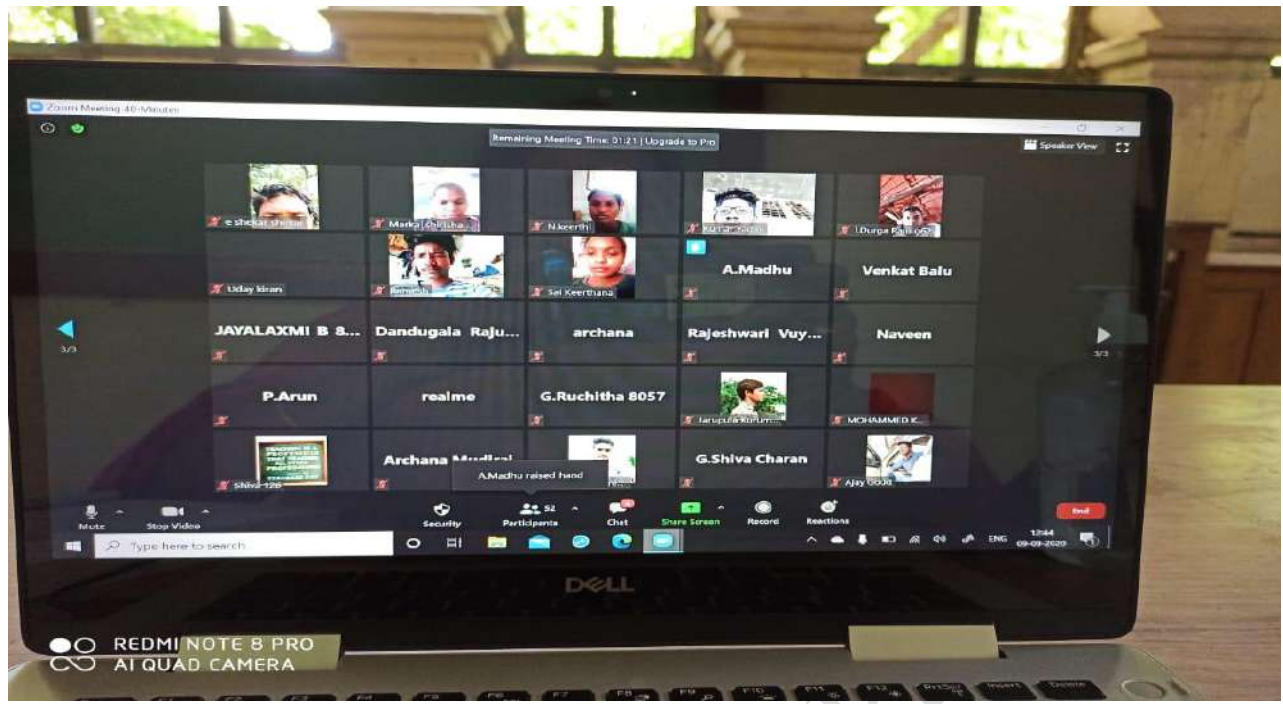


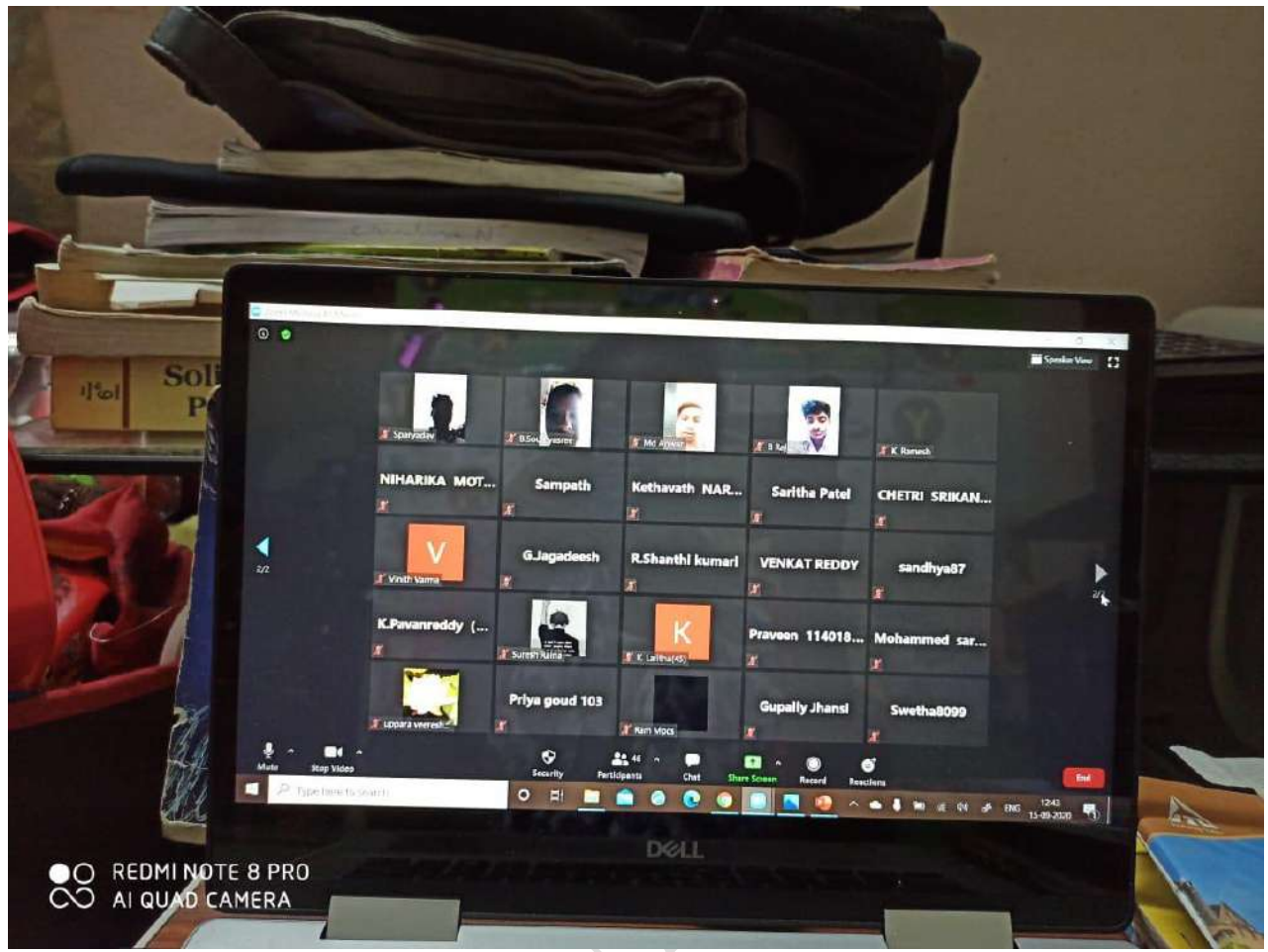




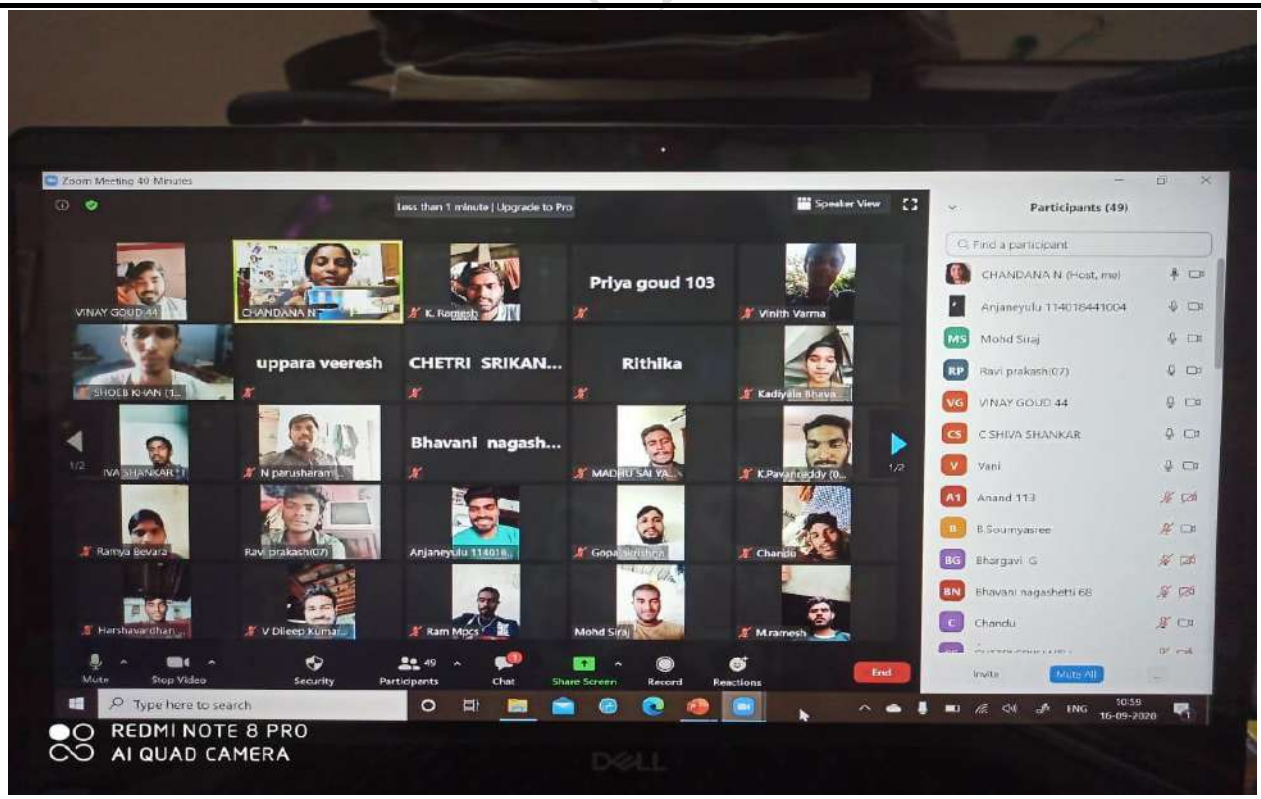






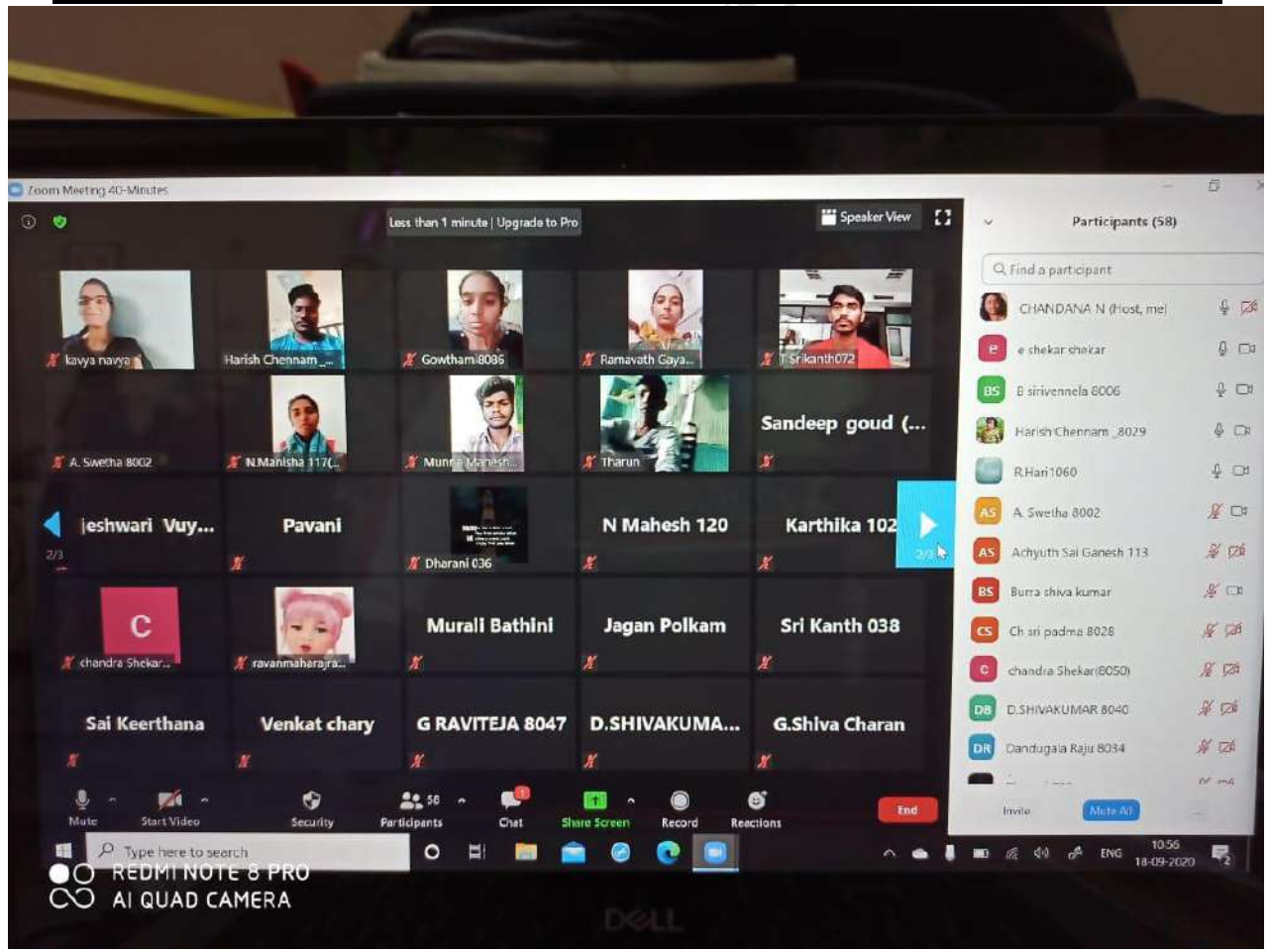
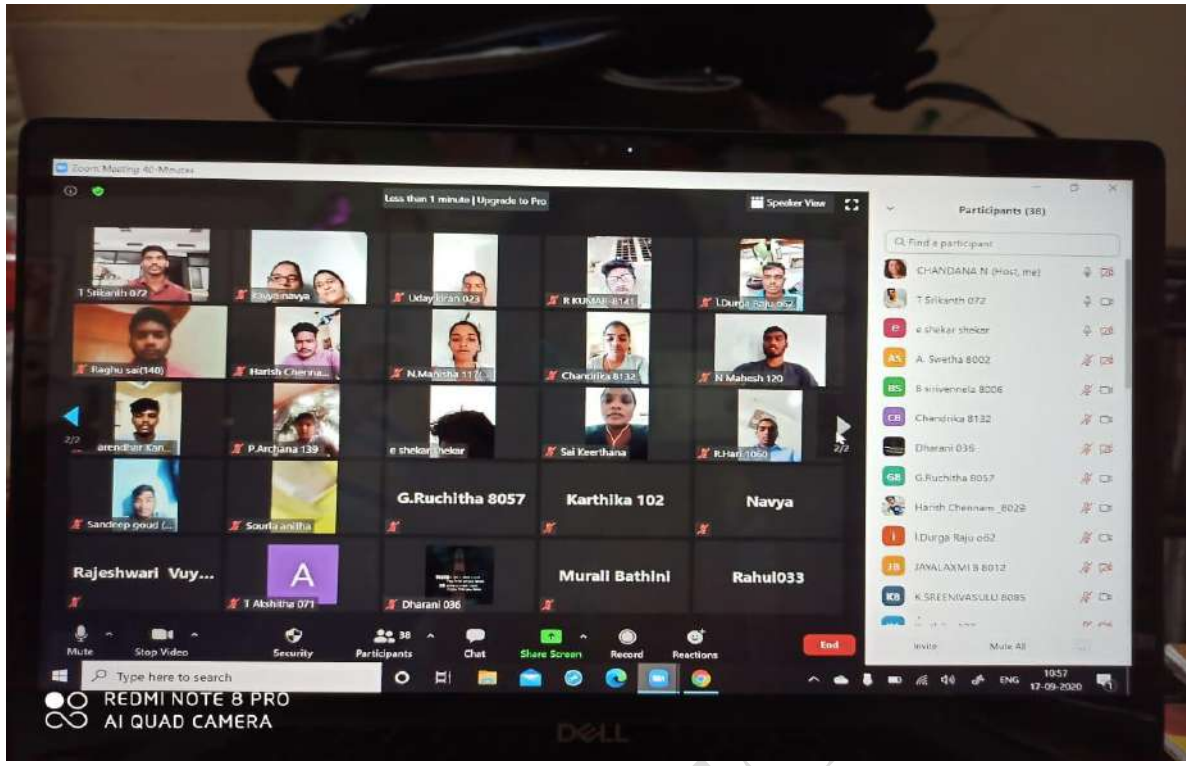


