# KURIAKOSE GREGORIOS COLLEGE PAMPADY

Website: www.kgcollege.ac.in Phone: 0481 2505212 Email: mail@kgcollege.ac.in


## 2.3.1. STUDENT CENTRIC METHODS OF TEACHING

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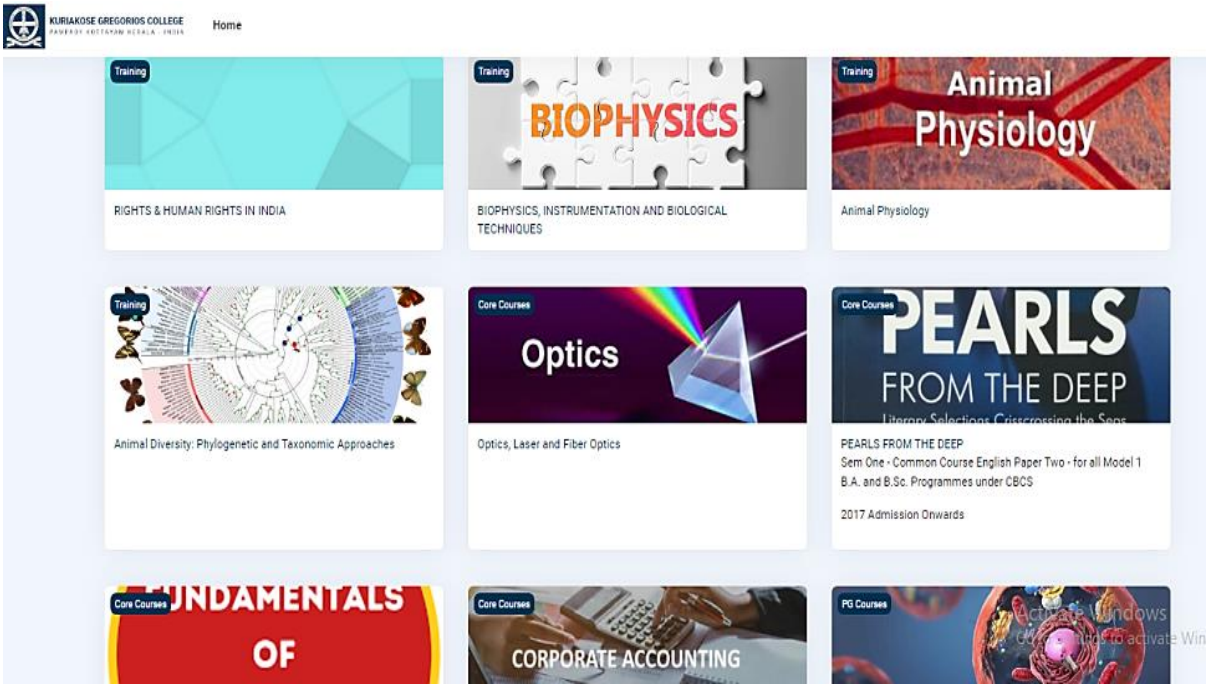
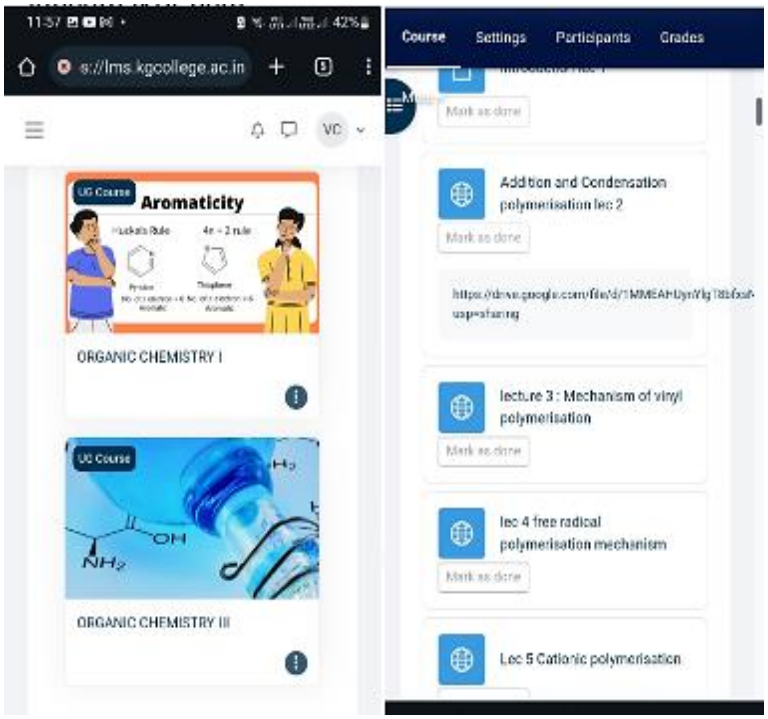
# ICT enabled learning methods

The education system has undergone a substantial transformation with the integration of Information and Communication Technology (ICT), offering a multitude of tools and online resources to improve the teaching and learning process. Our approach involves a blended teaching-learning strategy that combines both online and offline methods, with each mode complementing the other. We use ICT to support, enhance, and streamline the delivery of information.

## 1. Learning Management System (LMS)

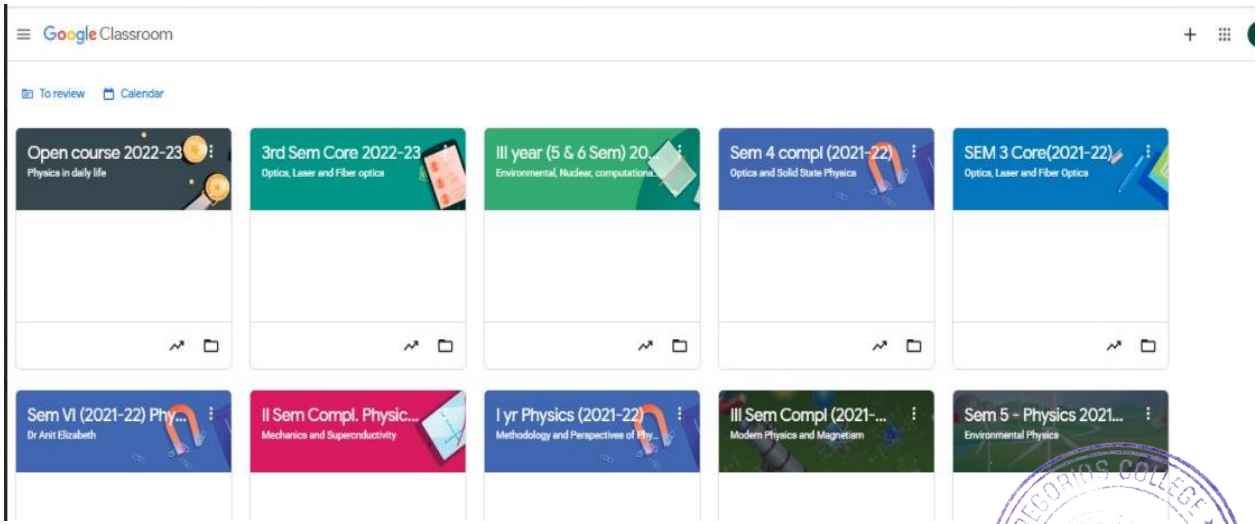
The institution has a customized Moodle LMS platform for curriculum delivery. Teachers are given training to use the platform. Recorded classes, notes, assignments are given through Moodle.

