



## **OBJECTIVE OF THE WORK SHOP**

To learn about GST and its structure in the current scenario

To know about the various types of GST and its applications

To understand the basic procedure to file the GST and income tax in business man

**Time & Date** : 10.00 am to 01.00 pm & 11.04.2023

**Venue** : B – Block Conference Hall.

### **Agenda:**

Welcome Address : V. Jayanthi, II BBA

MOC : Eden, III BBA

Felicitation Address : Mr.C.Srinivasan, Head of the Department,  
Department of Business Administration, MCAS.

Presidential Address : Dr. R. Selvakumaran, Director- Academics

Keynotes Address : **Dr. K. NAGARAJAN**, Cost Accountant, Namakkal

Vote of thanks : M Aathisakthi, I BBA.

### **Subject/Title:**

A workshop on "GST and Indian Economy”

The purpose of organising this workshop is to know about the basic and current trends in GST and its applications in the business enterprises. Dr. K.Nagarajan,M.Com.,P.hD. Cost Accountant, Trainer for Cost Accounting, Vamana Academy,Namakkal was the Chief Guest and he highlighted on GST trends and it's growth pattern as well as application in business enterprises. He also eagerly interacted with our students and clarified the doubts regarding GST and its components. He also focused on procedure to follow the business people to file the GST and gain some privileges from the government.

Dr. R. Selvakumaran,Director- Academics, Vanetra Muthayammal Institutions gave the presidential address. Mr.C.Srinivasan, Head of the Department, Department of Business Administration gave an introductory remark to the students and finally Ms. M Aathisakthi of I BBA presented a vote of thanks.

# PHOTOGRAPHS



**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**  
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Recognized by STAR College Scheme - DBT (2018 -2021)



RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

Department of Business Administration  
Organizes  
**Workshop**  
on  
**GST and Indian Economy**



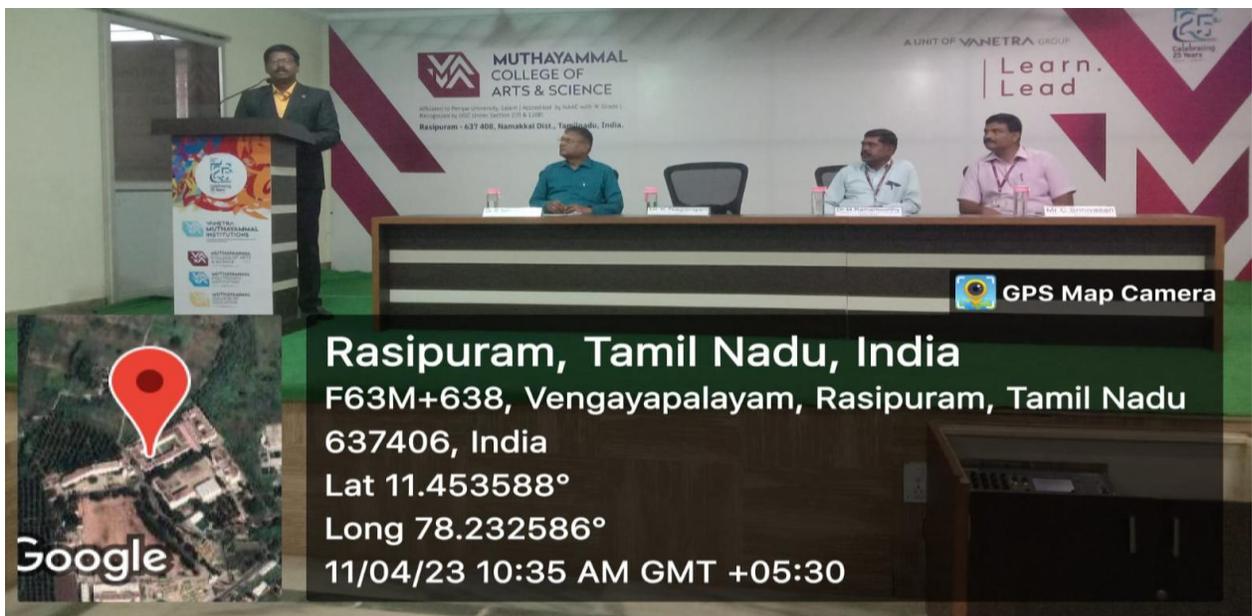
**Chief Guest**  
**Dr. K. NAGARAJAN**  
Proprietor of Audit Firm  
K. Nagarajan & Co  
Head, Trainer of Vamana Training Academy  
Namakkal

11<sup>th</sup> APR 2023      10.00 AM

Venue : B - Block Conference Hall

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## 5. Feedback

This workshop was really good to the students mind and they gave a positive opinion about this programme and learned a lot. Students also opined that this type of programme enable the students mind to think about tax and its structure especially GST apart from their curriculum. Every student has enjoyed the programme and got benefit also.

## 6. (i) Number of Students Participants

Nearly 195 students from BBA Department participated and gained a lot.

**(ii) Number of Staff Participants.** Nearly 9 faculties took part in this programme.

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE**  
(Autonomous), RASIPURAM  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**REPORT FOR - WORKSHOP ON CHATBOT 29.07.2022**

### 1. Objective

Department of computer Application organized Workshop on “CHATBOT” for III BCA Students on 29.07.2022. Apart from curriculum need to motivate students to achieve their goals.

- ✓ Workshop helps students to improve their learning Skill.
- ✓ These can be very helpful for the students, and also contribute to the teacher's knowledge and practices.
- ✓ Guest lecturers can be used to make classes more approachable and appealing to students.