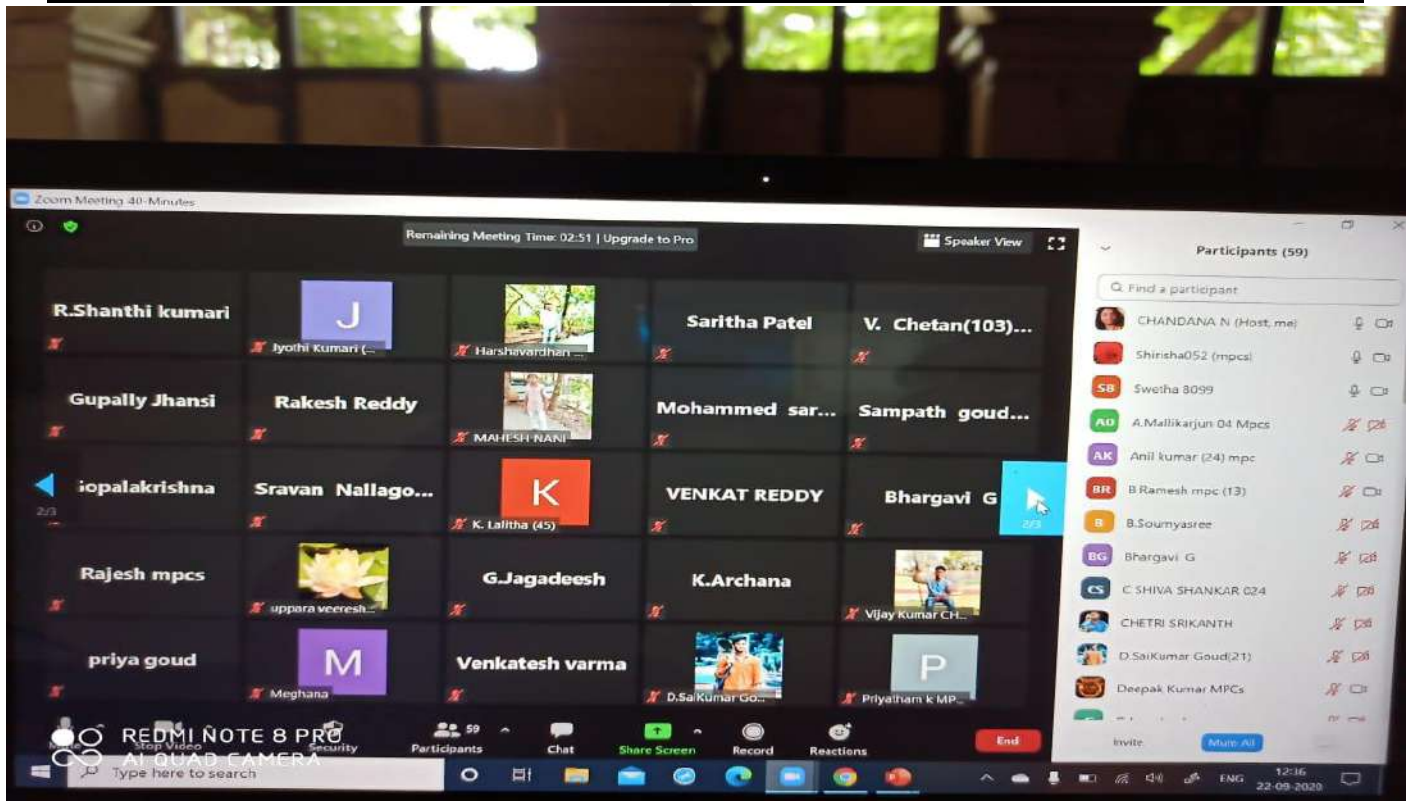
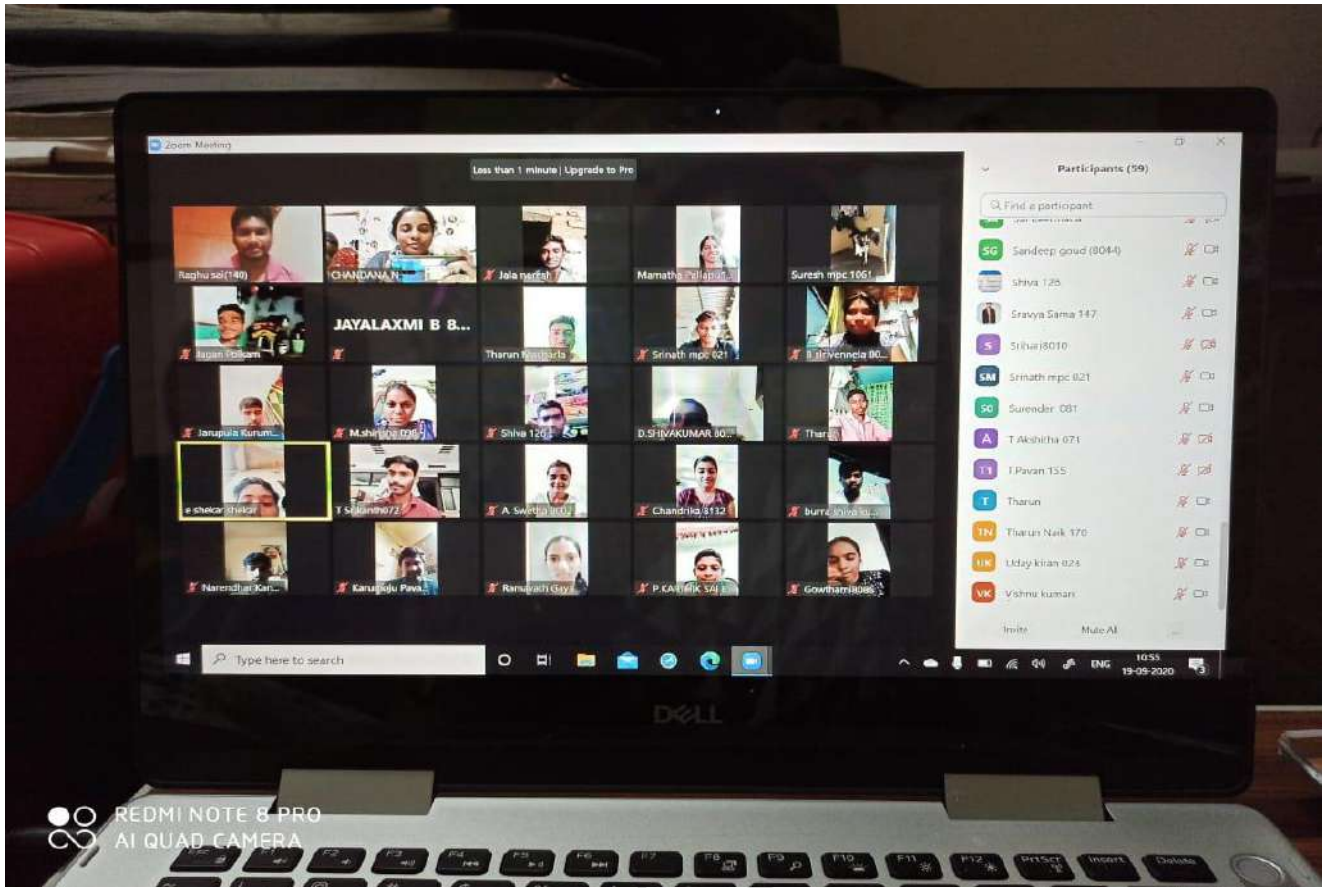
REDMI NOTE 8 PRO  
AI QUAD CAMERA



REDMI NOTE 8 PRO  
AI QUAD CAMERA







## WhatsApp

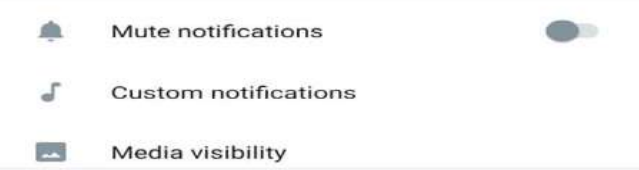
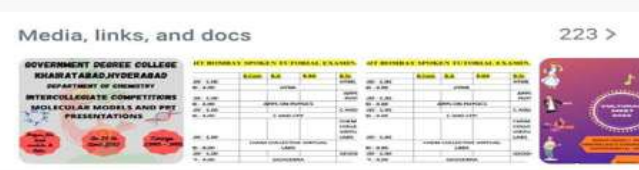
S.No	Group name	Year	Activity
1	MPC	I	Regular notes, PPTs, news related to science, Job opportunities, Notices of college and department were shared through WhatsApp groups.
2	MPCs	I	
3	MPC	II	
4	MPCs	II	
<u>5</u>	<u>MPC</u>	<u>III</u>	
<u>6</u>	<u>MPCs</u>	<u>III</u>	



Wear mask& wash your hands always.. Don't go outside unnecessary 😊😊 Be safe with corona..  
 Created by +91 73309 89404, 11/10/19



Friends e group lo elanti anavasaram aina msg lu pettaradhu. Alantivi pettinacho e group nundi remove cheyyabadunu. Only study ki ... [Read more](#)  
 Created by +91 98856 36204, 06/08/19







# I MPC 2021 - 22

Group · 39 participants



Group call



Add



Search

[Add group description](#)

Created by Shantikala Madam Gdck, 04/10/21

Media, links, and docs

191 >



	Exam	KA	KRR	SLC
09-11-20	HTMA			HTMA
09-11-20				APPS
09-11-20	APPS ON PHYSICS			PPT
09-11-20				C AND EPF
09-11-20				CHSM
09-11-20				COLLE
09-11-20				WRTU
09-11-20				LABS
09-11-20	TAMM COLLECTIVE WRITING LABS			
09-11-20				GEOSU
09-11-20				WIKIHERBA



	Exam	KA	KRR	SLC
09-11-20	HTMA			HTMA
09-11-20				APPS
09-11-20	APPS ON PHYSICS			PPT
09-11-20				C AND EPF
09-11-20				CHSM
09-11-20				COLLE
09-11-20				WRTU
09-11-20				LABS
09-11-20	CHSM COLLECTIVE WRITING LABS			
09-11-20				GEOSU
09-11-20				WIKIHERBA