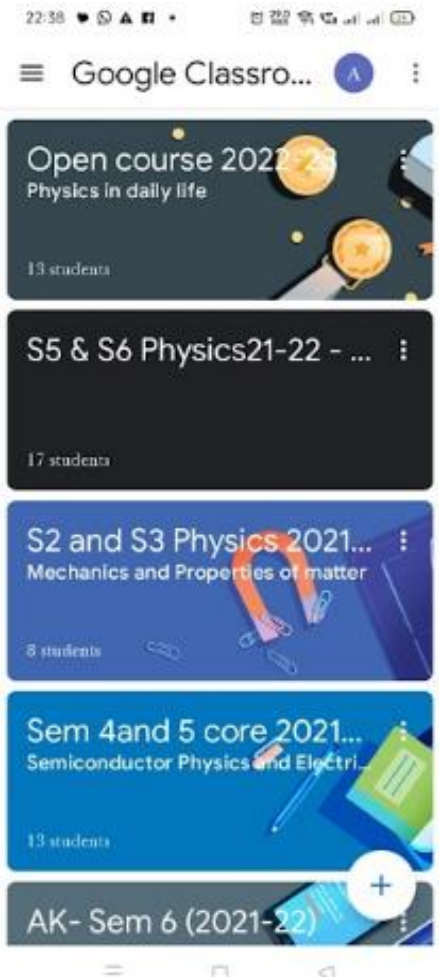




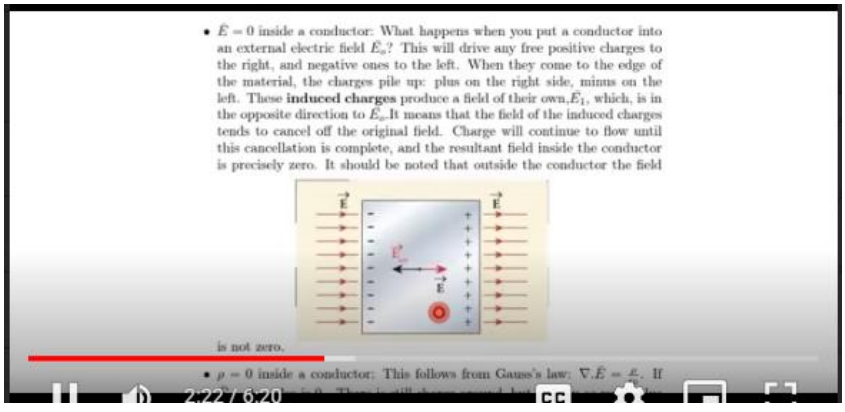

## 2. Google Classrooms

During Covid 19 pandemic period, the teaching learning process was through online platforms. Recorded classes, assignments, test papers, etc. were conducted through Google Classroom. Class groups were formed on WhatsApp and Telegram platforms also for effective communication.






Recorded classes are unloaded by the teachers in Google Classroom and also on the YouTube channel and the students can access it at any time Online.

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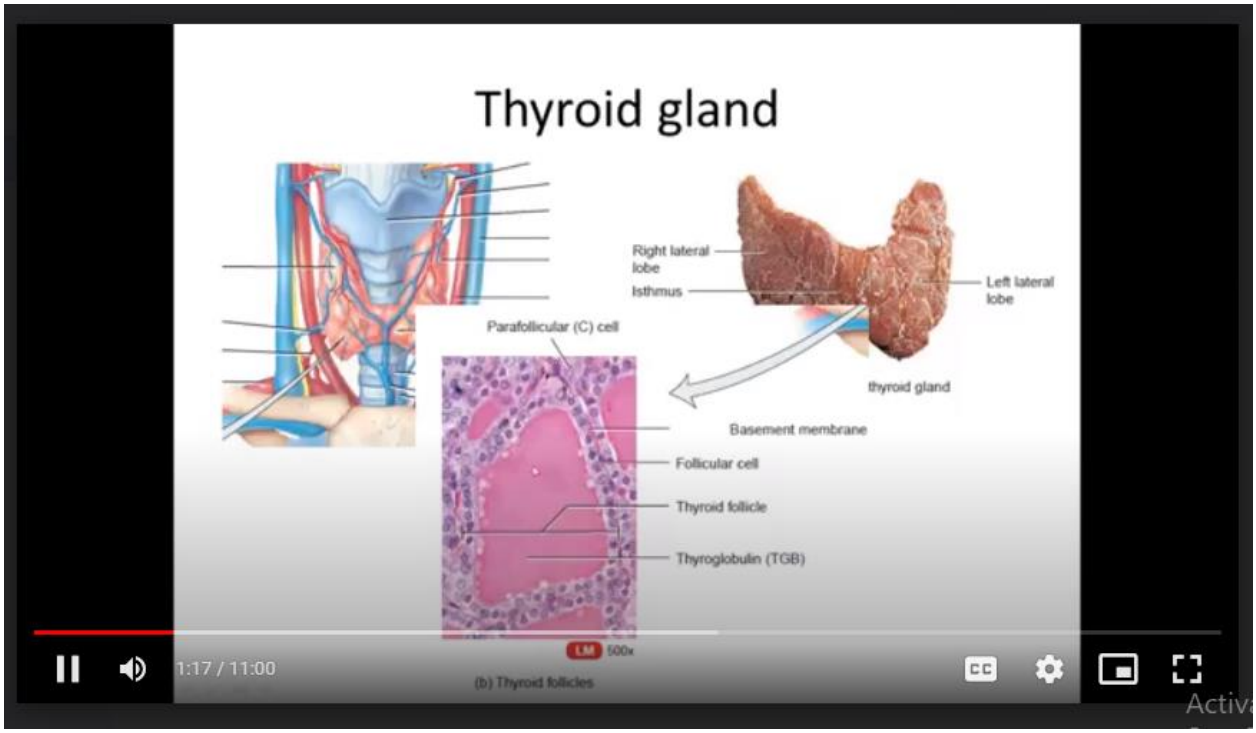