### 2. Agenda (Date & Time , Venue , Guest details)

Date : 29.07.2022

Time : 10.00 am to 04.00pm

Venue : LAB-B1

Guest Speaker : Mr.ArunKumar Madeswaran

Artificial Intelligence Specialist, UAE.

Mrs. Lakshmi Vairamani,

Project Manager-AI

Redmind Technologies, Chennai.



The poster features the college logo on the left and accreditation details on the right. The central text reads: 'Department of Computer Application Organizes One Day Workshop on Chat Bot'. Below this, it lists the date '29th July 2022' and time '10.00 AM'. The venue is 'Lab B1'. Two speakers are featured: 'Speaker Lakshmi Vairamani, Project Manager - AI, RedMind Technologies, Chennai' and 'Speaker Arun Kumar Madeswaran, Artificial Intelligence specialist, UAE'. The bottom of the poster includes social media handles and the website 'www.vanetrargroup.in'.

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RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

**Department of Computer Application**  
Organizes  
**One Day Workshop**  
on  
**Chat Bot**

**29<sup>th</sup> July**  
2022

**10.00**  
AM

**Venue**  
Lab B1

**Speaker**  
**Lakshmi Vairamani**  
Project Manager -AI  
RedMind Technologies  
Chennai

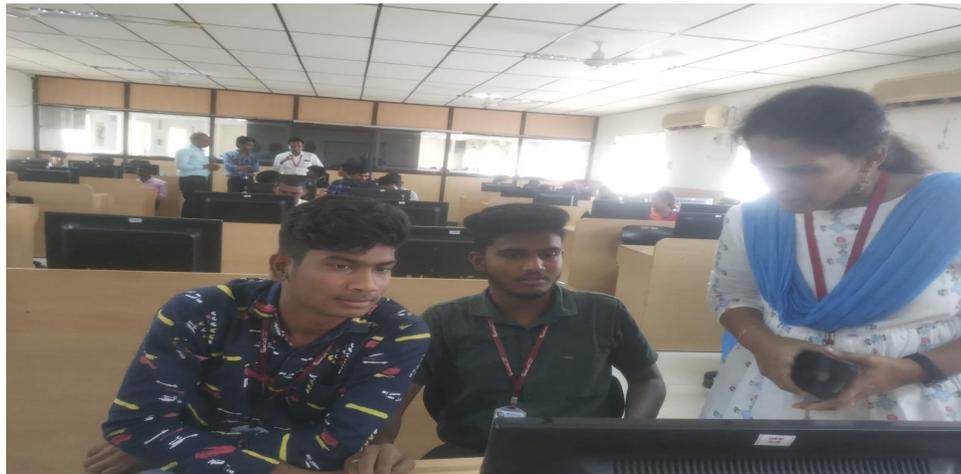
**Speaker**  
**Arun Kumar Madeswaran**  
Artificial Intelligence specialist  
UAE

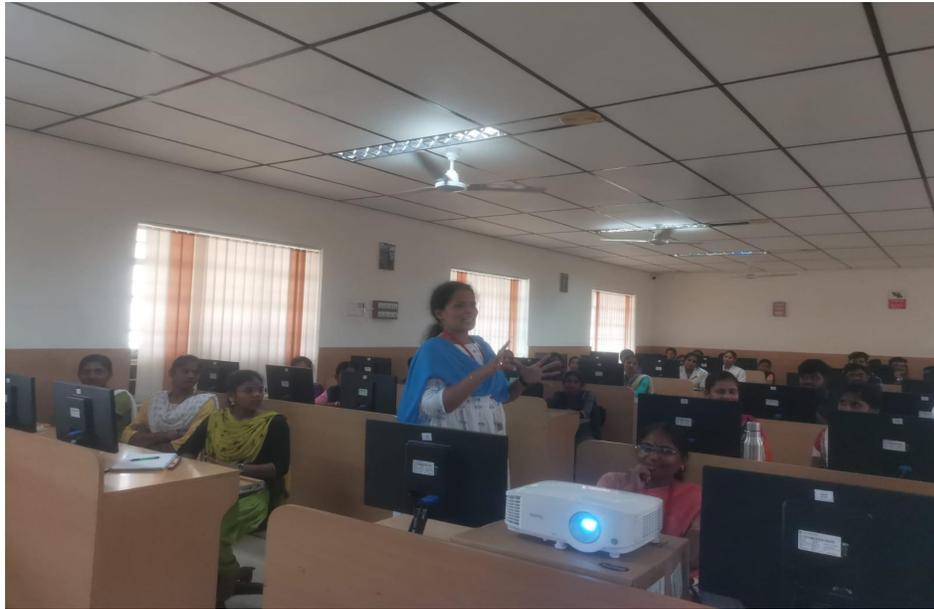
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www.vanetrargroup.in

### 3. Subject/topic dealt with (minimum 5-10 lines)

- They gave AI Basics as theory session.
- They trained the students how to use Chatbot application
- Gave hands on training about chatbot( Eg: Chatbot sample has been created for Muthayammal College of Arts & Science with Voice reorganization)

### 4. Photographs 5 nos (for both FN and AN session)





## 5. Feedback

Students were interestingly participated. They were interactively participated with the guest speaker.



**6. (i) Number of Staff Participants - 8**

**(ii) Number of Students Participants: III BCA - 107**

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE  
(Autonomous), RASIPURAM  
DEPARTMENT OF COMPUTER APPLICATIONS  
REPORT FOR – IPR Session 15.09.2022**

1. Objective

Department of Computer Applications and IIC organized Session on “Intellectual Property Rights” for II BCA Students on 15.09.2022. Apart from curriculum need to motivate students to find new things and how to register their Innovations & Inventions.