Media, links, and docs

188 >



Mute notifications



Mute notifications



Custom notifications



Custom notifications



Media visibility



Media visibility





### III MPCs- girls 2021-22

Group · 47 participants



Group call



Add



Search



Group call



Add



Search

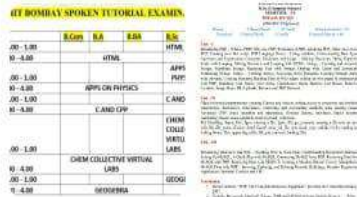
Add group description

Created by +91 91827 22662, 29/10/19

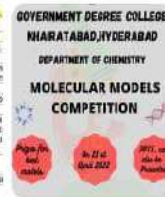
Official group I MPCs 2021-22

Created by You, 29/09/21

#### Media, links, and docs 216 >



#### Media, links, and docs 209 >



Mute notifications



Custom notifications



Media visibility



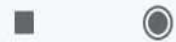
Mute notifications



Custom notifications



Media visibility





# MPC GDCK 2018-21

Group · 78 participants



Group call



Add



Search

Add group description

Created by Rithika mpc 2 Gdck, 11/04/20

Media, links, and docs

28 >



Mute notifications



Custom notifications



Media visibility



# MPC&MPCS 2016-19

Group · 34 participants



Group call



Search

Add group description

Created on 19/07/18

Media, links, and docs

9 >



Mute notifications



Custom notifications



Media visibility



12:12 PM



# M.P.Cs 2018-21

Group · 103 participants



Group call



Add



Search

Truth and dare

Created by Ramesh | Mpcs Gdck, 05/10/18

Media, links, and docs

69 >



Mute notifications



Custom notifications



Media visibility

12:13 PM



# FINAL YEAR PHYSICS (2K17-20)

Group · 37 participants



Group call



Add



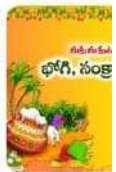
Search

For future information

Created on 12/04/20

Media, links, and docs

24 >



Mute notifications



Custom notifications

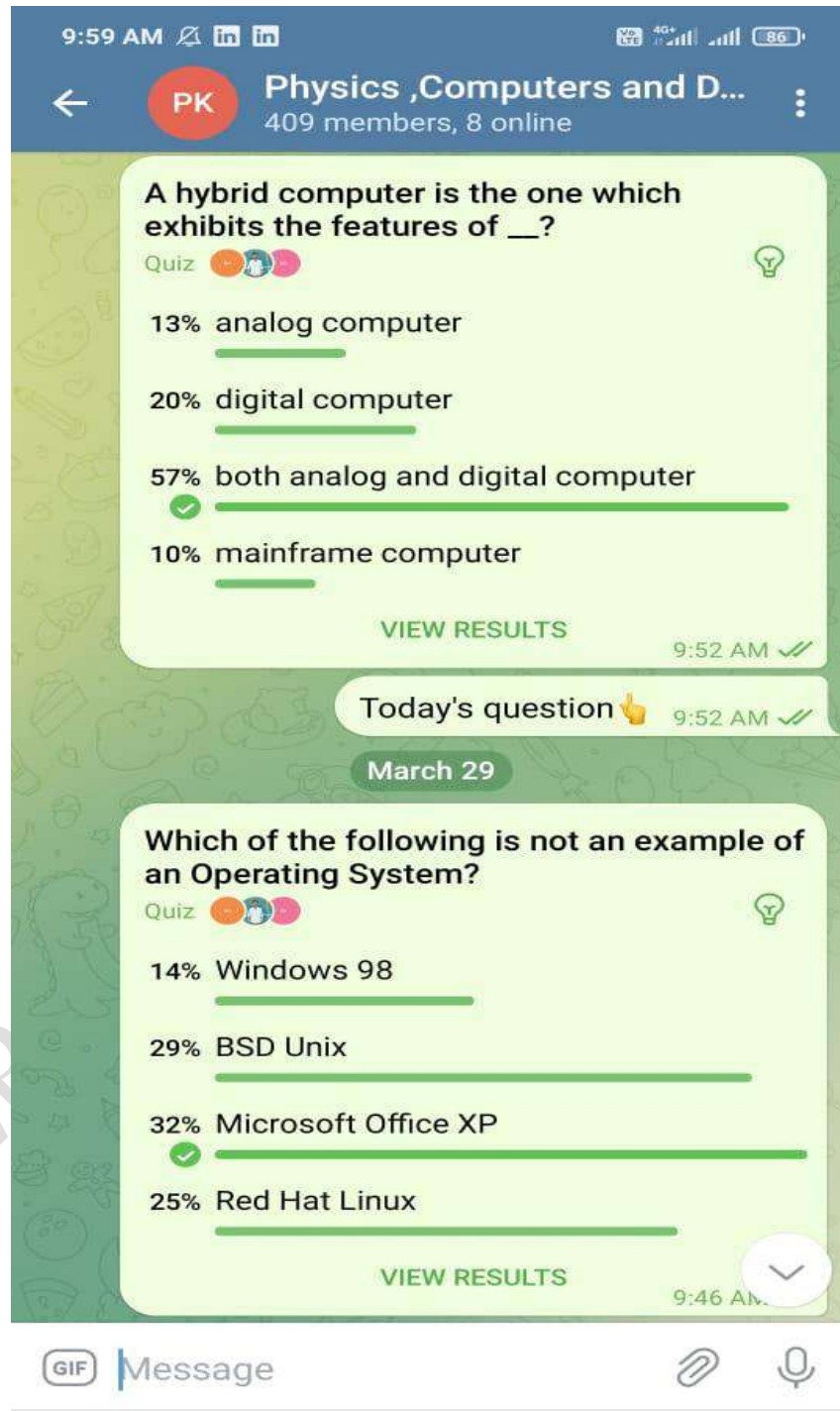


Media visibility



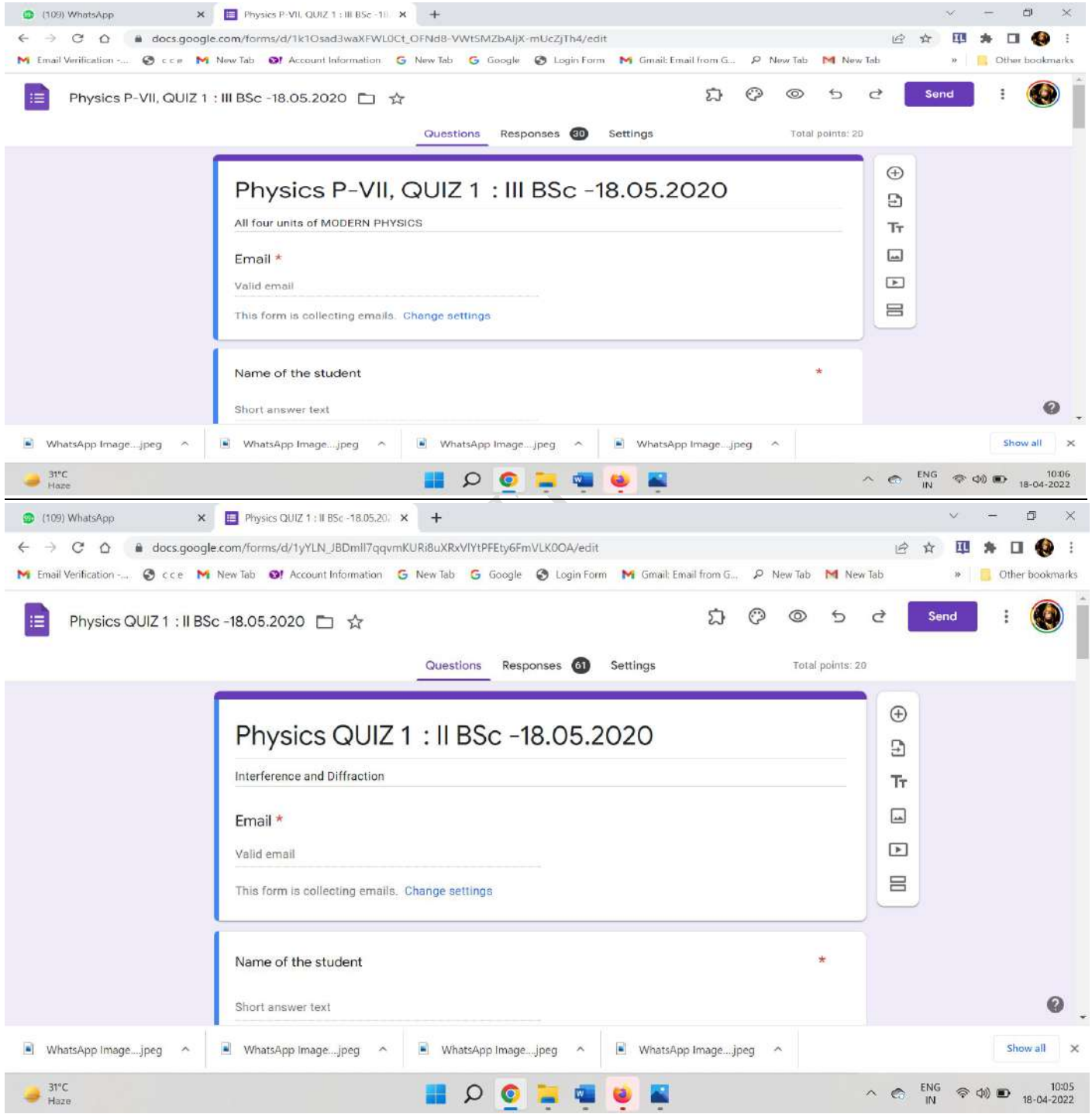
## Telegram

A telegram group is maintained by the Head of the department Ms.Chandana.N in sharing the information on career opportunities and guidance ,PG entrance material and every day poll on the PG Entrance questions is one of the best practice adopted by the department since the pandemic time.



# Google forms

Google forms are used extensively by the department to conduct internal examinations, online quizzes, collecting feedback, collecting data from the students. The students are being continuously engaged in using this platform as one of the best interactive learning strategies.



# NATIONAL SCIENCE DAY ONLINE QUIZ CONDUCTED DURING PANDEMIC

## 28.02.2021

The screenshot shows a Google Forms interface for a quiz. The title is "QUIZ - National Science Day - 28.02.2021 GDC - KHAIRATA". The form is in "Questions" mode, with 859 responses and a total of 50 points. A banner image at the top shows a silhouette of a person using a telescope against a starry night sky. Below the banner, the quiz title and location "GDC - KHAIRATABAD, HYDERABAD" are displayed, along with the organizing departments: "Organised by Departments of Physics & Computer Science, GDC Khairatabad, Hyderabad." The browser's taskbar at the bottom shows the date as 18-04-2022 and a temperature of 31°C with haze.

This screenshot shows the "Responses" tab of the Google Forms quiz. It displays "859 responses" and a toggle for "Accepting responses" which is turned on. Below this, there are three tabs: "Summary", "Question", and "Individual", with "Summary" selected. The "Insights" section provides the following statistics:

Metric	Value
Average	38.55 / 50 points
Median	42 / 50 points
Range	4 - 50 points

The "Total points distribution" section is visible at the bottom of the insights area. The browser's taskbar at the bottom shows the date as 18-04-2022 and a temperature of 31°C with haze.

## **USAGE OF ICT TOOLS IN CURRICULUM**

Name of the faculty : AMBALA SUDARSHAN

Designation : Lecturer

Subject : Physics

Email ID : [ambalask.72@gmail.com](mailto:ambalask.72@gmail.com)

### **List of videos uploaded to Youtube channel :**

S. No	Topic of YouTube class	Duration (Min)	Link	No of views
1	Band Theory of P N Junction Part 1	31.04	<a href="https://youtu.be/e_RhqT6XhYM">https://youtu.be/e_RhqT6XhYM</a>	92
2	Band Theory of P N Junction Part 2	28.21	<a href="https://youtu.be/MfJfcDGYLto">https://youtu.be/MfJfcDGYLto</a>	57
3	P N Junction Diode Part 1	28.43	<a href="https://youtu.be/T7L26rKelgs">https://youtu.be/T7L26rKelgs</a>	155
4	P N Junction Diode Part 2	20.00	<a href="https://youtu.be/HK_bJgo6DMo">https://youtu.be/HK_bJgo6DMo</a>	47
5	P N Junction Diode Part 3	40.23	<a href="https://youtu.be/_MdMLoc2wBQ">https://youtu.be/_MdMLoc2wBQ</a>	49
6	Transistors Part 1	44.47	<a href="https://youtu.be/pDtjXSgR5u8">https://youtu.be/pDtjXSgR5u8</a>	10
7	Transistors Part 2	35.53	<a href="https://youtu.be/e72mVhh-l1k">https://youtu.be/e72mVhh-l1k</a>	12
8	Amplifier Part 1	47.37	<a href="https://youtu.be/rxF5_XgVU5A">https://youtu.be/rxF5_XgVU5A</a>	20
9	Amplifier Part 2	36.05	<a href="https://youtu.be/1woD6K2p8LY">https://youtu.be/1woD6K2p8LY</a>	9
10	Oscillators	56.08	<a href="https://youtu.be/m2ZFkOybnBM">https://youtu.be/m2ZFkOybnBM</a>	73
11	Number System Part 1	39.17	<a href="https://youtu.be/BOTSsL3_ojU">https://youtu.be/BOTSsL3_ojU</a>	34
12	Number System Part 2	40.49	<a href="https://youtu.be/XOaySqKctzE">https://youtu.be/XOaySqKctzE</a>	36
13	Logic Gates Part 1	32.35	<a href="https://youtu.be/YEcArQTZBiY">https://youtu.be/YEcArQTZBiY</a>	34
14	Logic Gates Part 2	31.37	<a href="https://youtu.be/eaUf_hDLUOY">https://youtu.be/eaUf_hDLUOY</a>	18
15	Logic Gates Part 3	30.27	<a href="https://youtu.be/fS2c16zoo8E">https://youtu.be/fS2c16zoo8E</a>	30
16	Adders	32.29	<a href="https://youtu.be/RoafpfJxMos">https://youtu.be/RoafpfJxMos</a>	15
17	Passive & Active Elements Part 1	36.17	<a href="https://youtu.be/vi15pEnx2YA">https://youtu.be/vi15pEnx2YA</a>	85



18	Passive & Active Elements Part 2	35.35	<a href="https://youtu.be/eAXslbmqlZs">https://youtu.be/eAXslbmqlZs</a>	55
19	Passive & Active Elements Part 3	38.59	<a href="https://youtu.be/mYvTj-oDx98">https://youtu.be/mYvTj-oDx98</a>	28
20	Network Theorems Part 1	34.58	<a href="https://youtu.be/gjf-YcQRXEk">https://youtu.be/gjf-YcQRXEk</a>	101
21	Network Theorems Part 2	34.50	<a href="https://youtu.be/Nagk_DRXN4w">https://youtu.be/Nagk_DRXN4w</a>	60
22	Network Theorems Part 3	32.21	<a href="https://youtu.be/ASVols_RoKo">https://youtu.be/ASVols_RoKo</a>	69
23	Network Theorems Part 4	30.13	<a href="https://youtu.be/ZqXRyF4YNkQ">https://youtu.be/ZqXRyF4YNkQ</a>	39
24	Two Port Network Part 1	42.52	<a href="https://youtu.be/yHEbfRiTtck">https://youtu.be/yHEbfRiTtck</a>	70
25	Two Port Network Part 2	32.49	<a href="https://youtu.be/1Aj2M5Ctl3g">https://youtu.be/1Aj2M5Ctl3g</a>	40
26	LR CR LC LCR Circuits Part 1	36.08	<a href="https://youtu.be/4lix9l42b9U">https://youtu.be/4lix9l42b9U</a>	50
27	LR CR LC LCR Circuits Part 2	30.32	<a href="https://youtu.be/uAfN_yrMFAM">https://youtu.be/uAfN_yrMFAM</a>	55
28	LR CR LC LCR Circuits Part 3	37.33	<a href="https://youtu.be/nerE51vrFwQ">https://youtu.be/nerE51vrFwQ</a>	44
29	AC Currents Part 1	34.53	<a href="https://youtu.be/ee5ot4G-vqY">https://youtu.be/ee5ot4G-vqY</a>	47
30	AC Currents Part 2	30.56	<a href="https://youtu.be/ux6Szl17jVo">https://youtu.be/ux6Szl17jVo</a>	68
31	AC Currents Part 3	31.54	<a href="https://youtu.be/sUhx3Fmc4cg">https://youtu.be/sUhx3Fmc4cg</a>	83
32				
33				
34				

# YouTube channel

<https://www.youtube.com/user/SuperAssange>

The screenshot displays a web browser window with the YouTube channel page for 'ambalaSudarshan'. The channel has 262 subscribers. The 'Uploads' section features a grid of video thumbnails with the following details:

Video Title	Duration	Views	Posted
AC Currents Part 3	31:54	83 views	1 year ago
AC Currents Part 2	30:56	68 views	1 year ago
AC Currents Part 1	34:53	47 views	1 year ago
LR CR LC LCR Circuits Part 3	37:39	44 views	1 year ago
LR CR LC LCR Circuits Part 2	30:32	55 views	1 year ago

Below the first row, additional thumbnails are visible for 'Resonance / Hitches / Bandpass', 'Two-Port Network', 'Norton Theorem Ex...', and 'Thevenin's Theorem'. The browser's taskbar at the bottom shows the system tray with a temperature of 36°C, weather 'Haze', and the date 25-03-2022 at 17:35.

DEPARTMENT

## **PPT in Curriculum**

Name of the faculty : AMBALA SUDARSHAN

Designation : Lecturer

Subject : Physics

Email ID : [ambalask.72@gmail.com](mailto:ambalask.72@gmail.com)

ICT tools : PPT

### **List of PPTs:**

<b>S.No</b>	<b>Topic of the PPT</b>	<b>Remarks</b>
1.	Band Theory of PN Junction	
2.	PN Junction Diode, its applications & Rectifiers	
3.	Transistors	
4.	Amplifiers	
5.	Oscillators	
6.	Number System	
7.	Logic Gates	
8.	Adders	
9.	Passive & Active Elements	
10.	Network Theorems	
11.	Two Port Network	
12.	LR CR LC LCR Circuits	
13.	AC Currents	
14.	ELECTRON EMISSION AND DUAL NATURE	
15.	Environmental Science	
16.	Fluids I	
17.	Green House Effect	
18.	Light and EM Spectrum	
19.	Light II	
20.	Magnetism II	
21.	Motors and Generators	
22.	Nuclear Radiation	
23.	Optics II	
24.	Relativity	
25.	Sound II	
26.	Spectroscopy	
27.	Standard Model Particle Physics	
28.	Thermodynamics I	
29.	Ultrasonics	
30.	Waves II	

## What'sApp

Name of the faculty : AMBALA SUDARSHAN

Designation : Lecturer

Subject : Physics

Email ID : [ambalask.72@gmail.com](mailto:ambalask.72@gmail.com)

Content : What's App

S.No	Group name	Year	Activity
1	MPC	I	Regular notes, PPTS, news related to science, Job opportunities, Notices of college and department
2	MPCs	I	
3	MPC	II	
4	MPCs	II	
5	MPC	III	
6	MPCs	III	

## Google Classroom

GDCK / SEM V / Paper V - MODERN PHYSICS

MPC

<https://classroom.google.com/c/NDU3MDU0MTg0Mzgy?cjc=aucvzcg>

The screenshot displays a Google Classroom interface. At the top, the course title is 'GDCK / SEM V / Paper V - MODERN PHYSICS MPC'. Below the title, there are navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'. A '+ Create' button is visible. The main content area lists four assignments with their respective posting dates: 'UNIT III CHAPTER 3 PARTICLE DETECTORS' (Posted Feb 5), 'UNIT III CHAPTER 2 ALPHA & BETA DECAYS' (Posted Feb 5), 'UNIT III CHAPTER 1 NUCLEAR STRUCTURE' (Posted Feb 1), and 'SEM V PAPER V MODERN PHYSICS SYLLABUS' (Posted Jan 21). The bottom of the image shows a Windows taskbar with the system tray displaying 35°C, Haze, and the date 25-03-2022.

# GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS

MPC

<https://classroom.google.com/c/NDU3MDUyNjA4ODkw?cjc=6ufn6ye>

Inbox (10) - ambalank72@gmail.com x Classwork for GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS MPC x (1) WhatsApp x +

classroom.google.com/w/NDU3MDUyNjA4ODkw/v/all

GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS MPC

Stream **Classwork** People Grades

+ Create Google Calendar Class Drive folder

- UNIT II Chapter 2 Mechanics of a Rigid body... Posted Feb 13
- UNIT II Chapter 1 Mechanics of particles - N... Posted Feb 13
- SEM I PAPER I MECHANICS & OSCILLATIONS... Posted Jan 21

36°C Haze 14:27 25-03-2022

# GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS

MPCs

<https://classroom.google.com/c/NDQ5NTkxMDA5MTI3?cjc=vxxjhpe>

Inbox (10) - ambalank72@gmail.com x Classwork for GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS MPCs x (1) WhatsApp x +

classroom.google.com/w/NDQ5NTkxMDA5MTI3/v/all

GDCK / SEM I / PAPER I - MECHANICS & OSCILLATIONS MPCs

Stream **Classwork** People Grades

+ Create Google Calendar Class Drive folder

- UNIT II Chapter 2 Mechanics of a Rigid b... 1 Posted Feb 13
- UNIT II Chapter 1 Mechanics of particles... 1 Posted Feb 13
- SEM I Paper I Mechanics & Oscillations ... 1 Posted Jan 21

36°C Haze 14:27 25-03-2022

# GDCK / SEM V / Paper V - MODERN PHYSICS MPCs

<https://classroom.google.com/c/NDQ5NTkxMDA5MDQ1?cjc=d4ktyq4>

GDCK / SEM V / Paper V - MODERN PHYSICS MPCs

Stream Classwork People Grades

+ Create Google Calendar Class Drive folder

- UNIT III CHAPTER 3 PARTICLE DETECTORS - ... Posted Feb 5
- UNIT III CHAPTER 2 ALPHA & BETA DECAYS ... Posted Feb 5
- UNIT III CHAPTER 1 NUCLEAR STRUCTURE - ... Posted Feb 1
- SEM V Paper V MODERN PHYSICS SYLLABUS Posted Jan 21

36°C Haze 14:28 25-03-2022

**Zoom meetings**

**2022-01-19**

CHAPTER 1 NUCLEAR STRUCTURE [Compatibility Mode] - Word

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat Tell me what you want to do

Clipboard Paste Font Paragraph Styles

### NUCLEAR SIZE

From Rutherford's  $\alpha$ -particle scattering experiment, it has been clear nucleus has a finite mass. The result of  $\alpha$ -scattering experiment can be explained on the basis of Coulomb interaction between  $\alpha$ -particle and nucleus. The distance of the  $\alpha$ -particle from the nucleus helped in estimating the size of nucleus. The radius of the nucleus is found of the order  $10^{-14}$  m.

The nuclear size can also be studied by studying the charge distribution of nucleus using high energy electrons. In this method, the study of elastic scattering of electrons (with different energies) from target nuclei is involved. By this method, the size of the nucleus is calculated. It has been observed that the **nucleus is spherical in shape**.

Various scattering experiments show that nuclear size varies smoothly with mass number as shown in fig. (4). It is also found that the volume of the nucleus is proportional to the mass number of the nucleus.

Participants (16)

- ambala Sud... (Host, me)
- Sandeep
- AJAY KUMAR REDDY (8091)
- Chaitanya Naik
- Dattadri
- Dharani 036
- G.Ruchitha 8057
- JAYALAXMI B (8012)
- Manusha(8097)
- Marka shirisha 098
- S Ashok 146
- S Sravya
- Sai Kumar

Mute Start Video Security Participants Chat New Share Pause Share

16 ENG IN 13:17 19-01-2022



2022-01-20

UNIT II Chapter 1 Mechanics of particles - Word

Who can see what you share here? Recording On

neither be created nor destroyed". It can be transformed from one form to another form.

Let us consider the case of a body of mass  $m$  at height  $h$  above the ground as shown in fig. (5). At position  $A$ , the kinetic energy of the body is zero while its potential energy is  $m g h$ . The sum of two energies is  $m g h$ . Now suppose that body falls through a distance  $x$  where the velocity of the body becomes  $v$ . Using the formula,  $v^2 = u^2 + 2 g h$ , we have the velocity as  $v = \sqrt{2 g x}$  because  $u = 0$ .

$u = 0 \bullet A$

$v \bullet B$

$(h - x)$

**Fig. (5)**

Participants (34)

Name	Mute	Video
ambala Sud... (Host, me)	On	On
K Adithya	Off	Off
A.Supriya	Off	Off
A.Tulasi(mpcs)	Off	Off
Abhishek	Off	Off
Ashok Kumar	Off	Off
Ashwini	Off	Off
Basrikanth	Off	Off
Emmadi Shruthi(m.p.cs)	Off	Off
Fiza khatoon mpcs	Off	Off
G.Ashwini	Off	Off
G.Shirisha	Off	Off
K ramu	Off	Off

2022-01-21

UNIT II Chapter 1 Mechanics of particles - Word

Who can see what you share here? Recording On

$\frac{dP}{dt} = 0$  or  $P = \text{constant}$

Or  $P = p_1 + p_2 + \dots + p_n = \text{constant} \dots\dots(5)$

This proves the law of conservation of linear momentum.

SEM I / PAPER I - UNIT II Chapter 1 Mechanics of Particles

**IMPULSE**

The total change in linear momentum of any body during any given impact

Participants (19)

Name	Mute	Video
ambala Sud... (Host, me)	On	On
A.Supriya	Off	Off
Angoth sardar	Off	Off
B.srikanth	Off	Off
Fiza khatoon mpcs	Off	Off
G.Shirisha	Off	Off
K.shirisha(mpcs)	Off	Off
kirthy	Off	Off
M. Teja Sri (MPCS)	Off	Off
M.Naveen	Off	Off
P.Ruthik	Off	Off
Pochamoni Naresh	Off	Off

2022-01-22

CHAPTER 1 NUCLEAR STRUCTURE [Compatibility Mode] - Word

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat Tell me what you want to do

Clipboard Paste Times New Roman - 14 A Aa Font Paragraph Styles AaBbCcDc AaBbCcDc AaBbCc AaBbCcE AaBbCcE

### NUCLEAR FORCES

We know that the nucleus consists of protons and neutrons. Due to the positive charge on proton, there will be a repulsive electrostatic force between the two protons and the resulting repulsive force between protons will tend to push the nucleus apart. Therefore, for the nucleus to have a permanent existence, there must be some strong attractive forces between protons and neutrons inside the nucleus.

These attractive forces cannot be gravitational because they are much smaller than the attractive force demanded. Moreover, these forces cannot be electrical in nature because the strong repulsive forces between protons will lead to the disruption of nucleus. Actually, these forces are short range attractive forces known as *nuclear forces*. The nuclear forces have the following properties:

- These forces are attractive forces between (proton-neutron), (proton-proton) and (neutron-neutron). The overall effect of nuclear forces is attractive, otherwise the nucleus would be disrupted under the electrostatic repulsion among the protons. However, there must be a repulsive component also in nuclear forces. The reason is that an

Participants (6)

- ambala Sudarshan (Host, me)
- JAYALAXMI B (8012)
- K1 Karthika 102
- M. Marka shirisha (8098)
- R RAM
- SS S Sravya

Page 18 of 26 5548 words English (United States) Accessibility: Unavailable You are screen sharing Stop Share

15:34 22-01-2022

2022-01-24

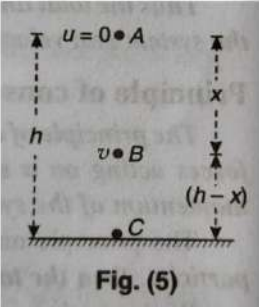
UNIT II Chapter 1 Mechanics of particles - Word

File Home Insert Draw Design Layout References Mailings Review View Help Acrobat Tell me what you want to do

Clipboard Paste Times New Roman - 14 A Aa Font Paragraph Styles AaBbCcDc AaBbCcDc AaBbCc AaBbCcE AaBbCcE

form.

Let us consider the case of a body of mass  $m$  at height  $h$  above the ground as shown in fig. (5). At position  $A$ , the kinetic energy of the body is zero while its potential energy is  $m g h$ . The sum of two energies is  $m g h$ . Now suppose that body falls through a distance  $x$  where the velocity of the body becomes  $v$ . Using the formula,  $v^2 = u^2 + 2 g h$ , we have the velocity as  $v = \sqrt{2 g x}$  because  $u = 0$ .



Participants (6)

- ambala Sudarshan (Host, me)
- VB vishal Bsc [mpc]
- BA B. Abhiram Reddy (MPC)
- k Govardan ~Bsc[MPC]
- P P.shirisha(mpc)
- B Bharath

Page 13 of 26 4 of 5331 words English (india) Mute Start Video Security Participants Chat New Share Pause Share

15:50 24-01-2022



2022-01-25

**IMPULSE**

The total change in linear momentum of any body during any given impact due to the action of a force is defined as the impulse of the force.

$$\therefore \text{Impulse} = \Delta p = p_2 - p_1 = m(v_2 - v_1)$$

Now,  $\Delta p = p_2 - p_1 = \int_{t_1}^{t_2} F dt$  (since  $F = \frac{dp}{dt}$ )

When a constant force is applied, then

$$\text{Impulse} = \Delta p = F \Delta t$$

So, the impulse is defined as the product of the average force multiplied with the duration of impact. The concept of impulse is used when very large forces are acting for a very short interval of time. The examples are: hitting a cricket ball with bat, hitting a...

2022-01-27

*torque acts on a body rotating about a fixed point, the angular momentum of the body remains constant.*

When external forces act on a particle, they exert torque on them. Now the angular momenta of the particles change with time. The rate of change of angular momenta is given by

$$\frac{dL}{dt} = \sum_{i=1}^n \frac{d}{dt} (r_i \times p_i)$$
$$= \sum_{i=1}^n \left[ \frac{dr_i}{dt} \times p_i + r_i \times \frac{dp_i}{dt} \right] = \sum_{i=1}^n \left[ r_i \times \frac{dp_i}{dt} \right]$$

Because  $\frac{dr_i}{dt} \times p_i = v_i \times m_i v_i = m_i (v_i \times v_i) = 0$

Now  $r_i \times \frac{dp_i}{dt} = r_i \times F_i$  (by Newton's Second Law)

$$\therefore \frac{dL}{dt} = \sum_{i=1}^n r_i \times F_i \quad (3)$$

2022-01-28

The screenshot shows a Microsoft Word document with the following text:

perpendicular to the direction of propagation). Suppose  $dN$  be the number of particles scattered per unit time into solid angle  $d\omega$  located in the direction  $\theta$  and  $\phi$  [fig. (13)] with respect to the bombarding direction. The ratio  $dN/N$  is called scattering cross-section.

$\Delta$  Scattering cross-section,  $\sigma_{sc} = \frac{dN}{N}$

Fig. (13) is a diagram showing an incident beam along the x-axis with direction vector  $N$ . A scatterer is located at the origin. A scattered particle is shown at an angle  $\theta$  from the x-axis, with a differential solid angle  $d\omega$  and a differential number of particles  $dN$ .

The meeting overlay shows 6 participants: ambala Sudarshan (Host, me), M.Naveen, RAM, Shaik sara tabassum, Tanguturi Prakash MPCs, and VSrujana.

2022-01-29

The screenshot shows a Microsoft Word document with the following text:

### NUCLEAR FORCES

We know that the nucleus consists of protons and neutrons. If a proton has a positive charge on proton, there will be a repulsive electrostatic force between two protons and the resulting repulsive force between protons will tend to disrupt the nucleus apart. Therefore, for the nucleus to have a permanent existence, there must be some strong attractive forces between protons and neutrons inside the nucleus.

These attractive forces cannot be gravitational because they are much weaker than the attractive force demanded. Moreover, these forces are not electrical in nature because the strong repulsive forces between protons would lead to the disruption of nucleus. Actually, these forces are short range attractive forces known as **nuclear forces**. The nuclear forces have the following properties:

- (i) These forces are attractive forces between (proton-neutron), (proton-proton) and (neutron-neutron).

The meeting overlay shows 8 participants: ambala Sudars..., Chaitanya Naik, G VEERESH RAO, JAYALAXMI B (8012), M Karthika 102, Marka.shirisha (8098), S Sravya, and sandeep goud 8044.

2022-01-31

UNIT II Chapter 1 Mechanics of particles - Word

ambalask.72@outlook.com

Participants (4)

- ambala Sudar... (Host, me)
- K prashanth(MPC)
- Manikanth -Bsc(MPC)
- Vishal B.sc (M.P.C)

Consider the collision to be elastic, the conservation of kinetic energy gives

$$\frac{1}{2} m_1 v_{1i}^2 = \frac{1}{2} m_1 v_{1f}^2 + \frac{1}{2} m_2 v_{2f}^2 \quad \dots (3)$$

SEM I / PAPER I - UNIT II Chapter 1 Mechanics of Particles

If we know the initial conditions ( $m_1, m_2, v_{1i}$ ), we are left with four unknowns ( $v_{1f}, v_{2f}, \theta_1$  and  $\theta_2$ ). So, we can determine the motion after collisions only if we specify a value for one of these quantities such as  $\theta_1$ .

You are screen sharing

Mute Start Video Security Participants Chat New Share Pause Share Annotate Remote Control More

Page 24 of 26 5297 words English (United States) 15:47 31-01-2022

## Google forms

Organized a quiz on the Biography of Galileo-Galilei's and his inventions on the occasion of his 458th Birth anniversary to aware everyone about his contribution in the field of Physics.

<https://forms.gle/2jmvBGf9hBvAxKV26>

On the occasion of National Science Day, Department of Physics conducted a Quiz on "Physics in daily life".

<https://forms.gle/Zvkmot8YtVddYFWy9>

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : HARIKA .K

Designation : Lecturer

Subject : Physics

Email ID : harika.bijjala@gmail.com

### List of videos uploaded to You tube channel :

S.No:	Topic of YouTube class	Uploaded date	Duration (Min)	Link
1	Polarization	9/6/2020	20.5	<a href="https://youtu.be/61Q54Gqdku4">https://youtu.be/61Q54Gqdku4</a>
2	Brewster Law	10/6/2020	17.05	<a href="https://youtu.be/iIDPU1FRXss">https://youtu.be/iIDPU1FRXss</a>
3	Malus Law	11/6/2020	18.34	<a href="https://youtu.be/c3Qog_2SWPI">https://youtu.be/c3Qog_2SWPI</a>
4	Double Refraction	12/6/2020	25.44	<a href="https://youtu.be/DJqjiFA9Xv4">https://youtu.be/DJqjiFA9Xv4</a>
5	Nicol's Prism	15/6/2020	18.09	<a href="https://youtu.be/EBOm1wxEfJc">https://youtu.be/EBOm1wxEfJc</a>
6	Selective Absorption, Scattering Of Light	16/6/2020	16.15	<a href="https://youtu.be/InfAiery4_d8">https://youtu.be/InfAiery4_d8</a>
7	Huygen's Explanation	17/6/2020	16.45	<a href="https://youtu.be/mTnMjwHTyuk">https://youtu.be/mTnMjwHTyuk</a>
8	Quarter Wave Plate, Half Wave Plate	18/6/2020	15.29	<a href="https://youtu.be/g9p0umVnVmU">https://youtu.be/g9p0umVnVmU</a>
9	Production Of Plane, Circularly And Elliptically Polarized Light	19/6/2020	14.11	<a href="https://youtu.be/pKuF8jeMtcw">https://youtu.be/pKuF8jeMtcw</a>
10	Babinet's Compensator	20/6/2020	20.17	<a href="https://youtu.be/khvDANvPRyk">https://youtu.be/khvDANvPRyk</a>
11	Optical Activity	22/6/2020	15.21	<a href="https://youtu.be/gYGmldmS-bc">https://youtu.be/gYGmldmS-bc</a>
12	Laurent's Half Shade Polarimeter	23/6/2020	23.38	<a href="https://youtu.be/npg0r_XYToo">https://youtu.be/npg0r_XYToo</a>
13	Fresnel's Biprism	24/6/2020	15.3	<a href="https://youtu.be/qu3xDYw23sM">https://youtu.be/qu3xDYw23sM</a>
14	Determination Of Thickness Of A Transparent Material Using Biprism	25/6/2020	16.48	<a href="https://youtu.be/710wuUY0X1o">https://youtu.be/710wuUY0X1o</a>
15	Change Of Phase On Reflection	26/6/2020	15.33	<a href="https://youtu.be/lc91VGCyxjU">https://youtu.be/lc91VGCyxjU</a>
16	Lloyd's Mirror Experiment	27/6/2020	16.01	<a href="https://youtu.be/ZEa6sH0ZArI">https://youtu.be/ZEa6sH0ZArI</a>
17	Mechanics Of Rigid Bodies, Equation Of A Motion For A Rotating Rigid Bodies	3/8/2020	45	<a href="https://youtu.be/KUdqYaQjEDY">https://youtu.be/KUdqYaQjEDY</a>