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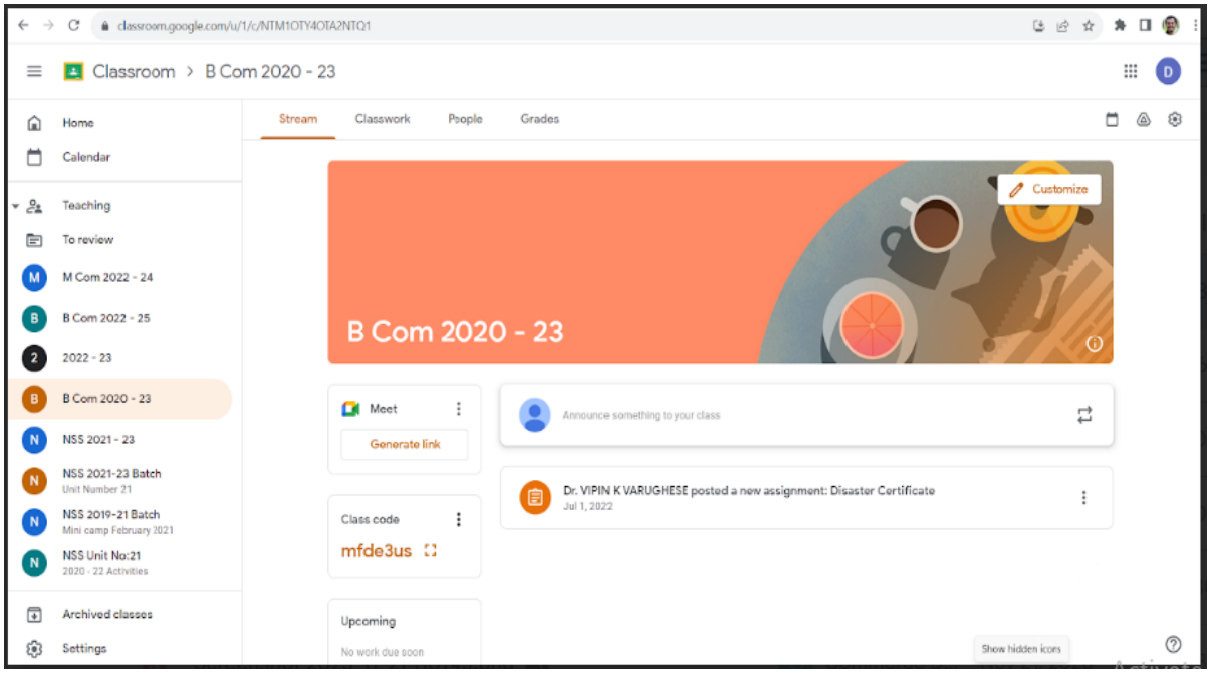


## 3. Massive Open Online Course (MOOC)

MOOCs is a platform that host courses from universities and institutions around the world, covering diverse topics such as science, technology, humanities, business, and more. It provides a flexible learning environment with video lectures, quizzes, forums, and other interactive elements. Students are encouraged to join the courses to acquire and update their knowledge.

**Mahatma Gandhi University**

**Massive Open Online Course**

**Certificate of Completion**

This certificate is awarded to

**VINEETHA VIJAYAN**

**PRN-200021036057**

For successfully completing the Massive Open Online Course on **Organic Farming** 2020 Admission with **4 Credits** in the examination held in 2022

**Grade Card**

| Project 1 | Project 2 | Final Exam | Total | Grade | Pass/Fail |
|---|---|---|---|---|---|
| 99 | 100 | 52 | 251 | A only | Pass |

Certificate No-**20OFC7373**

Date of Issue- 20-01-2023

**Vice Chancellor**

**Mahatma Gandhi University**

**Massive Open Online Course**

**Certificate of Completion**

This certificate is awarded to

**ANSAR KAMAL**

**PRN-200021036030**

For successfully completing the Massive Open Online Course on **Organic Farming** 2020 Admission with **4 Credits** in the examination held in 2022

**Grade Card**

| Project 1 | Project 2 | Final Exam | Total | Grade | Pass/Fail |
|---|---|---|---|---|---|
| 98 | 97 | 52 | 247 | A only | Pass |

Certificate No-**20OFB6454**

Date of Issue- 20-01-2023

**Vice Chancellor**

## 4. SWAYAM

SWAYAM **(**Study Webs of Active Learning for Young Aspiring Minds**)** is an initiative by the Government of India to provide high-quality education and learning resources to anyone, anywhere, and at any time. SWAYAM offers online courses and is part of the broader digital India and Skill India campaigns. Our college has a registered SWAYAM Chapter.

KURIAKOSE GREGORIOS COLLEGE ★ PAMPADY ★ 686 502

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

ALAN BIJI PHILIP

for successfully completing the course

Ecology and Environment

with a consolidated score of 65 %

| Online Assignments | 19.17/25 | Proctored Exam | 45.75/75 |
|---|---|---|---|

Total number of candidates certified in this course: 1334

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Aug-Oct 2023
(8 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL23GE33S640101310 To verify the certificate No. of credits recommended: 2 or 3

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

GAYATHRI K

for successfully completing the course

Ecology and Environment

with a consolidated score of 65 %

| Online Assignments | 16.88/25 | Proctored Exam | 48/75 |
|---|---|---|---|

Total number of candidates certified in this course: 1334

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Aug-Oct 2023
(8 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL23GE33S640101422 To verify the certificate No. of credits recommended: 2 or 3

## 5. edunext.io/Open edX

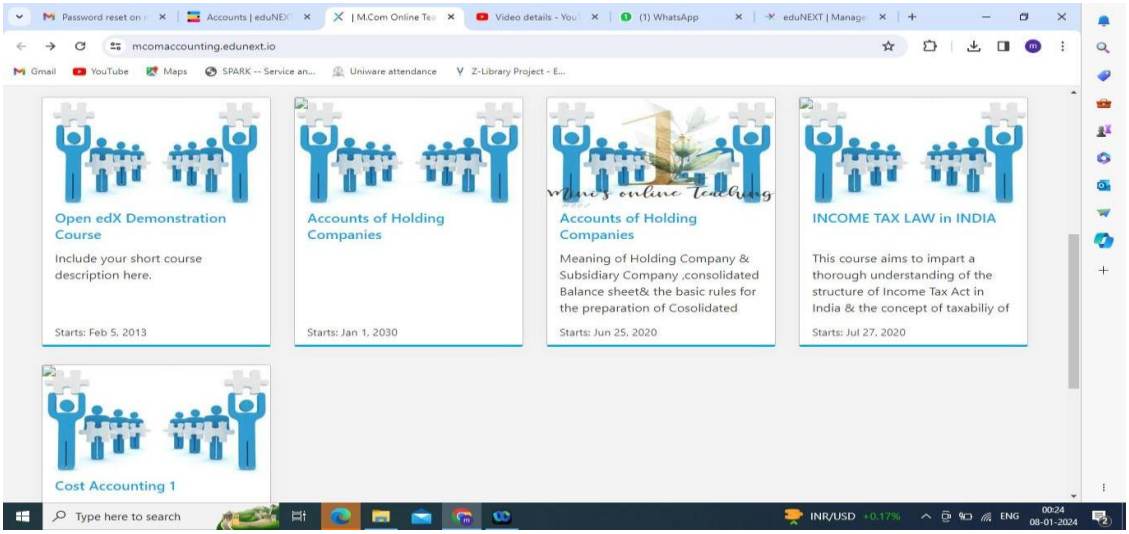
It is a platform for online learning and course delivery. Department of Commerce introduced Courses in this platform during the Covid pandemic period

https://mcomaccounting.edunext.io/courses/course-v1:mcomaccounting+CM010201+sem2/about

https://mcomaccounting.edunext.io/courses/course-v1:mcomaccounting+CM010302+Mcomsemester3/about

https://mcomaccounting.edunext.io/courses/course-v1:mcomaccounting+Core1+VSemester/about