2. Agenda (Date & Time , Venue , Guest details)

Date : 15.09.2022

Time : 1.15 pm to 3.00 pm

Venue : B-Block Conference Hall

Guest Speaker: Dr.N.Sudha,

Assistant Professor and Head-IIC,

Innovation Ambassador

Muthayammal College of Arts and Science(Autonomous),

Rasipuram.



The poster is for a session on Intellectual Property Rights (IPRs) organized by the Department of Computer Application & Institution's Innovation Cell. It features a portrait of the speaker, Dr. N. Sudha, and provides details on the date (15th Sept 2022), time (01.15 PM), and venue (B-Block Conference Hall). The poster also includes accreditation information for the college and the Institution's Innovation Council.

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Recognized by STAR College Scheme - DBT (2018 -2021)

**INSTITUTION'S INNOVATION COUNCIL**  
Member of AICTE

**Department of Computer Application & Institution's Innovation Cell**  
Organize  
**Session on Intellectual Property Rights (IPRs)**

**Speaker**  
**Dr.N.SUDHA**  
Assistant Professor and Head - IIC  
Innovation Ambassador  
Muthayammal College of Arts & Science  
Rasipuram

**Venue**  
**B - Block Conference Hall**

**Participants : II Year BCA Students**

15<sup>th</sup> SEPT 2022  
01.15 PM

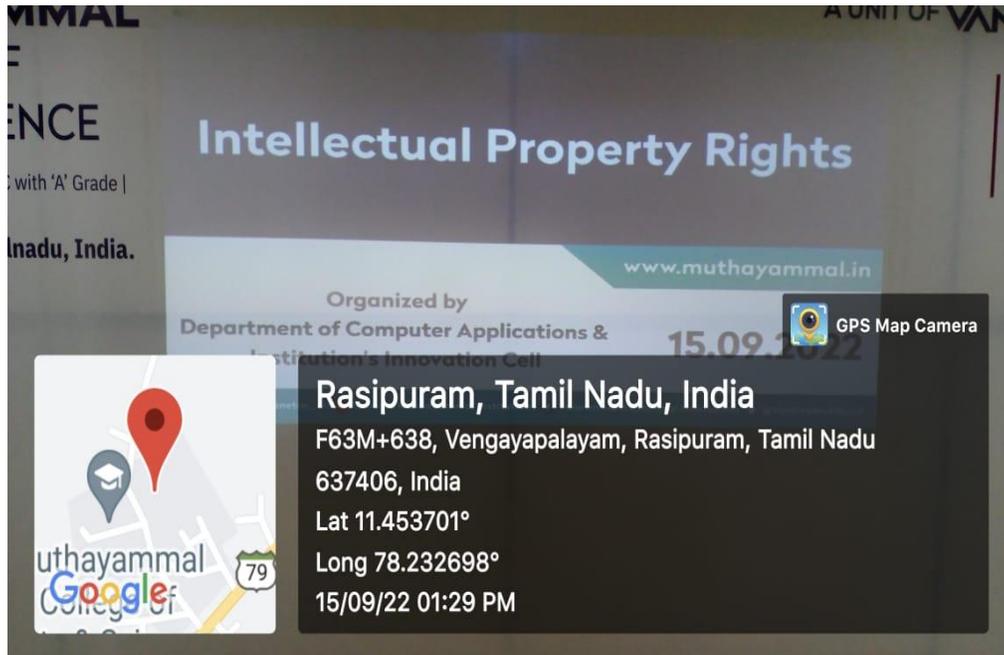
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3. Subject/topic dealt with (minimum 5-10 lines)

- ✓ Session helps students to improve their Innovative skill.
- ✓ These can be very helpful for the students, and also contribute to the teacher's knowledge and practices.
- ✓ Students could able to understand about Trademark, Patent and Copyright.
- ✓ Session can be used to make students to think in different way and how to register their Innovations & Inventions.
- ✓

4. Photographs 5 nos (for both FN and AN session)





## 5. Feedback

Students were interestingly and interactively participated with the guest speaker.

6. (i) Number of Staff Participants - 8

(ii) Number of Students Participants: II BCA - 125

# **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (Autonomous), RASIPURAM DEPARTMENT OF COMPUTER APPLICATIONS REPORT FOR –OUT OF BOX THINKING 21.09.2022**

## 1. Objective

Department of Computer Applications and IIC organized Session on “Out of Box Thinking” for I BCA Students on 21.09.2022. Apart from curriculum need to motivate students to find new things and how to register their Innovations & Inventions.

## 2. Agenda (Date & Time , Venue , Guest details)

Date : 21.09.2022

Time : 1.15 pm to 3.00 pm

Venue : B-Block Conference Hall

Guest Speaker: Dr.N.Sudha,

Assistant Professor and Head-IIC,

Innovation Ambassador

Muthayammal College of Arts and Science(Autonomous),

Rasipuram.