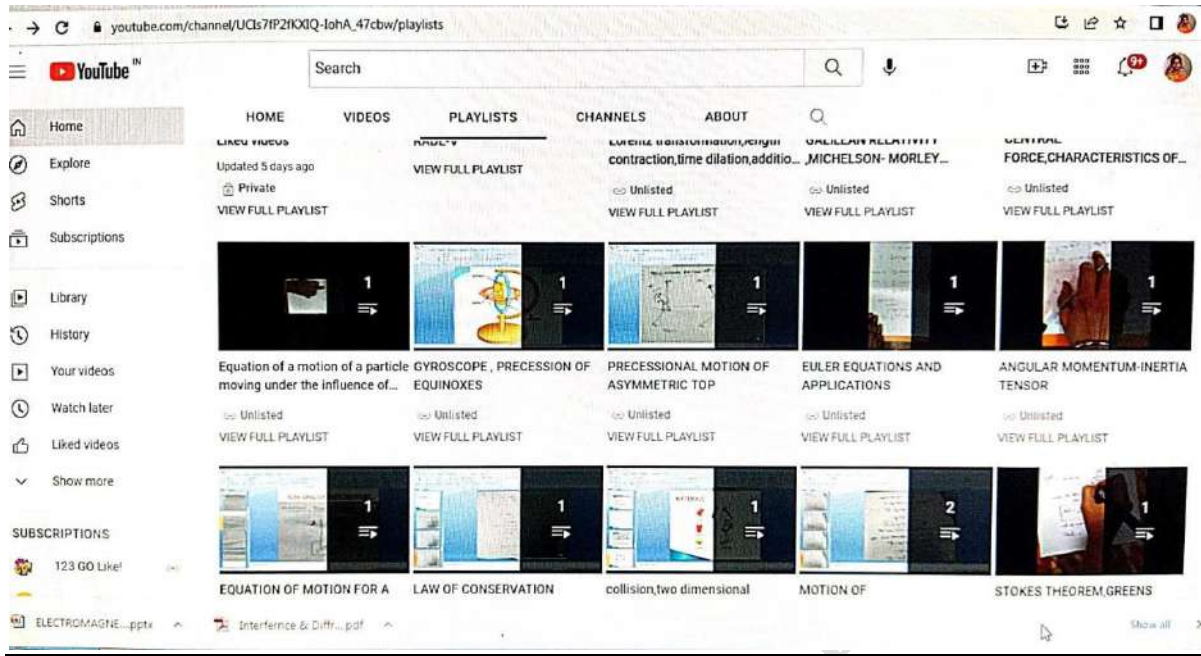
18	Angular Momentum Inertia Tensor And Properties Of Inertia Tensor Matrix	4/8/2020	46	<a href="https://youtu.be/lxR7daJBwew">https://youtu.be/lxR7daJBwew</a>
19	Euler Equations And Applications Of Euler Equations	5/8/2020	42	<a href="https://youtu.be/8nnNY31yS_k">https://youtu.be/8nnNY31yS_k</a>
20	Precessional Motion Of A Symmetric Top	6/8/2020	35	<a href="https://youtu.be/PwgcXw9WujQ">https://youtu.be/PwgcXw9WujQ</a>
21	Gyroscope And Applications Of Precession Of Equinoxes	7/8/2020	35	<a href="https://youtu.be/HdOItC7UQbo">https://youtu.be/HdOItC7UQbo</a>
22	Central Force Definition, Char. Of Central Forces Equal To Negative Gradient Of Potential Energy	10/8/2020	45.15	<a href="https://youtu.be/97QYbSB8eus">https://youtu.be/97QYbSB8eus</a>
23	Equation Of Motion Of A Particle Moving Under The Influence Of central Force, Gravitational Field Gravitational Potential	12/8/2020	38	<a href="https://youtu.be/fDPaZo8-ec8">https://youtu.be/fDPaZo8-ec8</a>
24	Derivation Of Kepler's Law	13/08/2020	49	<a href="https://youtu.be/bkJrnpMvz1g">https://youtu.be/bkJrnpMvz1g</a>
25	Coriolis Force, Equation Of Motion Of Planet Under Inverse Square Law	14-08-2020	48	<a href="https://youtu.be/dr6178BqiOA">https://youtu.be/dr6178BqiOA</a>
26	Special Theory Of Relativity, Galilean Relativity, Michelson Morley Experiment	17-08-2020	42	<a href="https://youtu.be/emGrONiFMUE">https://youtu.be/emGrONiFMUE</a>
27	Postulates Of special Theory Of Relativity, Lorentz Transformation, Addition Of Velocities	18-08-2020	43	<a href="https://youtu.be/u1rVd2K7jfM">https://youtu.be/u1rVd2K7jfM</a>
28	Mass Energy Relation, Momentum Energy Relation, Four Vector Formalism	19-08-2020	37	<a href="https://youtu.be/x1IHbi02wqs">https://youtu.be/x1IHbi02wqs</a>
29	Black Body And It's Radiation, Energy Distribution In Black Body Radiation	20-08-2020	31	<a href="https://youtu.be/idaJrKlZbTE">https://youtu.be/idaJrKlZbTE</a>
30	Derived Wein's Displacement Law	21-08-2020	31	<a href="https://youtu.be/ZDHOI7qeQUw">https://youtu.be/ZDHOI7qeQUw</a>
31	Plank's Radiation Formula, Different Laws From Plank's Radiation Formula	24-08-2020	54	<a href="https://youtu.be/LDUKXT55fZk">https://youtu.be/LDUKXT55fZk</a>
32	Pyrometer, Disappearing Filament Optical Pyrometer, Solar Constant, Angstrom's Pyroheliometer.	25-08-2020	43	<a href="https://youtu.be/AK5DNmpUx7Q">https://youtu.be/AK5DNmpUx7Q</a>

<b>33</b>	Postulates Of Kinetic Theory ,Deduction Of Maxwell's Distribution Of Molecular Speeds	26-08-2020	32	<a href="https://youtu.be/9tDvay5WZac">https://youtu.be/9tDvay5WZac</a>
<b>34</b>	Maxwell's Law Of Distribution Of Molecular Speeds	5/5/2021	49.32	<a href="https://youtu.be/Trhmlddhauw">https://youtu.be/Trhmlddhauw</a>
<b>35</b>	Viscosity Of Gases	6/5/2021	44.39	<a href="https://youtu.be/0pjpxm9Cxs8">https://youtu.be/0pjpxm9Cxs8</a>
<b>36</b>	Thermal Conductivity	7/5/2021	34.49	<a href="https://youtu.be/zWSfwZ_B97s">https://youtu.be/zWSfwZ_B97s</a>
<b>37</b>	Diffusion Of Gases	10/5/2021	40	<a href="https://youtu.be/BwU-v_f7qBo">https://youtu.be/BwU-v_f7qBo</a>
<b>38</b>	Thermodynamic Potential	11/5/2021	43.18	<a href="https://youtu.be/dDOv_84O1Dw">https://youtu.be/dDOv_84O1Dw</a>
<b>39</b>	Joule Kelvin Effect	12/5/2021	40.15	<a href="https://youtu.be/2aN-FlI9PEc">https://youtu.be/2aN-FlI9PEc</a>
<b>40</b>	Ratio Of Two Specific Heat	13/5/2021	36.21	<a href="https://youtu.be/7OZ0IhR3pfl">https://youtu.be/7OZ0IhR3pfl</a>
<b>41</b>	Porous Plug Experiment,Expression For Joule -Thomson Cooling	17/5/2021	33.39	<a href="https://youtu.be/7hLLJXcVKrM">https://youtu.be/7hLLJXcVKrM</a>
<b>42</b>	Transistors	18/5/2021	36.04	<a href="https://youtu.be/ivTiCqYUE94">https://youtu.be/ivTiCqYUE94</a>



# You tube channel

[https://studio.youtube.com/channel/UCIs7fP2fKXIQ-IohA\\_47cbw/playlists](https://studio.youtube.com/channel/UCIs7fP2fKXIQ-IohA_47cbw/playlists)



## PPT in Curriculum

Name of the faculty : HARIKA .K

Designation : Lecturer

Subject : Physics

Email ID : harika.bijjala@gmail.com

ICT tools : PPT

S.No	Topic of the PPT	Remarks
1.	Electromagnetic induction	
2.	Electric flux	
3.	Electrostatics	
4.	Gauss law in Electrostatics	
5.	Differential and integral form of gauss law	
6.	Interference	
7.	Diffraction	
8.	Vector Analysis	
9.	Galilean Transformation	
10.	Lorentz transformation	
11.	Maxwell's equations	
12.	Thermodynamics	
13.	Ballistic galvanometer	
14.	Crystal structure	

## What's App

Name of the faculty : HARIKA.K

Designation : Lecturer

Subject : Physcis

Email ID : harika.bijjala@gmail.com

Content : Whats app

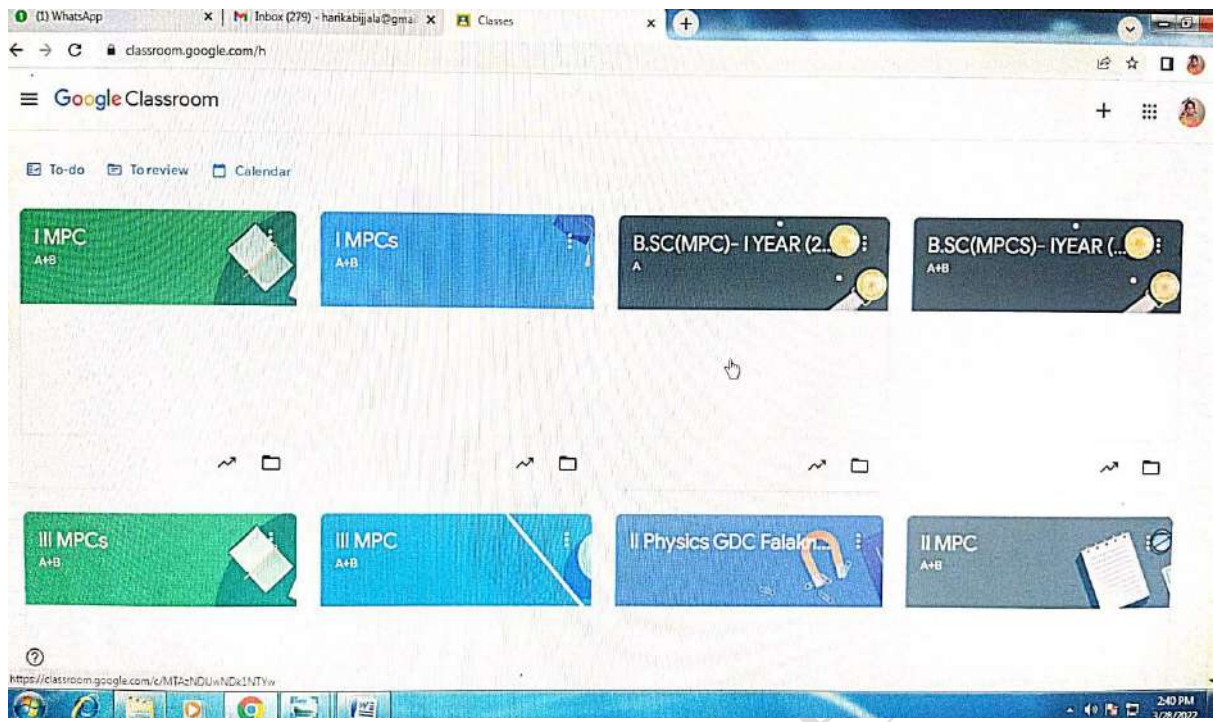
S.No	Group name	Year	Activity
1	MPC	I	Regular notes, PPTS, news related to science , Job opportunities, Notices of college and department
2	MPCs	I	
3	MPC	II	
4	MPCs	II	
5	MPC	III	
6	MPCs	III	

## Google classroom

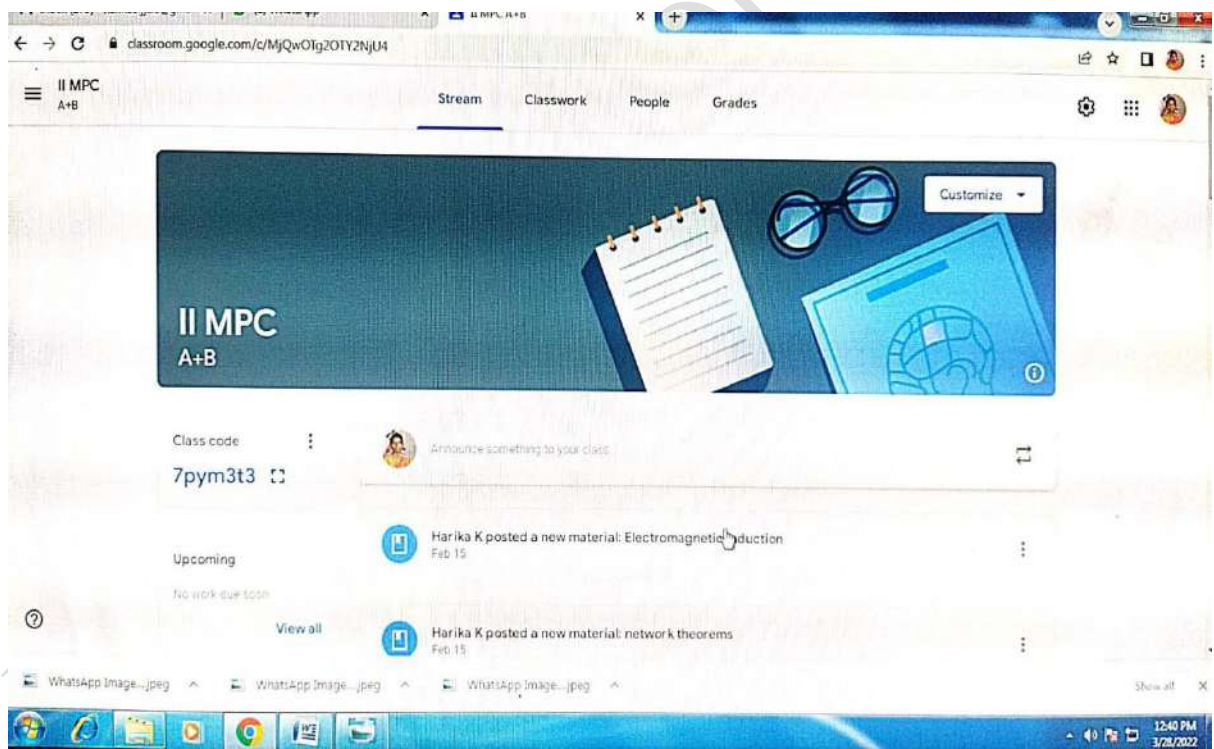
<https://classroom.google.com/c/MjkzMDMzOTkxMzUw>

The screenshot displays a Google Classroom interface. At the top, the class name is 'BSC I YEAR(MPCS),GDC,KHAIRATABAD IMPCS'. Below this, the class code '22eo537' is visible. The 'Upcoming' section indicates 'No work due soon'. A list of materials is shown, including 'SPECIAL THEORY OF RELATIVITY' (Feb 15), 'CENTRAL FORCE' (Feb 15), and 'Electrostatics:Unit-I' (Nov 8, 2021). The interface includes navigation tabs for 'Stream', 'Classwork', 'People', and 'Grades'.