KURIAKOSE GREGORIOS COLLEGE PAMPADY 686 509




Classes were also uploaded in Youtube channels.Some youtube channel links are

https://youtu.be/U7YSBF3GHBM

https://youtu.be/E9XTHNeCMSs

https://youtu.be/b_YqRC1zMFE

https://youtu.be/IxR6fpOCJTA

https://openinyoutu.be/XcmG5JGmfeA?si=m8h0f8WabnpgN_VZ

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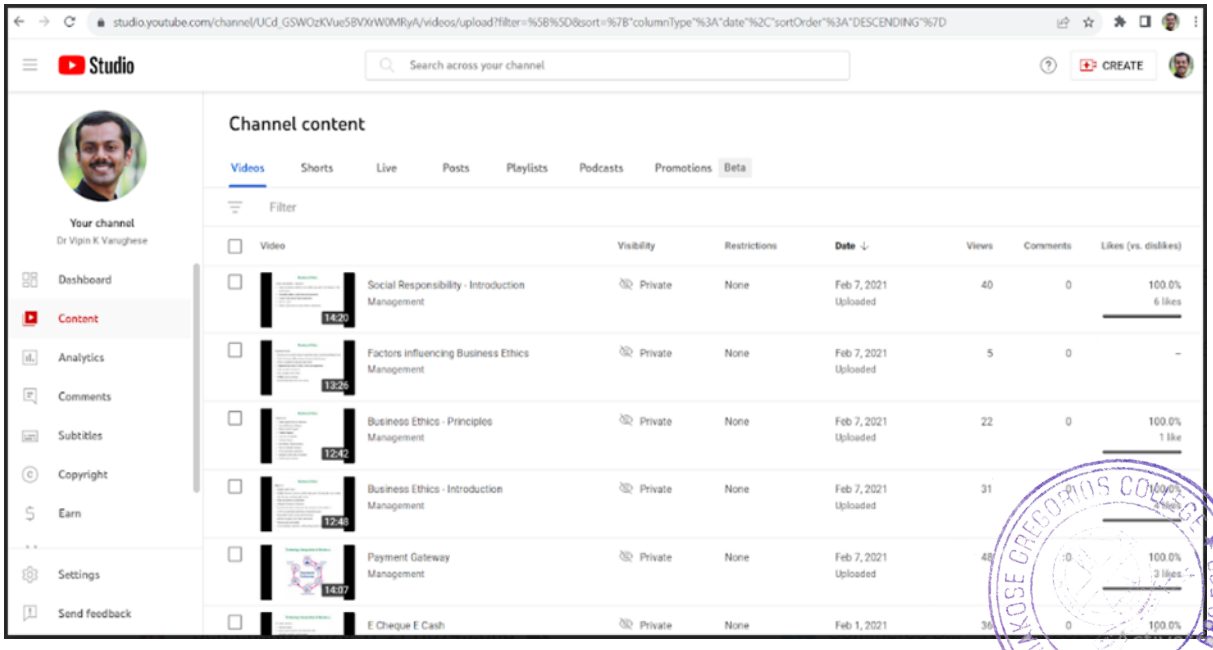
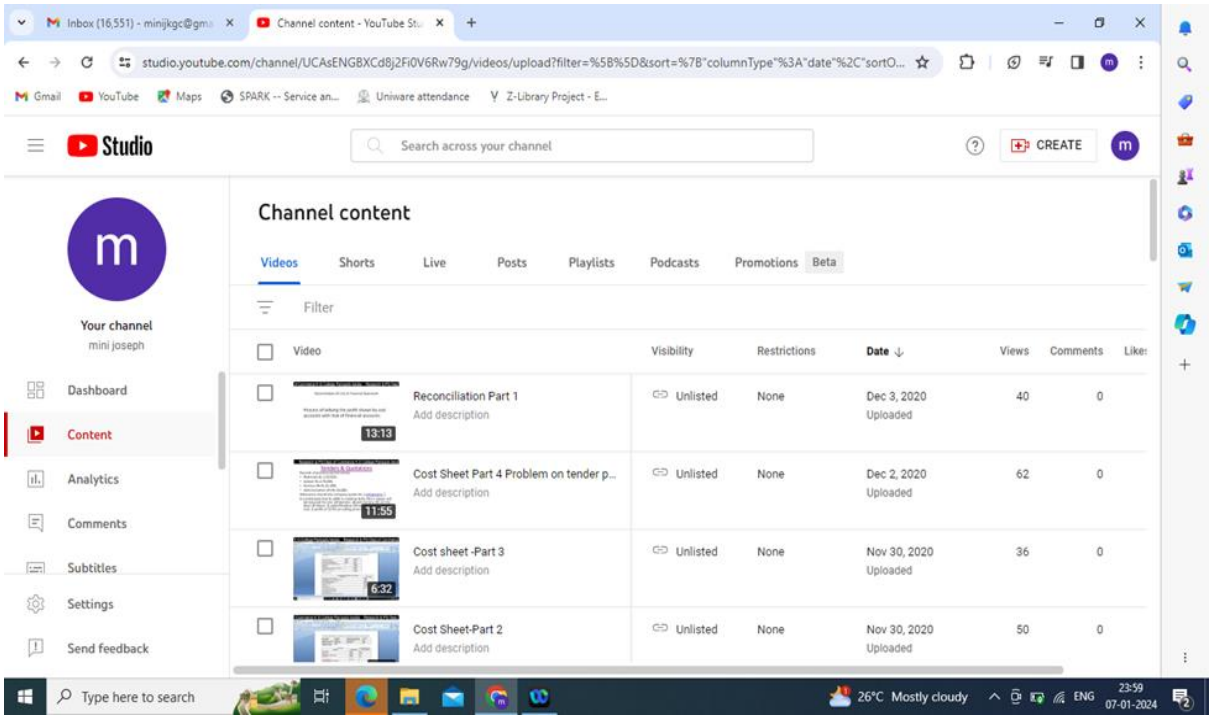
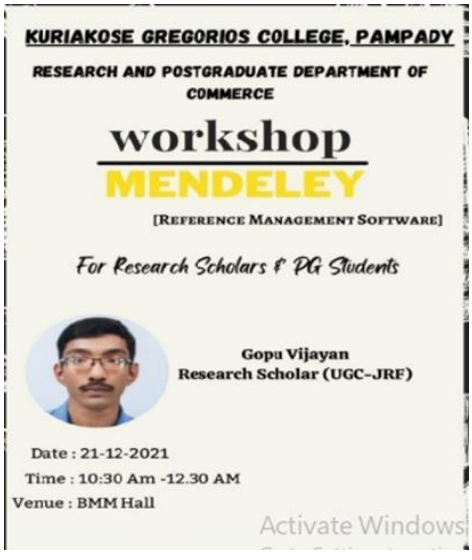