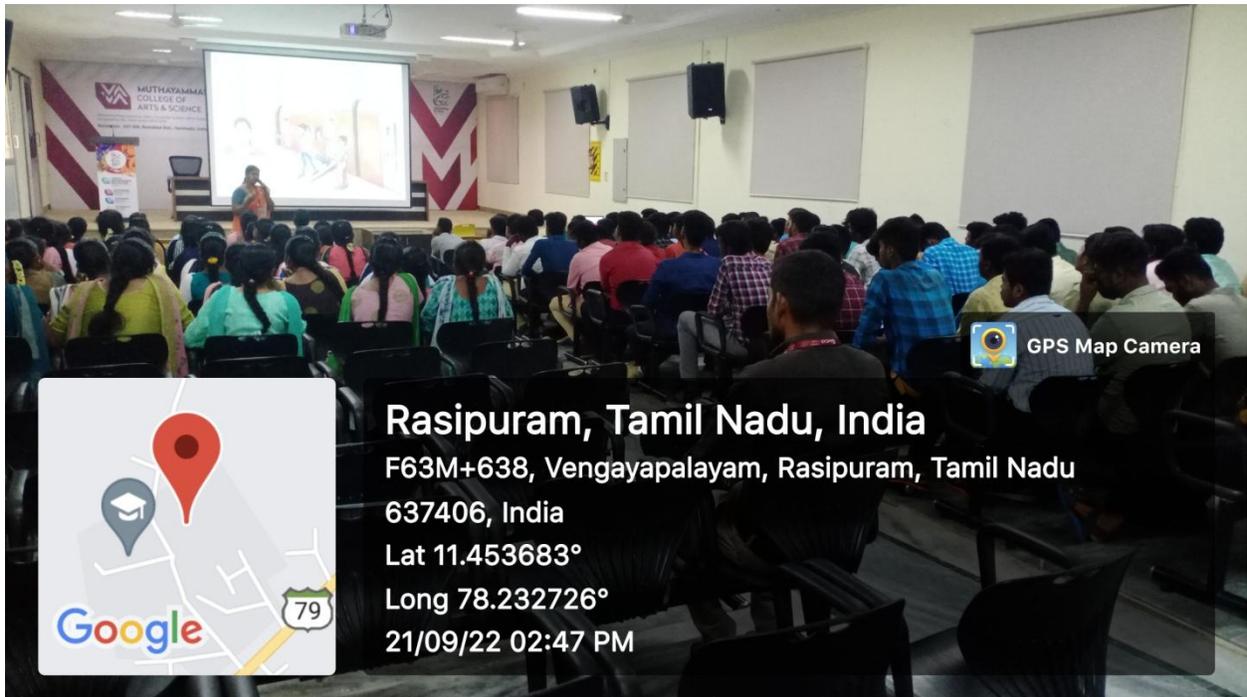


The poster is for a session titled "Think Out of the Box - Ideation and Innovation" organized by the Department of Computer Application & Institution's Innovation Cell (IIC). The speaker is Dr. N. Sudha, Assistant Professor and Head - IIC, Innovation Ambassador at Muthayammal College of Arts & Science, Rasipuram. The session is on Google Meet on 21st SEP 2022 at 01.15 PM. Participants are First Year BCA Students. The poster includes logos for Muthayammal College of Arts & Science, Institution's Innovation Council, and Vanetra Group. It also mentions affiliations with Periyar University, Salem, NAAC accreditation, and UGC recognition.

## 3. Subject/topic dealt with (minimum 5-10 lines)

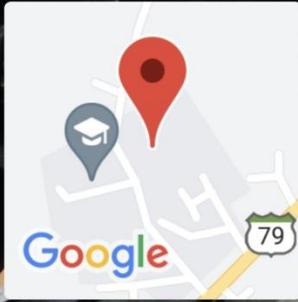
- ✓ Session helps students to improve their out of box skill.
- ✓ These can be very helpful for the students, and also contribute to the teacher's knowledge and practices.
- ✓ Students could able to understand about Innovations .
- ✓ Session can be used to make students to think in different way and how to register their Innovations & Inventions.

4. Photographs 5 nos





GPS Map Camera



**Rasipuram, Tamil Nadu, India**

F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu

637406, India

Lat 11.453696°

Long 78.232771°

21/09/22 02:48 PM



## 5. Feedback

Students were interestingly and interactively participated with the guest speaker.

6. (i) Number of Staff Participants - 4

(ii) Number of Students Participants: I BCA - 135



**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE  
(Autonomous), RASIPURAM  
DEPARTMENT OF COMPUTER APPLICATIONS  
REPORT FOR – KNOWLEDGE SHARING ON AWS 24.09.2022**

**1. Objective**

The Department of computer Application & Computer Science organized Knowledge sharing session on “AWS” for CA&CS faculties on 24.09.2022.

- ✓ To upgrade the new technologies.
- ✓ Identify the global infrastructure components of AWS
- ✓ To gain knowledge about the cloud concepts using AWS.