<https://classroom.google.com/h>

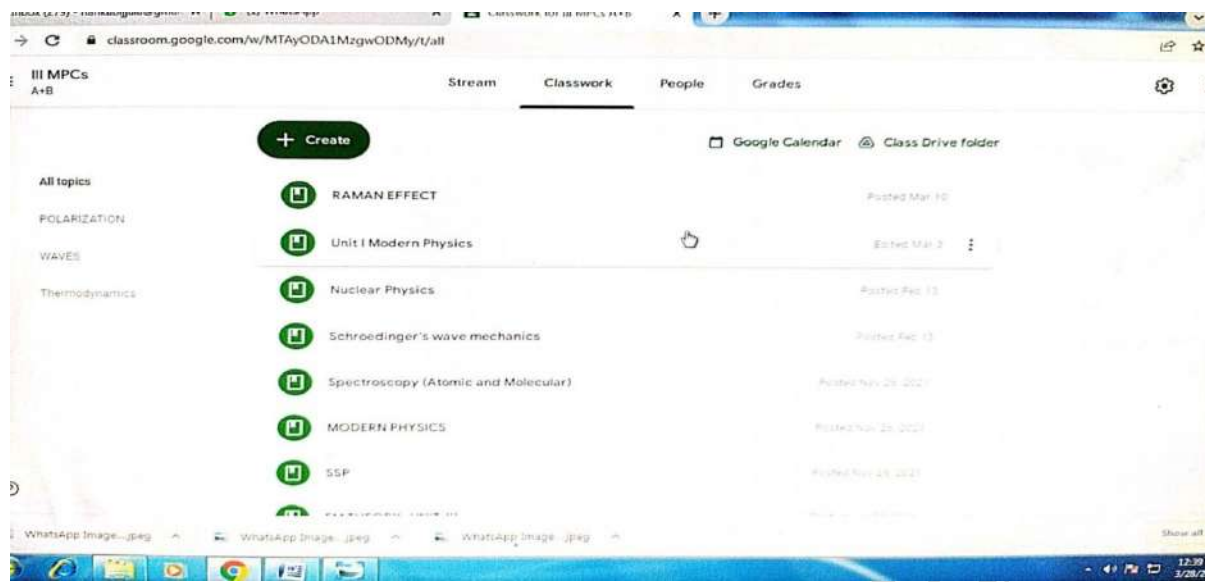


<https://classroom.google.com/c/MjQwOTg2OTY2NjU4>



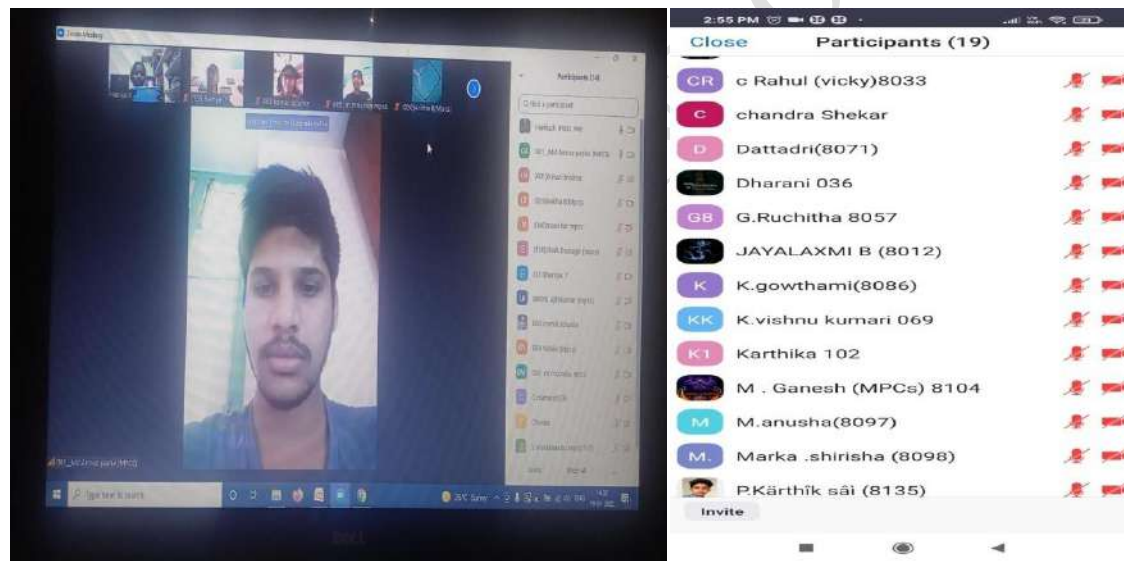


<https://classroom.google.com/w/MTAzNDUwNDk1NTA0/t/all>

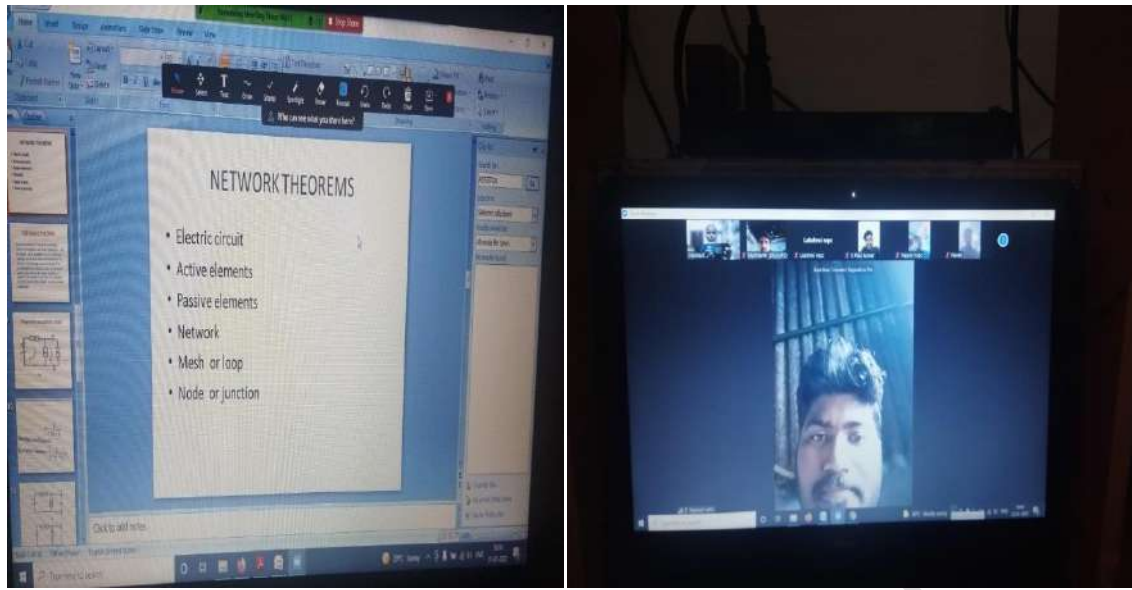


## Zoom meetings

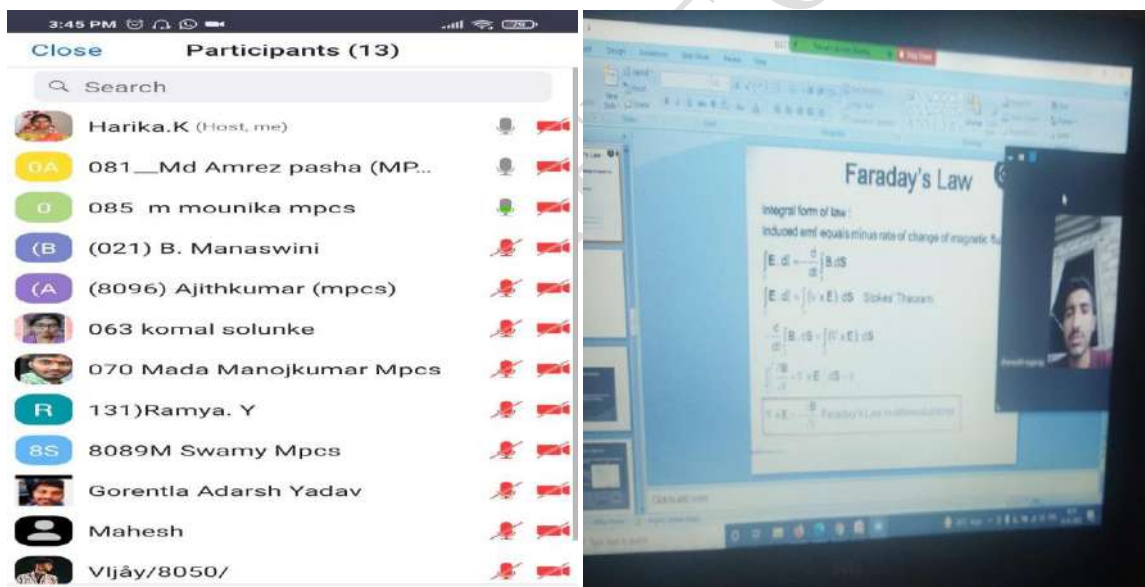
19-01-2021 & 20-01-2021



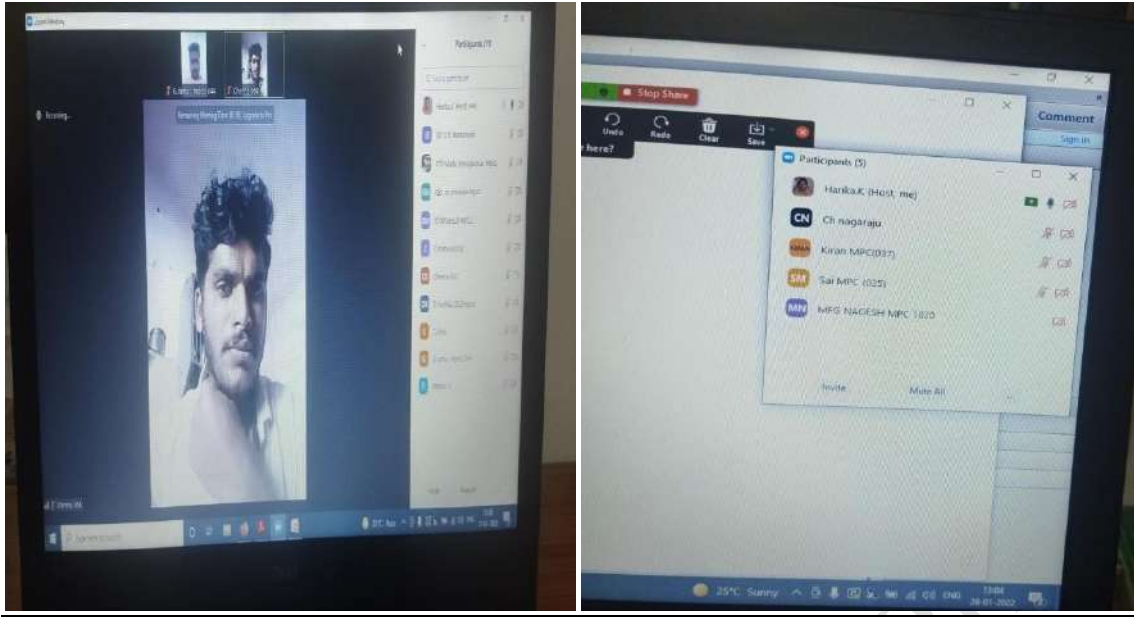
21-01-2021 & 22-01-2021



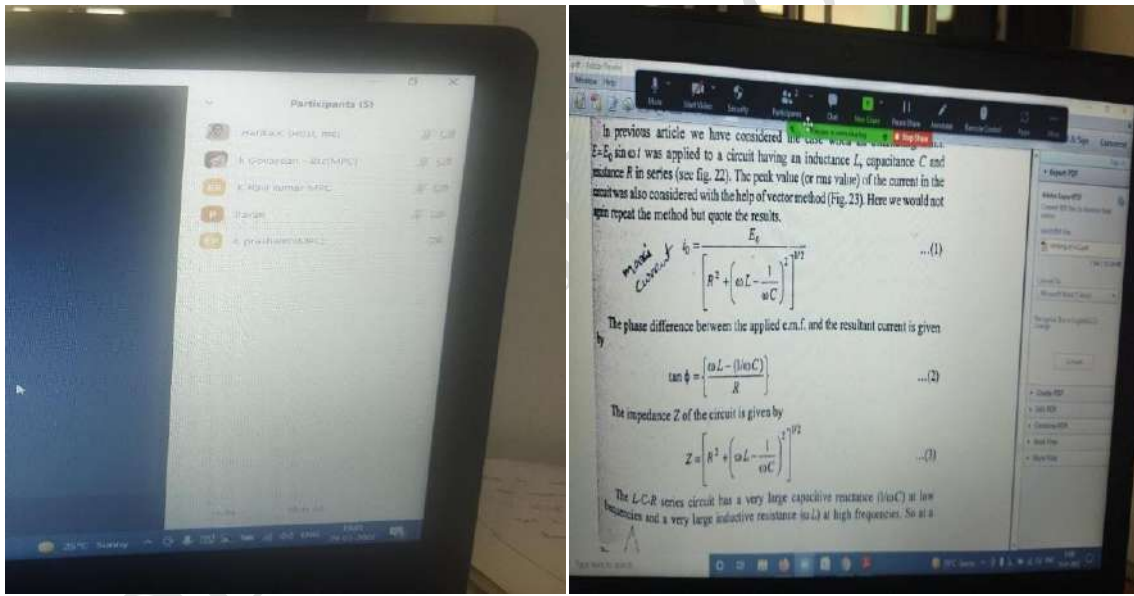
24-01-2021 & 25-01-2021



27-01-2022 & 28-01-2021



29-01-2021 & 31-01-2021





# USAGE OF ICT TOOLS IN CURRICULUM

## Introduction:

Information and communication tools (ICT) usage in higher education is increasing since 1980's. The ICT is powerful communicative tools that contribute to high quality lesson preparation, increase student motivation and connects the student to the class very effectively. Blended learning approach is very useful in classroom teaching rather than only class by ICT. The ICT tools provides an easy, better and comfortable approach in the teaching learning methodology. As the emergence of Covid 19 induced all the education institutions towards the online teaching learning process. Various platforms for teaching like Zoom, Google class room, Microsoft teams, etc were popularized. Various examinations also conducted through the online tools (Google forms, Kahoot, Edmodo etc.) In view of the Covid 19 pandemic situation our honorable commissioner Sri. Naveen Mittal Gaaru initiated and instructed to create a separate individual youtube channel for recording of lesson for students.

The Department of Microbiology, continuously uses the ICT tools and shares among the student community. A total of 34 Youtube lessons were uploaded into the channel. The lessons were viewed by the students according their topics. Dr. N.Harikrishna, Assistant Professor of Microbiology also delivered live classes in the T-SAT Nipuna. T-SAT Nipuna is a platform, live classes were conducted daily with respective subjects as per the schedule. Dr. N. Harikrishna delivered 6 talks in T-SAT channel.

Apart from this, the department also prepared more than 150 power point presentations (PPT) pertaining to the different courses for class room teaching. In the classes teachers also uses the animated videos of subject for better understanding of concepts. To communicate with students Department also initiated Whatsapp groups. These groups were very active and notes, PPTS, science related news, general news regarding the college and notifications of entrances and jobs are published.