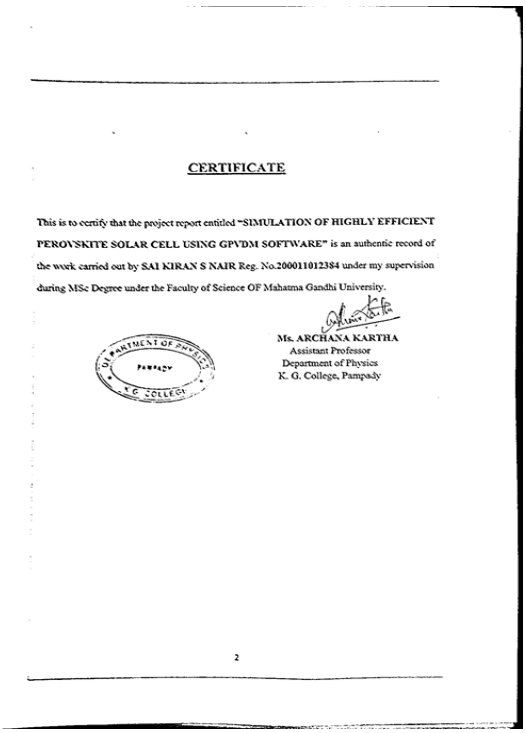

## 6. Software aided learning strategies

Software-aided learning strategies encompass the integration of various software applications and tools to enhance the educational experience. These methods support the technology to facilitate interactive and personalized learning, often incorporating platforms such as educational software, simulations, virtual labs, and online collaboration tools. We organize training on certain software applications to foster the learning process.




## 7. Projects using SPSS, SCAPS, GPVDM

Project work is an essential part of the undergraduate (UG) and postgraduate (PG) curricula at our college. We promote the application of software tools for project execution. Commonly utilized tools include SPSS, SCAPS, and GPVDM. This emphasis fosters practical software familiarization and enhances students' learning experiences.



**CERTIFICATE**

This is to certify that the project report entitled **"SIMULATION OF HIGHLY EFFICIENT PEROVSKITE SOLAR CELL USING GPVDM SOFTWARE"** is an authentic record of the work carried out by **SAI KIRAN S NAIR** Reg. No.**200011012384** under my supervision during MSc Degree under the Faculty of Science OF Mahatma Gandhi University.

**Ms. ARCHANA KARTHA**
Assistant Professor
Department of Physics
K. G. College, Pampady

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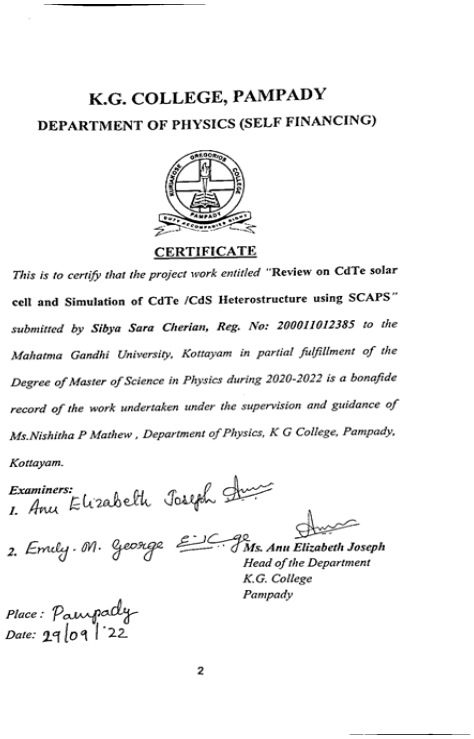

**K.G. COLLEGE, PAMPADY**
**DEPARTMENT OF PHYSICS (SELF FINANCING)**

**CERTIFICATE**

*This is to certify that the project work entitled* **"Review on CdTe solar cell and Simulation of CdTe /CdS Heterostructure using SCAPS"** *submitted by* ***Sibya Sara Cherian, Reg. No: 200011012385*** *to the Mahatma Gandhi University, Kottayam in partial fulfillment of the Degree of Master of Science in Physics during 2020-2022 is a bonafide record of the work undertaken under the supervision and guidance of Ms.Nishitha P Mathew , Department of Physics, K G College, Pampady, Kottayam.*

***Examiners:***
*1. Anu Elizabeth Joseph*
*2. Emily M. George*

***Ms. Anu Elizabeth Joseph***
*Head of the Department*
*K.G. College*
*Pampady*

*Place: Pampady*
*Date: 29/09/22*

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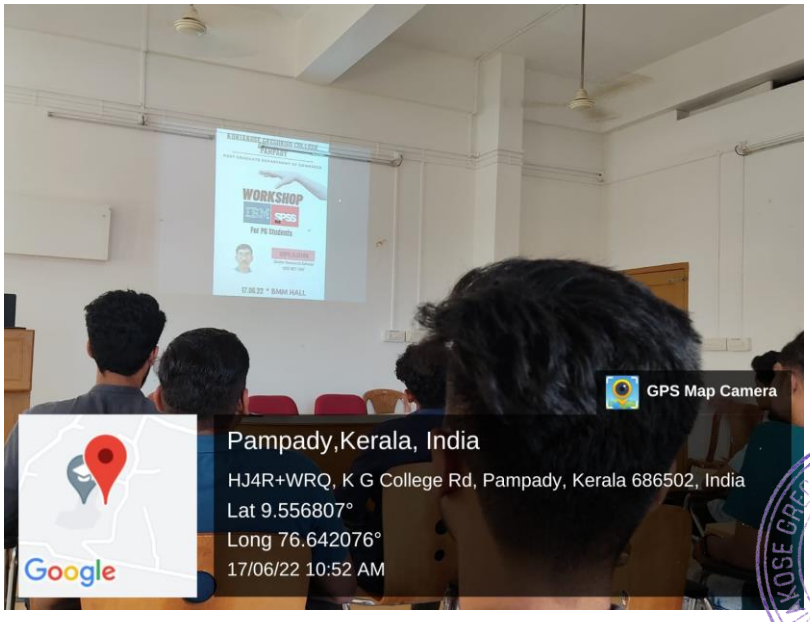
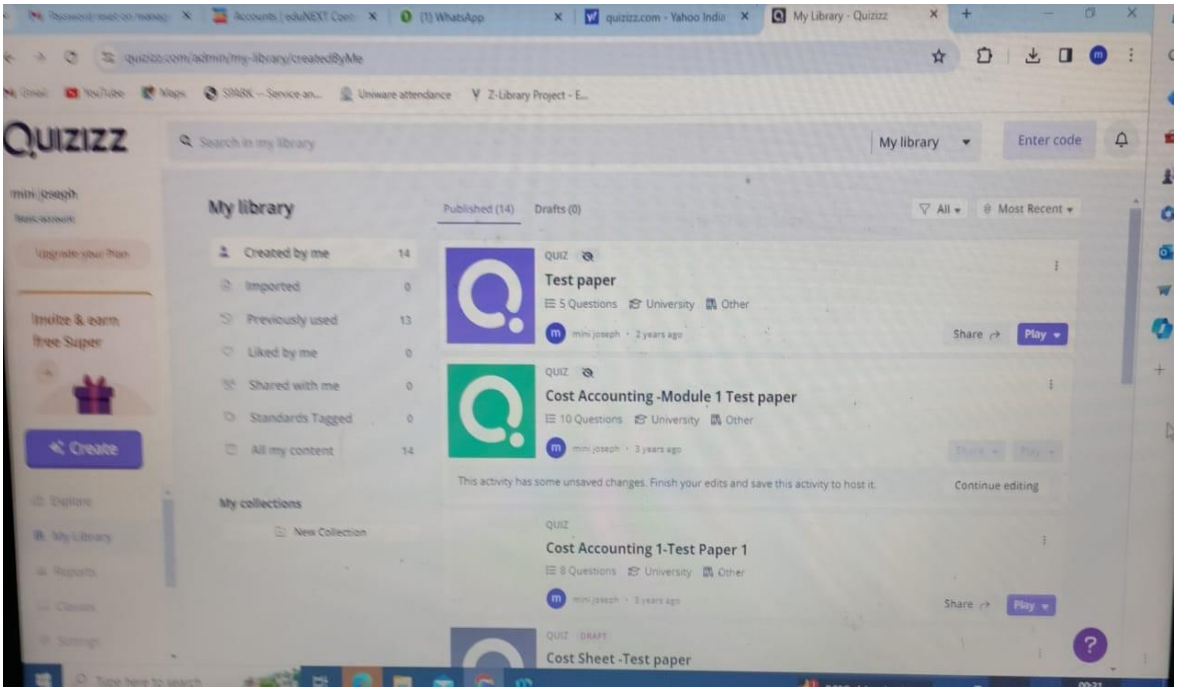