**2. Agenda (Date & Time , Venue , Guest details)**

Date: 24.09.2022

Time: 10.15 am to 11.00 am

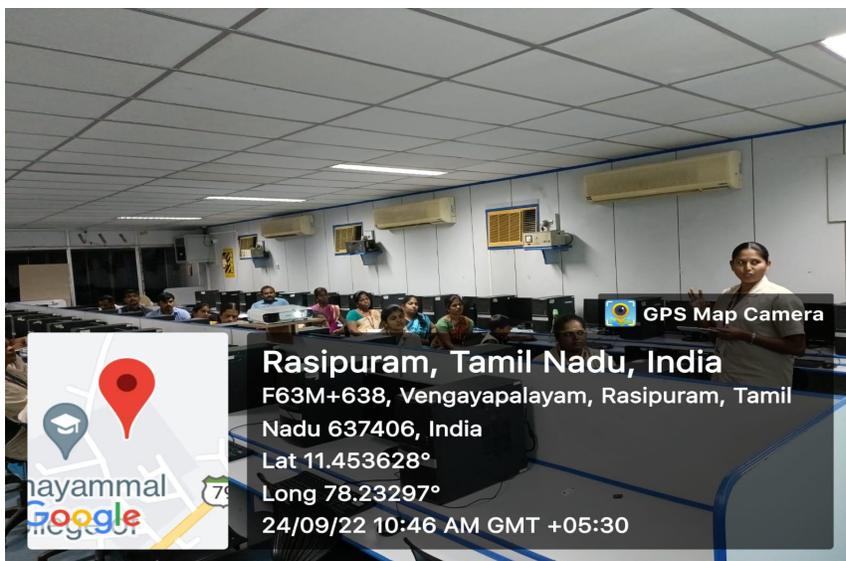
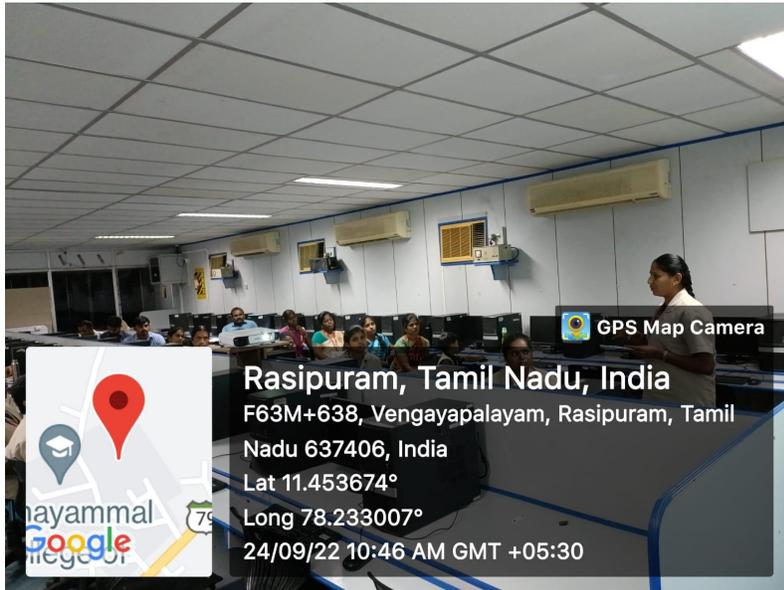
Venue: LAB-B4

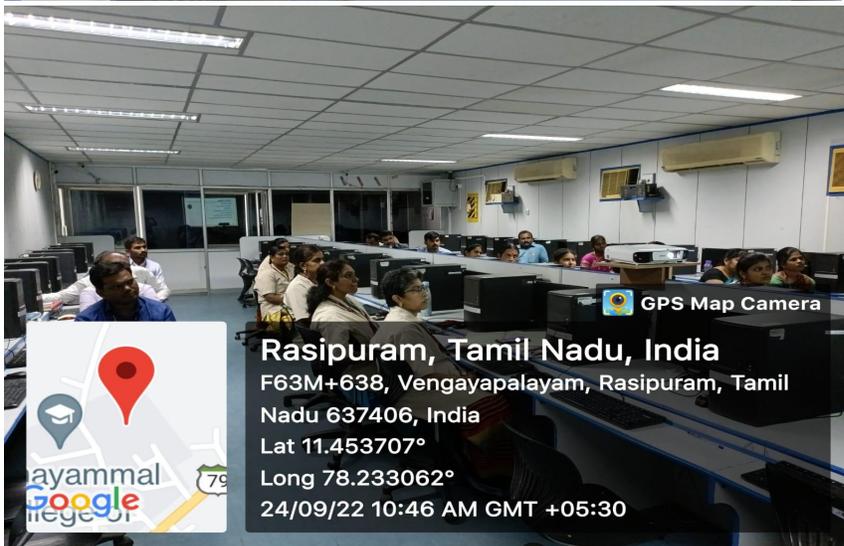
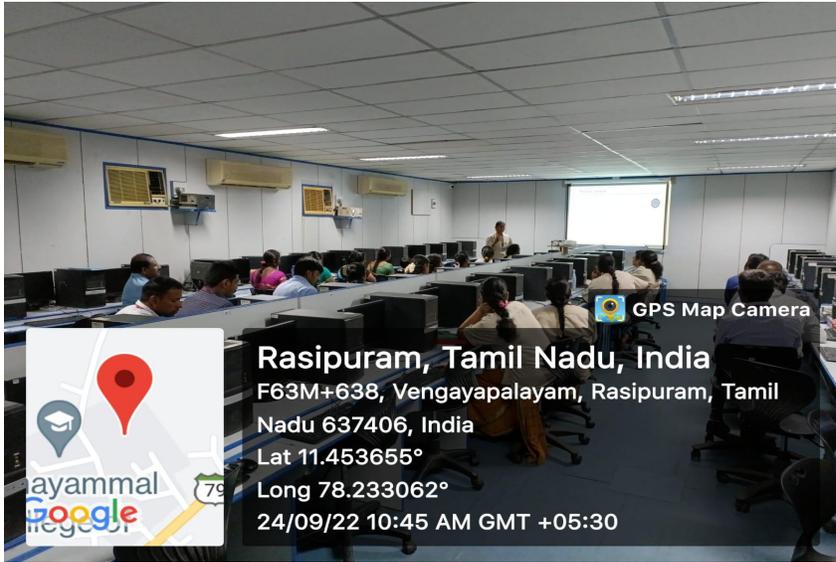
Guest Speaker: Ms.R.REVATHI., A/P., CA  
Ms.L. NADHINI.,A/P., CS

**3. Subject/topic dealt with (minimum 5-10 lines)**

- ✓ **AWS Course & 3 levels provided by ICT.**
- ✓ **Modules Discussed**
  - **Cloud concepts overview, Economics and Billing, AWS Global Infrastructure overview, Cloud Security, Networking and content Delivery, Compute, Storage, Databases, Cloud Architecture, Automatic Scaling and Monitoring.**
- ✓ **IAM used to control the services of Cloud.**
- ✓ **VPC (Virtual Private Cloud)-Maintain the long data.**
- ✓ **Amazon File systems & services.**
- ✓ **3 Levels of Certificates – Professional, Associate & Foundational.**

#### 4. Photographs 5 nos (FN session)





## 5. Feedback

Faculties were interestingly participated. They were interactively participated with the guest speaker.