List of ICT tools used in teaching and learning evaluation :

Youtube channel

Google forms

PPT

Animation videos

Whats app and Google scholar

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna  
Designation : Assistant Professor  
Subject : Microbiology  
Email ID : harinagamalli@gmail.com

### List of videos uploaded to Youtube channel

S.No	Topic of youtube class	Uploaded date	Duration (Min)	Link	No of views
1	Lac operon	19/07/2020	48	<a href="https://youtu.be/fnW6CCKyurA">https://youtu.be/fnW6CCKyurA</a>	02
2	Genetic code	20/07/2020	36	<a href="https://youtu.be/I1HvKZyhXhc">https://youtu.be/I1HvKZyhXhc</a>	10
3	Transcription 1	20/07/2020	37	<a href="https://youtu.be/HZLG0AQI_Hc">https://youtu.be/HZLG0AQI_Hc</a>	02
4	Transcription 2	23/07/2020	41	<a href="https://youtu.be/d_gQ5QC4qJA">https://youtu.be/d_gQ5QC4qJA</a>	00
5	Glycolysis	23/07/2020	36	<a href="https://youtu.be/QNLdg_K6sTU">https://youtu.be/QNLdg_K6sTU</a>	43
6	TCA cycle	23/07/2020	38	<a href="https://youtu.be/uBntqi99WdI">https://youtu.be/uBntqi99WdI</a>	20
7	Microbial growth	24/07/2020	39	<a href="https://youtu.be/JLWQmfzEccs">https://youtu.be/JLWQmfzEccs</a>	01
8	Factors effecting microbial growth	24/07/2020	42	<a href="https://youtu.be/iwIPeKBYB6A">https://youtu.be/iwIPeKBYB6A</a>	03
9	Primary screening	29/07/2020	32	<a href="https://youtu.be/dX1YCM-qFQ">https://youtu.be/dX1YCM-qFQ</a>	00
10	Secondary screening	04/08/2020	45	<a href="https://youtu.be/F5pUkVjpO-A">https://youtu.be/F5pUkVjpO-A</a>	00
11	Types of Immunity	30/07/2020	32	<a href="https://youtu.be/OgfT4tbusPk">https://youtu.be/OgfT4tbusPk</a>	09
12	Acquired Immunity	30/07/2020	30	<a href="https://youtu.be/NWIKtg7js00">https://youtu.be/NWIKtg7js00</a>	00
13	Mutations 1	05/08/2020	55	<a href="https://youtu.be/7hV65mqxF5c">https://youtu.be/7hV65mqxF5c</a>	00
14	Mutations 2	05/08/2020	44	<a href="https://youtu.be/WU2ZfUFD7KE">https://youtu.be/WU2ZfUFD7KE</a>	00
15	Mutations 3	07/08/2020	43	<a href="https://youtu.be/KeNxVtnIGGo">https://youtu.be/KeNxVtnIGGo</a>	00
16	Beta oxidation of fatty acids	07/08/2020	44	<a href="https://youtu.be/PbVUyFqbDbE">https://youtu.be/PbVUyFqbDbE</a>	00
17	Enzymes 1	10/08/2020	42	<a href="https://youtu.be/JSY6P9D8XR8">https://youtu.be/JSY6P9D8XR8</a>	00

18	Enzymes – classification	11/08/2020	44	<a href="https://youtu.be/gIICk5cq1zk">https://youtu.be/gIICk5cq1zk</a>	01
19	Factors effecting Enzyme activity	13/08/2020	41	<a href="https://youtu.be/iOH9S9DrZlQ">https://youtu.be/iOH9S9DrZlQ</a>	00
20	Enzymes – Mechanism of action	13/08/2020	41	<a href="https://youtu.be/iOH9S9DrZlQ">https://youtu.be/iOH9S9DrZlQ</a>	00
21	Enzyme - Inhibitions	16/08/2020	49	<a href="https://youtu.be/v7q7NvUWf1w">https://youtu.be/v7q7NvUWf1w</a>	00
22	Antigens	18/08/2020	47	<a href="https://youtu.be/74vBnIURWqc">https://youtu.be/74vBnIURWqc</a>	10
23	Antibodies	18/08/2020	47	<a href="https://youtu.be/eBo_eUFbPh8">https://youtu.be/eBo_eUFbPh8</a>	04
24	ELISA	20/08/2020	35	<a href="https://youtu.be/aVdd1nyvpfA">https://youtu.be/aVdd1nyvpfA</a>	02
25	RIA and Immunofluorescen ce	20/08/2020	45	<a href="https://youtu.be/p-KPJOmZi-c">https://youtu.be/p-KPJOmZi-c</a>	01
26	Plasmids	25/08/2020	42	<a href="https://youtu.be/EV-66WfhFDk">https://youtu.be/EV-66WfhFDk</a>	01
27	Host pathogen interactions	25/08/2020	50	<a href="https://youtu.be/dqM_MFSfcM">https://youtu.be/dqM_MFSfcM</a>	09
28	Host pathogen interactions	25/08/2020	47	<a href="https://youtu.be/zeyItDWgVM0">https://youtu.be/zeyItDWgVM0</a>	07
29	Virology	27/08/2020	44	<a href="https://youtu.be/aGzpWEAgC-o">https://youtu.be/aGzpWEAgC-o</a>	20
30	Virology	27/08/2020	47	<a href="https://youtu.be/hrxDtE_B3V8">https://youtu.be/hrxDtE_B3V8</a>	16
31	Complement pathways	16/07/2020	44	<a href="https://youtu.be/q-m9OUFsW08">https://youtu.be/q-m9OUFsW08</a>	87
32	Complement pathways	18/07/2020	41	<a href="https://youtu.be/38KaYhjk0X8">https://youtu.be/38KaYhjk0X8</a>	172
33	Microscopy	11/07/2018	46	<a href="https://www.youtube.com/watch?v=vSTQRm9ya-w">https://www.youtube.com/watch?v=vSTQRm9ya-w</a>	353
34	Transcription	16/11/2020	43	<a href="https://www.youtube.com/watch?v=wh_5RP_ut-s">https://www.youtube.com/watch?v=wh_5RP_ut-s</a>	510

YouTube logo Search [Microphone icon] [Grid icon] [Bell icon] [Profile icon]

Home Explore Subscriptions Library

**Harikrishna Nagamalli**  
25 subscribers

CUSTOMIZE CHANNEL MANAGE VIDEOS

HOME VIDEOS **PLAYLISTS** CHANNELS DISCUSSION ABOUT

Created playlists SORT BY

Playlist Name	Video Count	Thumbnail Description
Liked videos	18	Host-Pathogen Interaction
Enzymology	4	Enzymology
Immunology	7	Complement Pathways
Microbiology	9	Virus



Private VIEW FULL PLAYLIST VIEW FULL PLAYLIST VIEW FULL PLAYLIST

## You tube channel

# Google scholar account

Google Scholar

Verify email  
Unverified profiles can't appear in search results.  
ADD

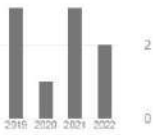
 **Hari Krishna Nagamalli**   
Assistant Professor of Microbiology  
No verified email  
Microbial Enzymes

FOLLOWING

Cited by

	All	Since 2017
Citations	9	9
h-index	1	1
i10-index	0	0

4

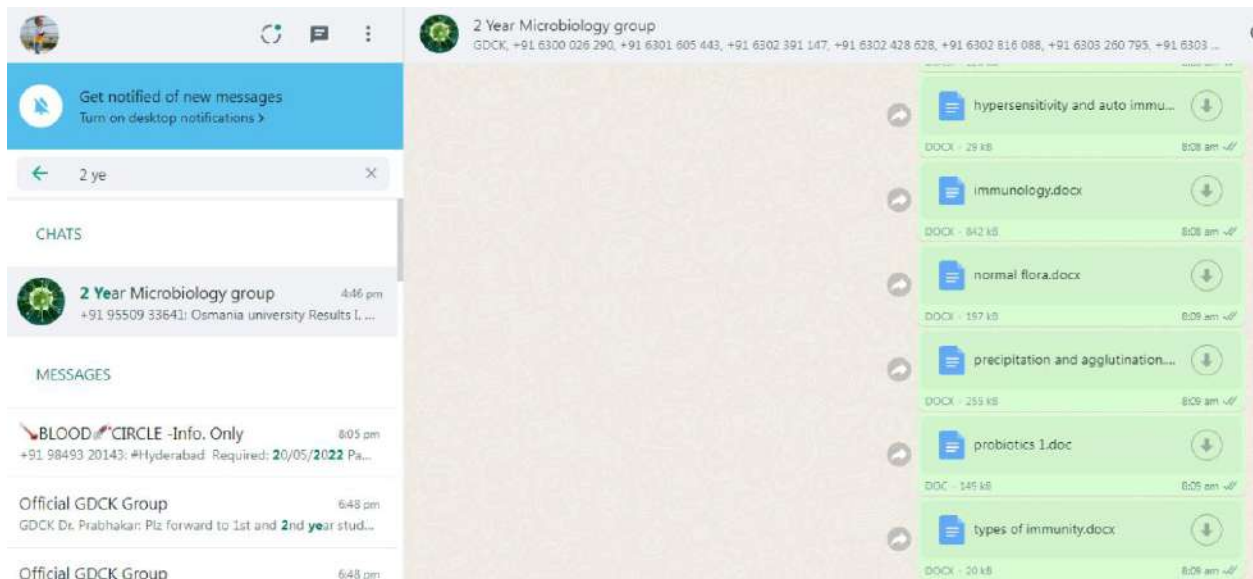
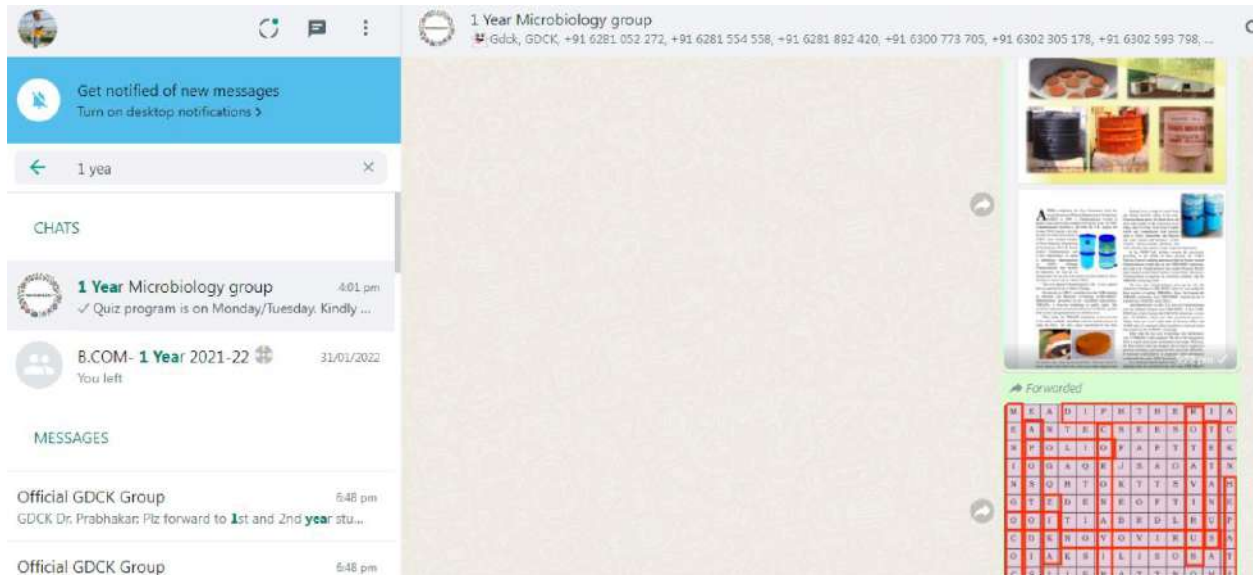


Public access VIEW ALL

TITLE	CITED BY	YEAR
<input type="checkbox"/> Chicken egg shell as a potential substrate for production of alkaline protease by <i>Bacillus altitudinis</i> GVC11 and its applications H Nagamalli, M Sitaraman, KK Kandala, GR Mudhole 3 Biotech 7 (3), 1-6	9	2017

SHOW MORE

# Whatsapp groups of students





Microbiology -3 rd yr  
GDCK, +91 6305 435 396, +91 6305 595 827, +91 70131 65007, +91 70759 54003, +91 73966 24204, +91 84639 04067, +91 84990 1...

Get notified of new messages  
Turn on desktop notifications >

3 rd

CHATS

Microbiology -3 rd yr  
Photo

MESSAGES

MBC third Year (2019-22) 18/04/2022  
Gd: Company Name: Unschool Domain: Sales & Marke...

BSC Scienc2018-2021 Batch 16/04/2022  
Gd: Company Name: Unschool Domain: Sales & Marke...

+91 6303 323 107 31/03/2022  
JOCKEY EXCLUSIVE STORE @ SIDDIPET has missed you l...

DOC - 194 kB 7:44 am ✓

screening 1.doc

DOC - 37 kB 7:44 am ✓

screening.doc

DOC - 37 kB 7:44 am ✓

strain improvement.docx

DOCX - 854 kB 7:44 am ✓

clinical microbiology.docx

DOCX - 129 kB 7:47 am ✓

clinical sample sample processi...

IMG - 381 kB 7:53 am ✓

clinical sample sample processi...

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna  
Designation : Assistant Professor  
Subject : Microbiology  
Email ID : harinagamalli@gmail.com  
ICT tools : PPT

### List of PPTS:

Year : I

Semester : I and II

S.No	Topic of the PPT	Remarks
1.	Applications of Microbiology	
2.	Chemical methods of Sterilisation	
3.	Glycolysis	
4.	History of Microbiology	
5.	Microscopy	
6.	Measurement of Microbial growth	
7.	Microbial growth	
8.	Scope of Microbiology	
9.	Staining	
10.	Sterilisation methods	
11.	Uptake of Nutrients	
12.	Virology	
13.	Carbohydrates	
14.	Classification of Microorganisms	
15.	DNA	
16.	Electrophoresis	
17.	Electron transport chain	
18.	Lipids	
19.	Photosynthesis	
20.	Proteins	
21.	pH and buffers	
22.	Control of Microbial growth	
23.	Microbial biodiversity	
24.	Proteobacteria	
25.	Archaea bacteria	
26.	Planctomycetes	
27.	Actinobacteria	
28.	Bacteroidetes	

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna

Designation : Assistant Professor

Subject : Microbiology

Email ID : harinagamalli@gmail.com

**List of PPTS:**

**Year :II**

**Semester : III &IV**

S.No	Topic of the PPT	Remarks
1.	Antigens	
2.	Antibodies	
3.	Antibiotics sensitivity testing	
4.	Enzymes- properties, classification mechanism	
5.	Bacterial plasmids	
6.	Bacterial toxins	
7.	Beta oxidation of Fatty acids	
8.	Bulgarian milk	
9.	C,N, S cycle	
10.	Cell of the Immunity	
11.	Cheese	
12.	Genetic code	
13.	History of Microbiology	
14.	Host pathogen interaction	
15.	Idly	
16.	History and Development of Immunology	
17.	Lac operon	
18.	Linkage	
19.	Mycotoxins	
20.	Nitrogen fixation	
21.	Phosphate solubilizing bacteria	
22.	Plant growth promoting bacteria	
23.	Prebiotics	
24.	Probiotics	
25.	Sauerkraut	
26.	Milk Microbiology	
27.	Transcription	
28.	Types of Immunity	
29.	Soil, Rhizosphere, Phyllosphere	
30.	Virulence factors	
31.	Yogurt	
32.	cDNA library	
33.	Applications of genetic engineering	

34.	Classification of Microorganisms	
35.	Clinical sample collection	
36.	Cloning	
37.	Vectors	
38.	Crossing over	
39.	Dark cycle	
40.	DNA	
41.	Electrophoresis	
42.	Enzyme Inhibitions	
43.	Factors effecting enzyme activity	
44.	Electron transport chain	
45.	Genomic library	
46.	Lipids	
47.	Vaccines	
48.	Microbial pathogenicity	
49.	Monoclonal and polyclonal antibodies	
50.	Normal flora	
51.	Organs of the immune system	
52.	Pesticide degradation	
53.	pH and buffers	
54.	Phagocytosis	
55.	Photosynthesis	
56.	Proteins	
57.	Recombinant DNA Technology	
58.	Restriction endo nucleases	
59.	Translation	
60.	Vaccines	

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna  
Designation : Assistant Professor  
Subject : Microbiology  
Email ID : harinagamalli@gmail.com

**List of PPTS:**

**Year : III**

**Semester V& VI**

S.No	Topic of the PPT	Remarks
1.	Antigens	
2.	Antibodies	
3.	Antibiotics sensitivity testing	
4.	Bacterial toxins	
5.	C,N, S cycle	
6.	Cell of the Immunity	
7.	ELISA, RIA, Immunofluorescence	
8.	Fermentation types	
9.	Principles of Laboratory diagnosis	
10.	Host pathogen interaction	
11.	History and Development of Immunology	
12.	Nitrogen fixation	
13.	Phosphate solubilizing bacteria	
14.	Plant growth promoting bacteria	
15.	Probiotics	
16.	Screening of Industrially important Microorganisms	
17.	Soil, Rhizosphere, Phyllosphere	
18.	Types of Immunity	
19.	Virulence factors	
20.	Antigen-antibody interations	
21.	Alcohol and beer production	
22.	Amoebiasis	
23.	Amylase and glutamic acid production	
24.	Anthrax	
25.	Antiviral agents	
26.	Beer production	
27.	Carboydrates	
28.	Cholera and typhoid	
29.	Clinical sample collection	
30.	Complement pathways	
31.	Dengue	
32.	DNA	