## 8. Quizizz

Quizizz is an engaging and interactive online platform designed for educational purposes, offering teachers a versatile tool for creating fun and effective quizzes to assess and reinforce students' understanding of various subjects. Teachers can utilize Qizizz to track individual student progress, identify areas of strength and weakness, and tailor their teaching strategies accordingly, making it a valuable resource for formative assessment and ongoing classroom engagement.

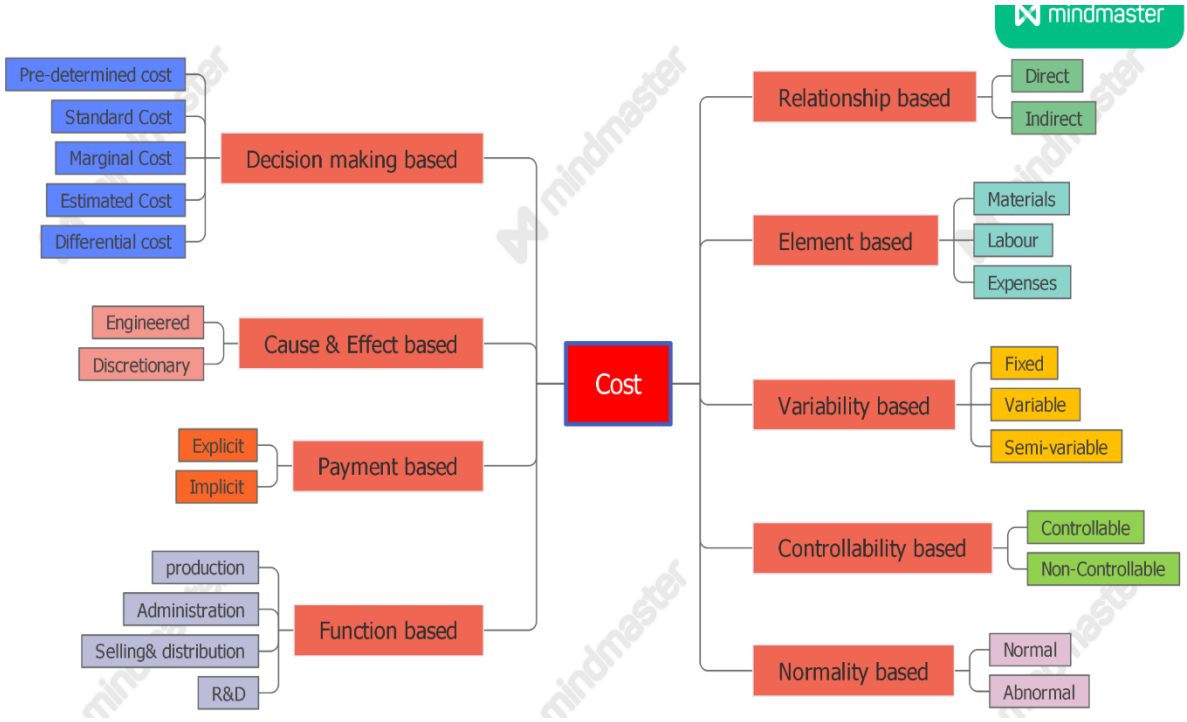
https://quizizz.com/admin/quiz/613716e41424b9001ed9b4b1?searchLocale=




## 9. Mind Master

Mind Master is a mind mapping tool that enables users to visually organize ideas and information, fostering creativity and improved understanding. With intuitive features and customizable templates, Mind Master serves as a versatile tool for brainstorming, project planning, and knowledge structuring. Its user-friendly interface and collaborative capabilities

make it an effective resource for individuals and teams seeking efficient ways to map out and visualize complex concepts.




## 10. Kahoot

Kahoot is an engaging and interactive learning platform used in classrooms. It allows teachers to create quizzes, surveys, and discussions that students can participate in using their devices. Kahoot promotes active learning, collaboration, and gamification, making learning fun and effective.

## 11. Hosting Online Webinars, Workshops, Training Sessions

Online expert talk, workshops, training sessions were conducted to nurture the knowledge of students especially during the pandemic period.