### 6. (i) Number of Staff Participants – CA-09, CS-14

# MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (Autonomous), RASIPURAM DEPARTMENT OF COMPUTER APPLICATIONS REPORT FOR – Cyber Expo - 31.10.2022

## 1. Objective

- ✓ To raise awareness about Cyber security and to protect against cyber threats, October month has been recognized in the IT world as Cyber Security Awareness month. Hence, we are planning to have this awareness session titled as "Cyber Expo - 2022" , on 31 Oct 2022.

## 2. Agenda (Date & Time , Venue , Guest details)

Date : 31.10.2022

Time : 10.00 am to 2.00 pm

Venue : B-Block Conference Hall

 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (Autonomous) (A Unit of VANETRA Group) Rasipuram – 637 408, Namakkal DT		
<b>Department of Computer Applications</b> <b>Cyber Expo – 2022</b>		
31.10.2022	Monday	10.00 AM
<b><u>B - Block Conference Hall</u></b>		
10.00 AM	:	<b>Prayer</b>
10.05 AM	:	<b>Welcome &amp; Introductory Remarks</b> <b>Dr.V.Vijayadeepa</b> Head – Dept. of Computer Applications Muthayammal College of Arts and Science
10.10 AM	:	<b>Felicitation Address</b> <b>Dr.R.Selvakumaran</b> Director – Academics VANETRA Muthayammal Institutions
10.20 AM	:	<b>Commencements of Events</b> 1. PPT Presentations 2. Short Films 3. Awareness Videos 4. Awareness Models ( B - 201) 5. Chart & Poster Presentation ( B – 202 )
12.10 PM	:	<b>Vote of Thanks</b> <b>Mr.K.J.P.Satheeshkumar</b> Assistant Professor / CA

### 3. Subject/topic dealt with (minimum 5-10 lines)

- ✓ Students made poster presentation, PPT presentation, model creation, short film and awareness videos on that day.
- ✓ Posters were displayed with the content how to avoid threats in online.
- ✓ Power point presentation were presented with the topics, types of Hackers, Phishing etc.
- ✓ Awareness were given to female students through different applications.
- ✓ Models were displayed related to the topics Juice Jacking, QR Codes, Malwares etc.
- ✓ Different methods of security awareness were drawn using the chart and safety Tips were given through videos.

### 4. Photographs 5 nos







## 5. Feedback

- ✓ Appreciation were given by the Director Academics sir, for the efforts taken by the students as well as the staff for initiating such an event.

6. (i) Number of Staff Participants - 15

(ii) Number of Students Participants: - 380

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE  
(Autonomous), RASIPURAM  
DEPARTMENT OF COMPUTER APPLICATIONS  
REPORT FOR – Brainstorming Session on Internship - 10.02.2023**

1. Objective

Department of Computer Application organized a “Brainstorming session on Internship” for I BCA, II BCA & III BCA Students on 10.02.2023. Apart from curriculum motivate them to make Interaction for achieving their next level and how to enhance their qualifications in their resume.

2. Agenda (Date & Time , Venue , Guest details)

Date : 10.02.2023

Time : 10.00 am

Venue : B-Block Conference Hall

Guest Speaker: Mr..D.Saravanan,  
S/W Engineer(Grade III),  
Walmart Global Tech India, Bangalore

 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (Autonomous) (A Unit of VANETRA Group) Rasipuram – 637 408, Namakkal DT	
Department of Computer Application organizes <b>Brainstorming Session on Internship</b>	
10.02.2023	Friday
10.00 AM	
B - Block Conference Hall	
10.00 AM Welcome Address :	<b>Ms.S.Y.Shamsath Begum</b> II BCA 'C'
10.05 AM Introductory Remarks :	<b>Dr.V.Vijayadeepa</b> Head – Department of Computer Application MCAS
10.15 AM Felicitation :	<b>Dr.S.P.Vijeikumar</b> Principal MCAS
10.20 AM Presidential Address :	<b>Dr.R.Selvakumaran</b> Director – Academics VANETRA Muthayammal Institutions
10.30 AM Keynote Address :	<b>Mr.D.Saravanan</b> S/W Engineer – Grade III Walmart Global Tech India Bangalore
12.30 PM Vote of Thanks :	<b>Ms.N.Rafiya</b> II BCA 'B'

3. Subject/topic dealt with (minimum 5-10 lines)

- ✓ Students Gained Knowledge about importance of Communication & about Formal Dress Code.

- ✓ Focuses mainly on which areas to be concentrated to get into the IT Sector.
- ✓ He elaborated on the different domains in the IT field and how an internship can give an opportunity to students to gain hands-on experience in the IT industry.
- ✓ Tips were given by the guest how to enhance their qualifications in their resume.
- ✓ How Cloud Technology supports with Data Base in IT Sector.
- ✓ Guest gave Tips for Interview process and also how to face the HR round in effective manner.
- ✓ Wipro Technology gave more importance to improve their higher studies particularly in M.Tech.