33.	Filarial	
34.	Gonorrhoea	
35.	Hepatitis A	
36.	Hepatitis B	
37.	HIV	
38.	Immune Response	
39.	Hyper sensitivity and Autoimmunity	
40.	Influenza	
41.	Malaria	
42.	Microbial pathogenicity	
43.	Monoclonal and polyclonal antibodies	
44.	Normal flora	
45.	Organs of the immune system	
46.	Pesticide degradation	
47.	Penicillin and Vitamin B 12 production	
48.	Phagocytosis	
49.	Plant diseases	
50.	Polio	
51.	Rabies	
52.	Syphilis	
53.	Tuberculosis	
54.	Typhoid	
55.	Vaccines	

# USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna  
Designation : Assistant Professor  
Subject : Microbiology  
Email ID : harinagamalli@gmail.com

## Interdisciplinary PPTs

S.No	Topic of PPT	Discipline
1.	IPR Definition and History	IPR
2.	Introduction to Intellectual property	IPR
3.	Patents	IPR
4.	Copyright	IPR
5.	Copyright subject matter	IPR
6.	Role of copyright societies	IPR
7.	Performers right	IPR
8.	Moral rights of copyright	IPR
9.	Economic rights of copyright	IPR
10.	Copyright ownership	IPR
11.	Broad cast rights of copyright	IPR
12.	Trademark -Introduction	IPR
13.	Trademark- registration	IPR
14.	Trademark- assignment and transfer	IPR
15.	Trademark – refusal	IPR
16.	Trademark – Infringement	IPR
17.	Plant varieties	IPR
18.	Geographical indications	IPR
19.	GI Registration	IPR
20.	Artificial intelligence- Introduction	AI
21.	AI- Components	AI
22.	AI – Machine Learning	AI
23.	AI- Deep Learning	AI
24.	AI- ANN	AI
25.	AI- Types of ANN	AI
26.	Auto encoders	AI
27.	AI- NLP	AI
28.	AI – Applications	AI
29.	AI- Machine learning algorithms	AI
30.	AI- Clustering Algorithms	AI

## USAGE OF ICT TOOLS IN CURRICULUM

Name of the faculty : Dr. N. Harikrishna  
Designation : Assistant Professor  
Subject : Microbiology  
Email ID : harinagamalli@gmail.com  
Content : Whats app

<b>S.No</b>	<b>Group name</b>	<b>Year</b>	<b>Activity</b>
1	1 year Microbiology	II and III year (2021 to till date )	Regular notes, PPTS, news related to science , Job opportunities, Notices of college and department
2	II year Microbiology	II year (2020- till date )	
3	III Year, Microbiology	III year (2019 to till date)	
4	Microbiologists	III year (2018-2021)	

### **Others:**

<b>S.No</b>	<b>Name of the topic</b>	<b>Year</b>	<b>Planned to conduct Activity</b>
1	Animal wonders – Wonder animals 1	For all students	<b>Science talks</b>
2	Animal wonders – Wonder animals 2	For all students	<b>Science talks</b>
3	Sleep	For all students	<b>Science talks</b>

## ICT tools usage in curriculum

Name of the Faculty : P.Archana Mary

Subject : Microbiology

S.No	Group/Sem	Topic	Date	You Tube Link
1.	B.Sc III Sem	-Sources of Microorganisms in foods	9/06/20	<a href="https://youtu.be/11cuQJ-GRck">https://youtu.be/11cuQJ-GRck</a>
2.	B.Sc II Sem	General Characteristics of Algae-	10/6/20	<a href="https://youtu.be/Vts8gHPIOEg">https://youtu.be/Vts8gHPIOEg</a>
3.	B.Sc VI Sem	Microorganisms in Air	11/6/20	<a href="https://youtu.be/A9_66pdd_YI">https://youtu.be/A9_66pdd_YI</a>
4.	B.Sc VI Sem	Physical and chemical properties of soil	12/6/20	<a href="https://youtu.be/cOFy3A9Imp0">https://youtu.be/cOFy3A9Imp0</a>
5.	B.Sc III Sem	Sources and types of Microorganisms in milk	15/6/20	<a href="https://youtu.be/jRxs5djYuq4">https://youtu.be/jRxs5djYuq4</a>
6.	B.Sc V Sem	Cholera Disease	16/6/20	<a href="https://youtu.be/byI_97tN9NM">https://youtu.be/byI_97tN9NM</a>
7.	B.Sc V Sem	Infection & Non specific defense mechanisms	17/6/20	<a href="https://youtu.be/WZgHLDZ4MHU">https://youtu.be/WZgHLDZ4MHU</a>
8.	B.Sc III Sem	Microorganisms of Food	18/6/20	<a href="https://youtu.be/KIW166uX4gI">https://youtu.be/KIW166uX4gI</a>
9.	B.Sc I Sem	Importance and Applications of Microbiology	19/6/20	<a href="https://youtu.be/wmLv-WtLOe0">https://youtu.be/wmLv-WtLOe0</a>
10.	B.Sc V Sem	Laboratory diagnosis of clinical specimens-	20/6/20	<a href="https://youtu.be/IWcLpI_PwVs">https://youtu.be/IWcLpI_PwVs</a>
11.	B.Sc I Sem	History of Microbiology-	22/6/20	<a href="https://youtu.be/tng4WXZhj00">https://youtu.be/tng4WXZhj00</a>
12.	B.Sc III Sem	Microbial products of milk-	23/6/20	<a href="https://youtu.be/yAfXpRyW5wM">https://youtu.be/yAfXpRyW5wM</a>
13.	B.Sc VI Sem	Sulphur Cycle	24/6/20	<a href="https://youtu.be/Ju_CFdsCCho-">https://youtu.be/Ju_CFdsCCho-</a>
14.	B.Sc VI Sem	Carbon Cycle	13/7/20	<a href="https://youtu.be/9zjDaIKaoz8">https://youtu.be/9zjDaIKaoz8</a>
15.	B.Sc V Sem	Typhoid Disease	14/7/20	<a href="https://youtu.be/wl8iy9maed4">https://youtu.be/wl8iy9maed4</a>
16.	B.Sc I Sem	Carl Woese System of Classification	15/7/20	<a href="https://youtu.be/AAtm4SyhMv4">https://youtu.be/AAtm4SyhMv4</a>
17.	B.Sc II Sem	Uptake of nutrients by bacterial cells	17/7/20	<a href="https://youtu.be/C7OTO_v20nw">https://youtu.be/C7OTO_v20nw</a>

18.	B.Sc V Sem	Innate immunity	18/7/20	<a href="https://youtu.be/VcAuE7Fd5zs">https://youtu.be/VcAuE7Fd5zs</a>
19.	B.Sc V Sem	Immunoglobulins	21/7/20	<a href="https://youtu.be/AR6U62zSpqg">https://youtu.be/AR6U62zSpqg</a>
20.	B.Sc V Sem	Primary lymphoid organs	23/7/20	<a href="https://youtu.be/FdHqqKNheko">https://youtu.be/FdHqqKNheko</a>
21.	B.Sc V Sem	Secondary lymphoid organs	24/7/20	<a href="https://youtu.be/y9VBF-X7jqY">https://youtu.be/y9VBF-X7jqY</a>
22.	B.Sc VI Sem	Rhizosphere	25/7/20	<a href="https://youtu.be/ZLPQIPpGadI">https://youtu.be/ZLPQIPpGadI</a>
23.	B.Sc III Sem	Bacterial growth	27/7/20	<a href="https://youtu.be/ZKMA05WNNFI">https://youtu.be/ZKMA05WNNFI</a>
24.	B.Sc II & III Sem	Factors effecting microbial growth	29/7/20	<a href="https://youtu.be/5nyNyKNc0ds">https://youtu.be/5nyNyKNc0ds</a>
25.	B.Sc II & III Sem	Growth media	30/7/20	<a href="https://youtu.be/TpIOfE0prnI">https://youtu.be/TpIOfE0prnI</a>
26.	B.Sc II Sem	Ultrastructure of Bacterial cell	31/7/20	<a href="https://youtu.be/cQX07SmSN8Q">https://youtu.be/cQX07SmSN8Q</a>
27.	B.Sc V Sem	Antigens	3/8/20	<a href="https://youtu.be/15g9w8HaajY">https://youtu.be/15g9w8HaajY</a>
28.	B.Sc II Sem	Sterilization-Introduction	4/8/20	<a href="https://youtu.be/qPyCfZZCZxs">https://youtu.be/qPyCfZZCZxs</a>
29.	B.Sc II Sem	Physical methods of sterilization	5/8/20	<a href="https://youtu.be/_fTa58y9giA">https://youtu.be/_fTa58y9giA</a>
30.	B.Sc II Sem	Chemical methods of sterilization	6/8/20	<a href="https://youtu.be/9-By0wv4KGO">https://youtu.be/9-By0wv4KGO</a>
31.	B.Sc V Sem	Complement System	7/8/20	<a href="https://youtu.be/xAIBr_GfiqE">https://youtu.be/xAIBr_GfiqE</a>
32.	B.Sc II Sem	General characteristics of Cyanobacteria	10/8/20	<a href="https://youtu.be/XQbPoLvJ_ms">https://youtu.be/XQbPoLvJ_ms</a>
33.	B.Sc V Sem	Autoimmunity and its Significance	12/8/20	<a href="https://youtu.be/eTgOX4b6PTs">https://youtu.be/eTgOX4b6PTs</a>
34.	B.Sc I Sem	Microscopy -Introduction	13/8/20	<a href="https://youtu.be/rLZri3Rus_k">https://youtu.be/rLZri3Rus_k</a>
35.	B.Sc I Sem	Types of light microscope	14/8/20	<a href="https://youtu.be/SorkuLjJ-Mk">https://youtu.be/SorkuLjJ-Mk</a>
36.	B.Sc I Sem	Electron Microscope	17/8/20	<a href="https://youtu.be/fVRmtBsp7D4">https://youtu.be/fVRmtBsp7D4</a>
37.	B.Sc IV Sem	Transposons	18/8/20	<a href="https://youtu.be/5vKIMOGw0ZQ">https://youtu.be/5vKIMOGw0ZQ</a>
38.	B.Sc IV Sem	Nitrogen Cycle	19/8/20	<a href="https://youtu.be/Fbka8yT_fUI">https://youtu.be/Fbka8yT_fUI</a>
39.	B.Sc II Sem	Archaeobacteria-General Characteristics	20/8/20	<a href="https://youtu.be/uCnni4j1g6E">https://youtu.be/uCnni4j1g6E</a>



40.	B.Sc II Sem	Mycoplasma –General characteristics	21/8/20	<a href="https://youtu.be/QIZpj7KjuFE">https://youtu.be/QIZpj7KjuFE</a>
41.	B.Sc II Sem	Staining techniques-Introduction	24/8/20	<a href="https://youtu.be/iQYMGVccAp4">https://youtu.be/iQYMGVccAp4</a>
42.	B.Sc II Sem	Structural Staining	25/8/20	<a href="https://youtu.be/soNJK-njKV8">https://youtu.be/soNJK-njKV8</a>
43.	B.Sc IV Sem	Normal flora of human body	26/8/20	<a href="https://youtu.be/LVdTHwNOK4E">https://youtu.be/LVdTHwNOK4E</a>
44.	BSc II Sem	Mycoplasma-General Characteristics	6/5/21	<a href="https://youtu.be/0C_uSDUWqu0">https://youtu.be/0C_uSDUWqu0</a>
45	BSc IV Sem	Bacterial Toxins	7/5/21	<a href="https://youtu.be/twxDEmWxTJU">https://youtu.be/twxDEmWxTJU</a>
46	BSc IV Sem	Anthrax Disease	10/5/21	<a href="https://youtu.be/3m6TxnGWgww">https://youtu.be/3m6TxnGWgww</a>
47	BSc IV Sem	Virulence and attenuation	11/5/21	<a href="https://youtu.be/Qc77kyb0eWE">https://youtu.be/Qc77kyb0eWE</a>
48	BSc V.Sem	Elements of Chemotherapy	12/5/21	<a href="https://youtu.be/oCA80YQdaF8">https://youtu.be/oCA80YQdaF8</a>
49	BSc V Sem	General principles of diagnostic microbiology	13/5/21	<a href="https://youtu.be/kMazVGbcb1Q">https://youtu.be/kMazVGbcb1Q</a>
50	BSc II Sem	Microbial Interactions	17/5/21	<a href="https://youtu.be/jyBvYuBSiZk">https://youtu.be/jyBvYuBSiZk</a>
51	BSc III Sem	Phyllosphere	18/5/21	<a href="https://youtu.be/KdLINbE_DSk">https://youtu.be/KdLINbE_DSk</a>
52	B.Sc VI Sem	Microorganisms in water	19/5/21	<a href="https://youtu.be/PTG8Xp7uoSg">https://youtu.be/PTG8Xp7uoSg</a>
53.	B.Sc IV & V Sem	Hypersensitivity & its types	21/5/21	<a href="https://youtu.be/74WxVN_0JHE">https://youtu.be/74WxVN_0JHE</a>
54.	BSc V Sem	Base Analogues	24/5/21	<a href="https://youtu.be/YDI5f5WG42_8">https://youtu.be/YDI5f5WG42_8</a>
55.	BSc III & V Sem	Sewage treatment	25/5/21	<a href="https://youtu.be/BKDCYgnUFRM">https://youtu.be/BKDCYgnUFRM</a>
56.	BSc III & V Sem	Gonorrhoea disease	26/5/21	<a href="https://youtu.be/OBMCm50jZ1E">https://youtu.be/OBMCm50jZ1E</a>
57.	BSc VI Sem	Solid waste disposal methods	27/5/21	<a href="https://youtu.be/NgOTjoiN488">https://youtu.be/NgOTjoiN488</a>
58.	BSc IV & V Sem	Syphilis Disease	28/5/21	<a href="https://youtu.be/xL51I0fRQiE">https://youtu.be/xL51I0fRQiE</a>
59.	BSc IV & V Sem	Influenza-Air borne disease	31/5/21	<a href="https://youtu.be/U_467Og0EAA">https://youtu.be/U_467Og0EAA</a>
60.	BSc IV & V Sem	Rabies-Zoonotic disease	31/5/21	<a href="https://youtu.be/WUE0JFWA0EE">https://youtu.be/WUE0JFWA0EE</a>
61.	BSc VI Sem	Sources of microorganisms in food	12/6/21	<a href="https://youtu.be/11cuQJ-GRck">https://youtu.be/11cuQJ-GRck</a>

62.	BSc VI Sem	Microorganisms of food	12/6/21	<a href="https://youtu.be/KlW166uX4gI">https://youtu.be/KlW166uX4gI</a>
63.	BSc IV & V Sem	Laboratory diagnosis of clinical specimens	13/6/21	<a href="https://youtu.be/IWcLpI_PwVs">https://youtu.be/IWcLpI_PwVs</a>
64.	BSc V Sem	Sulphur Cycle	13/6/21	<a href="https://youtu.be/Ju_CFdsCCho">https://youtu.be/Ju_CFdsCCho</a>
65.	BSc I Sem	History of Microbiology	13/6/21	<a href="https://youtu.be/tng4WXZhj00">https://youtu.be/tng4WXZhj00</a>
66.	BSc III Sem	Mycorrhizae	14/6/21	<a href="https://youtu.be/ElGg1G5JRBA">https://youtu.be/ElGg1G5JRBA</a>
67.	BSc III & V Sem	Carbon Cycle	14/6/21	<a href="https://youtu.be/9zjDaIKaoz8">https://youtu.be/9zjDaIKaoz8</a>