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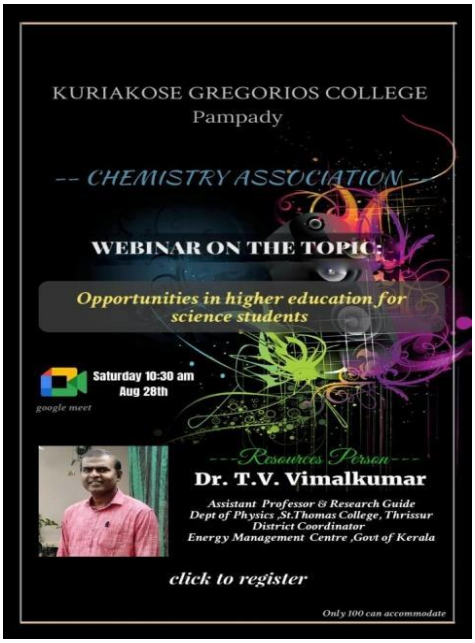
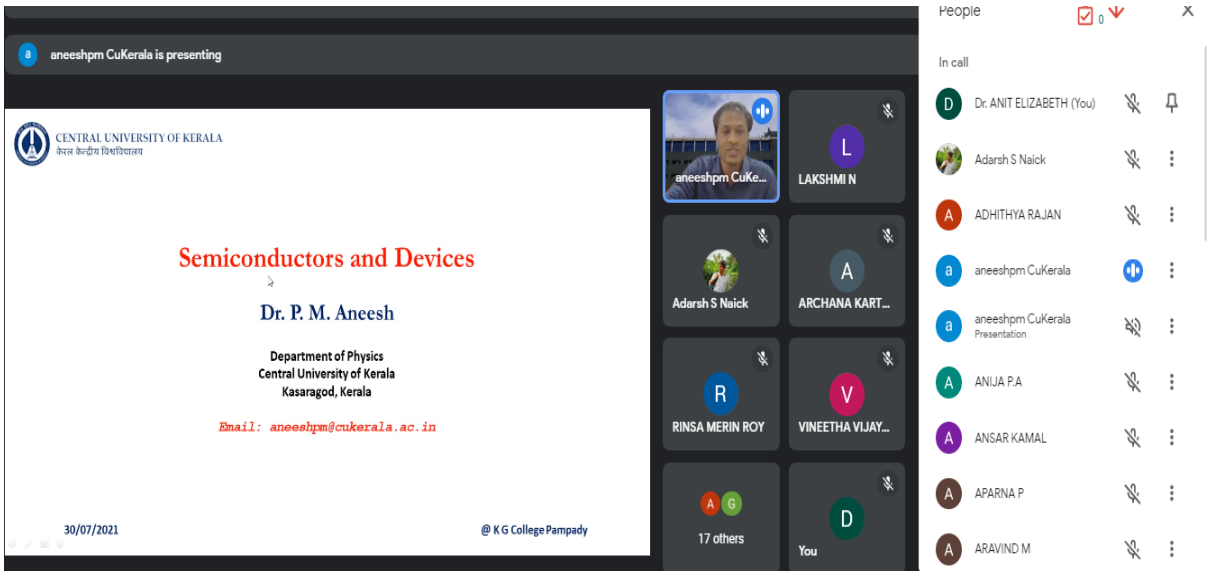
KURIAKOSE GREGORIOS COLLEGE
PAMPADY
Department of Chemistry
Presents
Association Inauguration
&
Webinar
3 July 2021
10 : 30 A M
Chief Guest
Dr. Tomlal Jose E
Associate Professor & Head
Department of Chemistry
St.Berchmans College
Changanassery
Webinar
Structure - Property relationship of materials


KURIAKOSE GREGORIOS COLLEGE
Pampady
-- CHEMISTRY ASSOCIATION --
WEBINAR ON THE TOPIC:
Opportunities in higher education for science students
Saturday 10:30 am
Aug 28th
google meet
Resources Person
Dr. T.V. Vimalkumar
Assistant Professor & Research Guide
Dept of Physics ,St.Thomas College, Thrissur
District Coordinator
Energy Management Centre ,Govt of Kerala
click to register
Only 100 can accommodate


National Webinar
on
Nano - Materials for 21st Century
Organized by
Department of Chemistry
In Association with IQAC
Kuriakose Gregorios College Pampady
Affiliated to MG University
Kottayam,Kerala
Resource Person
Google Meet
12 March 2022
5 PM
Dr.Laxman Singh
Head & Assistant Professor
RRS College
(Pataliputra University)


KURIAKOSE GREGORIOS COLLEGE
PAMPADY
POST GRADUATE
DEPARTMENT OF ZOOLOGY
Presents
NATIONAL SCIENCE DAY
National level Webinar
Platform : Google Meet
Date : 28 February 2022
Day : MONDAY
Time : 11 AM
DR. B SANTHOSH


aneeshpm CuKerala is presenting
CENTRAL UNIVERSITY OF KERALA
केरल केन्द्रीय विश्वविद्यालय
Semiconductors and Devices
Dr. P. M. Aneesh
Department of Physics
Central University of Kerala
Kasaragod, Kerala
Email: aneeshpm@cukerala.ac.in
30/07/2021
@ K G College Pampady
aneeshpm CuKe...
LAKSHMI N
Adarsh S Naick
ARCHANA KART...
RINSA MERIN ROY
VINEETHA VIJAY...
17 others
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People
In call
Dr. ANIT ELIZABETH (You)
Adarsh S Naick
ADHITHYA RAJAN
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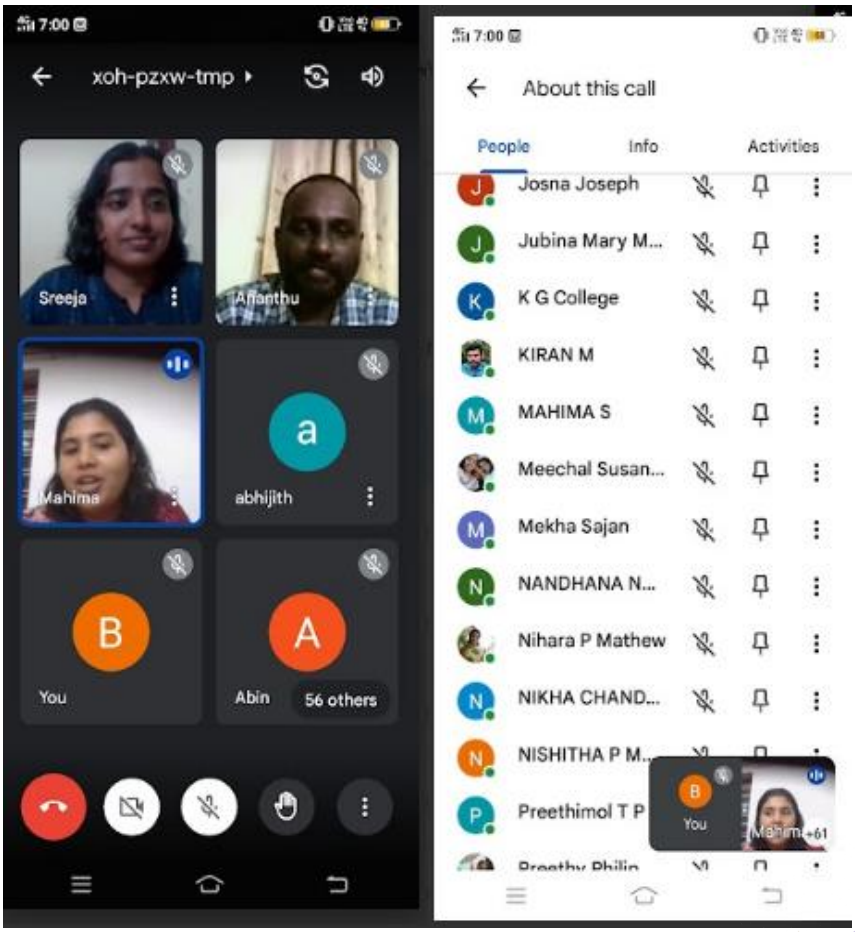
Presentation
ANIJA P.A
ANSAR KAMAL
APARNA P
ARAVIND M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56 others
About this call
People
Info
Activities
Josna Joseph
Jubina Mary M...
K G College
KIRAN M
MAHIMA S
Meechal Susan...
Mekha Sajan
NANDHANA N...
Nihara P Mathew
NIKHA CHAND...
NISHITHA P M...
Preethimol T P
You

## 12. ICT enabled Classrooms

Interactive boards are installed in all departments and the use of these boards enhances the learning process by allowing interactive lessons, multimedia content, and real-time annotation. In classrooms lacking interactive boards, LCD projectors are installed to facilitate presentations and video lectures.