#### 4. Photographs 5 nos





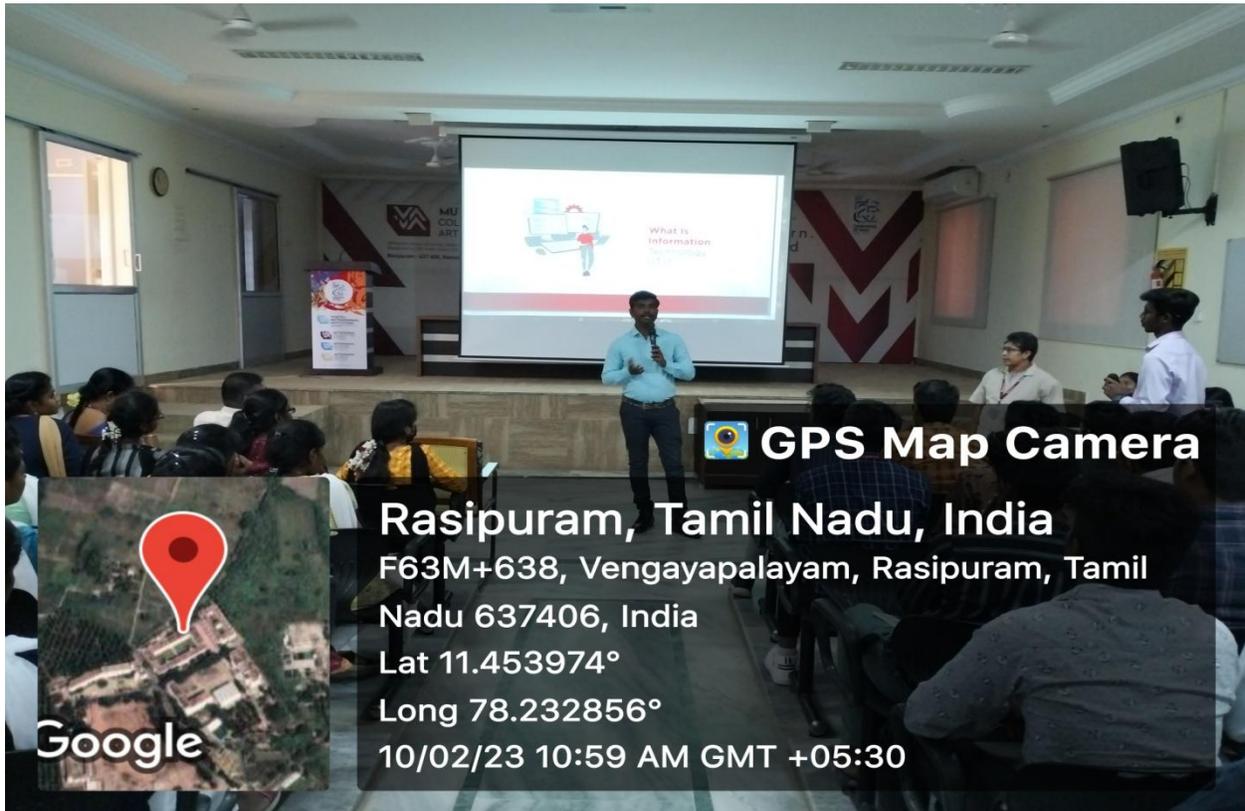
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F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
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Long 78.232941°  
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**GPS Map Camera**  
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F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
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**GPS Map Camera**  
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F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
Lat 11.4538°  
Long 78.232889°  
10/02/23 10:46 AM GMT +05:30



5. Feedback

- ✓ Students were interestingly and interactively participated with the guest speaker.
- ✓ Students interacted a lot and made a way for their improvement.

6. (i) Number of Staff Participants - 8

(ii) Number of Students Participants: I BCA , II BCA & III BCA - 270

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS),  
RASIPURAM - 637408**

**DEPARTMENT OF COMPUTER APPLICATIONS**

**REPORT FOR SCHOOL VISIT TO ATAL LAB –  
VIVEKANANDHA BALAMANDHIR MATRICULATION  
SCHOOL, ATTAYAMPATTY**

**1. Objective**

- ✓ Department of Computer Application organized school visit to ATAL lab – Vivekanandha Balamandhir Matriculation School, Attayampatty for BCA students on 23.02.2023.
- ✓ This visit helps the students to get awareness about ATAL Tinkering Lab and usage of Arduino .