## 13. ICT enabled Library

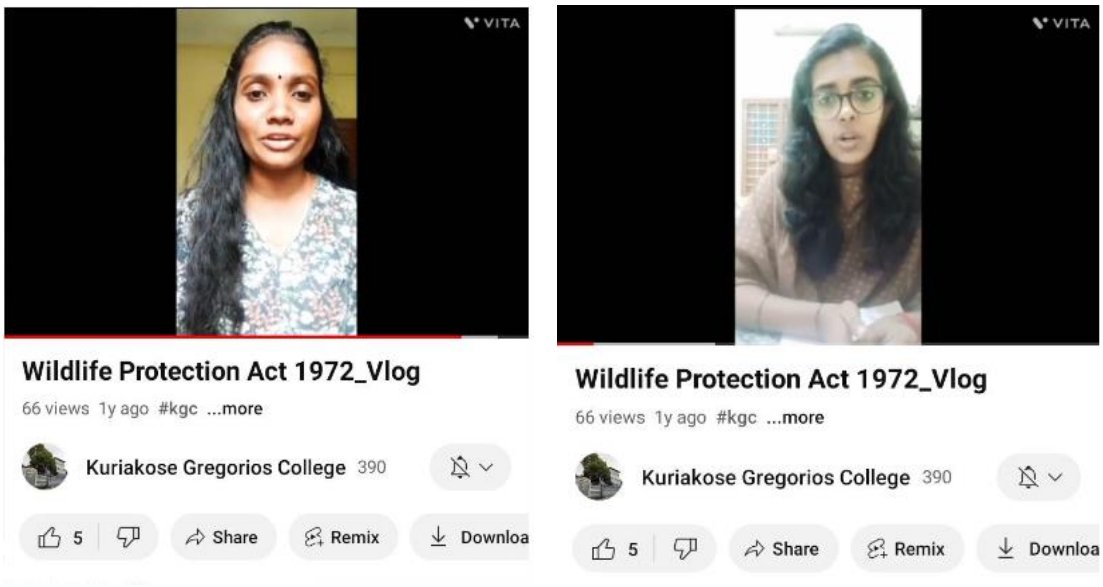
Information and Communication Technology (ICT) has revolutionized libraries, turning them into dynamic hubs of knowledge and innovation. This transformation includes the shift from traditional digital catalogs and databases to providing online access to a vast array of resources.

The major areas of ICT application in our library are:

- **Library Management Software** – Our library is fully automated with the library management software KOHA (version- koha 22.05). They include modules for cataloging, circulation, acquisitions, and inventory management.
- **Online Public Access Catalogue (OPAC)** - Online Public Access Catalogues (OPACs) are digital platforms or interfaces that allow users to access and search the catalogue of a library's collection, including books, journals, audio-visual materials, and other resources.
- **Digital library service/Browsing facility** - Digital library services encompass a range of offerings that leverage technology to provide access to digital resources, facilitate information retrieval, and enhance user experiences.
- **Access to online databases** – Our library has a subscription to **NLIST** which provides access to lakhs of e- books, e-journals and other e resources to its clienteles.
- **Access to e resources** – Library provides access to open access electronic journals, books, portals, course wares, newsletters, periodicals etc.
- **Reprographic services –** online based reprographic services are also enabled in our library.
- **E-gate entry –** entry and exit of users to the library is done through an electronic gate by scanning their college id.

## 14. E-content creation by students

Students are assigned to take a seminar on given topics and they are given the opportunity to manage the class with slide presentations. This helps them to get familiarized with ICT tools. Videos were created by the students on different topics and those were circulated in the class groups.

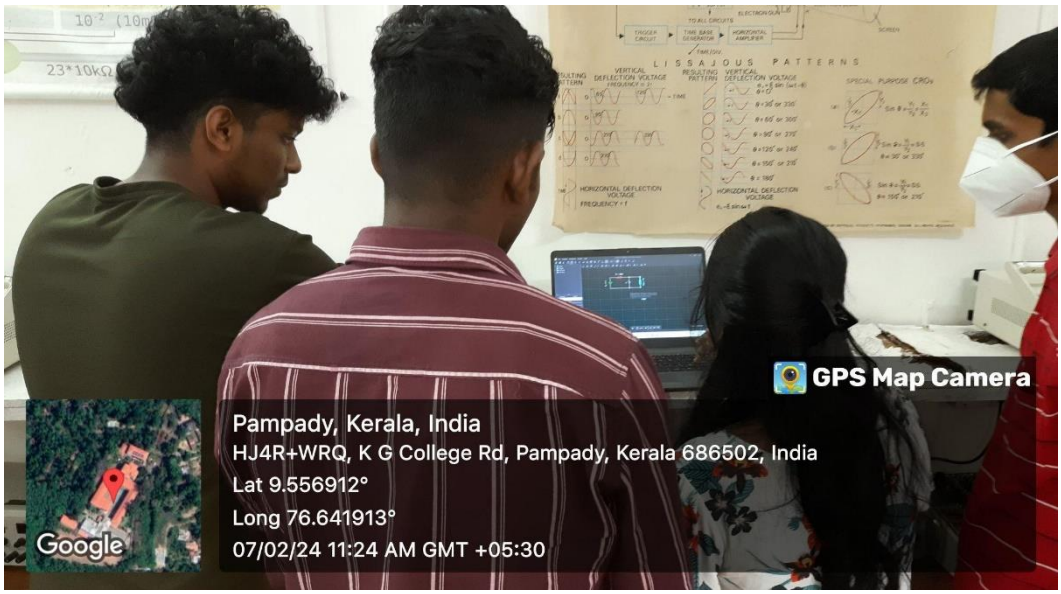

## 15. VESTA

VESTA is a powerful 3D visualization program primarily used in Materials Science and related fields. It enables users to visualize and analyze crystal structures and their associated reciprocal lattice, molecular models, and electron/nuclear densities. It supports various file formats and provides tools for manipulation, measurement, and analysis of structural data. VESTA allows students to visualize crystal structures in 3D. This helps them understand the arrangement of atoms/molecules within different crystal lattices. Students can visualize reciprocal lattices, which are essential for understanding properties like electronic band structures and Brillouin zones.

## 16. SIMPHY

SIMPHY is a Physics Simulation software to set up a virtual Physics Lab which makes teaching highly interactive. SIMPHY provides tools for designing experiments, setting up parameters, and running simulations to observe the behavior of physical systems. It covers a wide range of topics in physics, including mechanics, electricity, magnetism, optics, and electronics. SIMPHY aims to enhance learning experiences by providing interactive and visually engaging

simulations that help users understand fundamental principles of physics through experimentation and exploration.




## 17. PhysioEx

An online lab experience called PhysioEx 10.0: Laboratory Simulations in Physiology gives students the chance to practice in an atmosphere that emphasizes comprehension and critical thinking.

With PhysioEx 10.0's 63 user-friendly laboratory simulation activities, students can do experiments without endangering real animals and that are challenging to carry out in a wet lab setting due to budgetary, time, or safety problems. It also lessens the likelihood that students may make mistakes in a live lab by allowing them to repeat labs as frequently as they desire.