**2. Agenda (Date & Time, Venue, Guest details)**

Date: 23.02.2023

Time: 11.00 AM to 12.30 PM

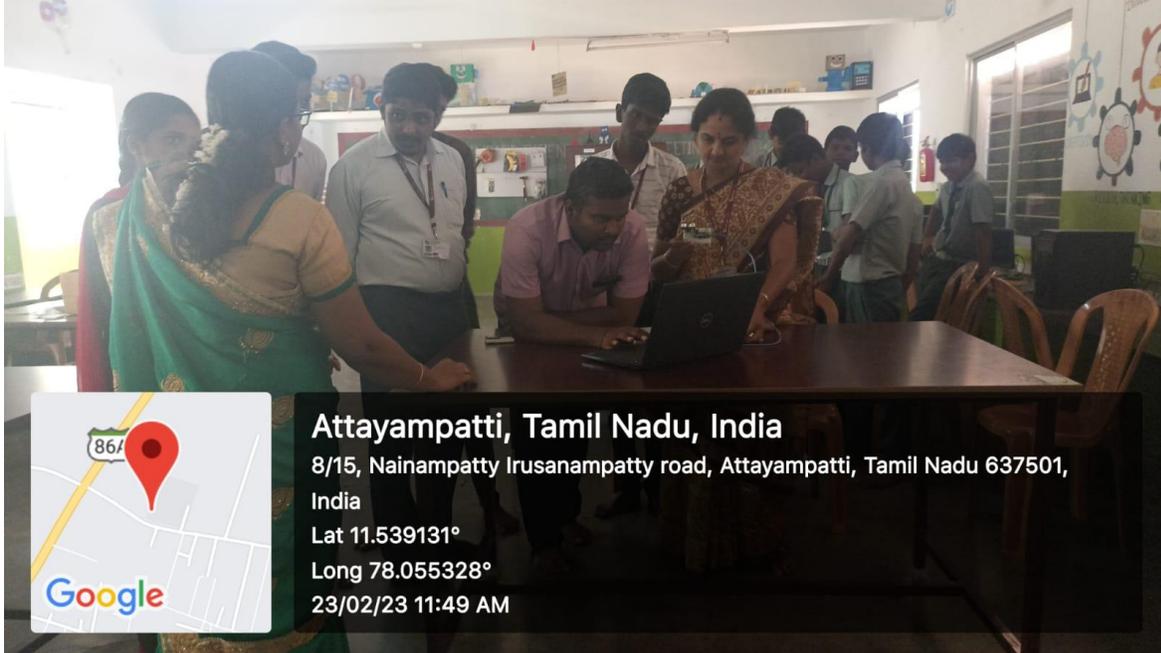
Venue: Vivekanandha Balamandhir Matriculation School, Attayampatty

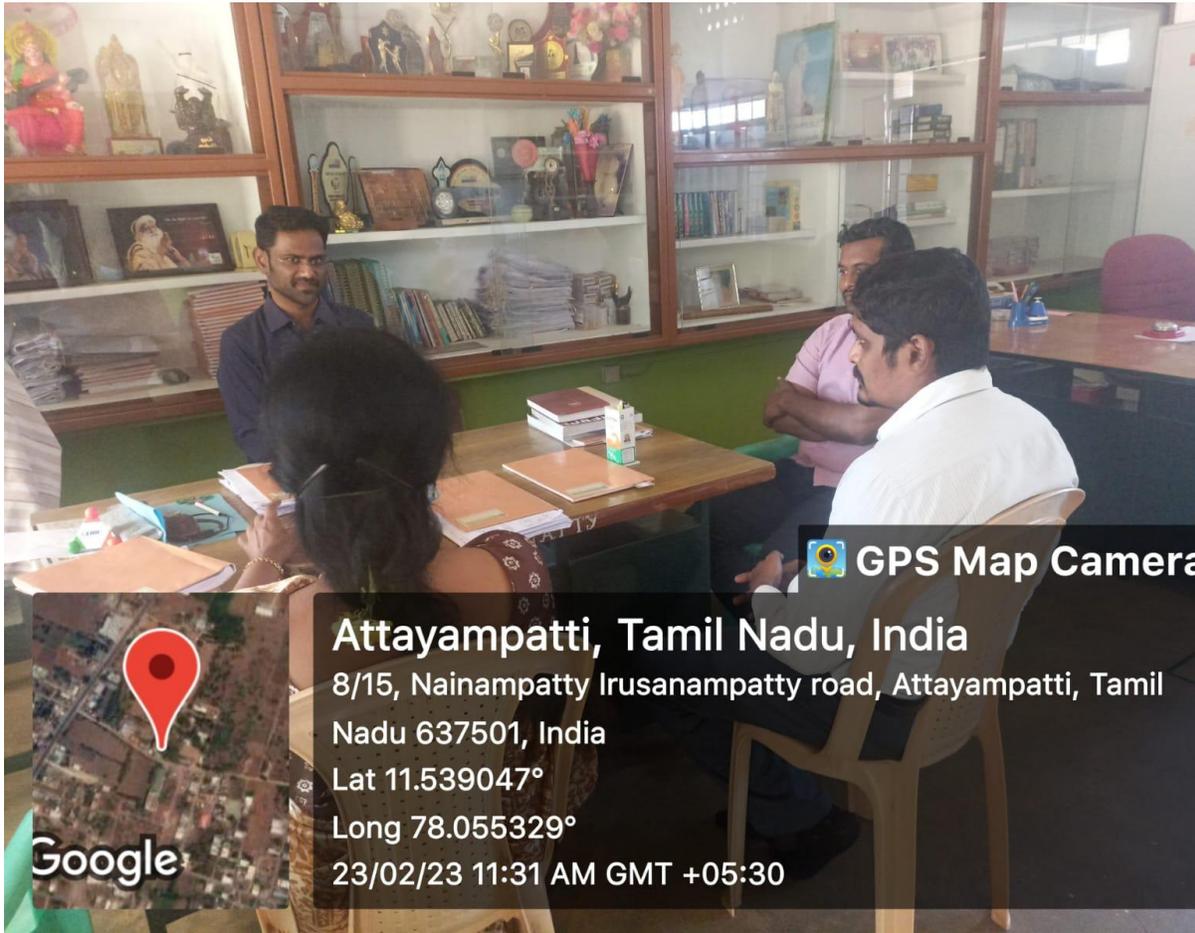
Contact Person: Principal and Correspondent,  
Vivekanandha Balamandhir Matriculation School,  
Attayampatty.

**3. Subject/topic dealt with (minimum 5-10 lines)**

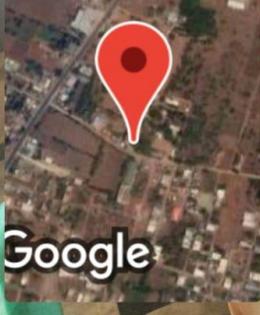
- ❖ Configuration of ATAL Tinkering Lab.
- ❖ Students' own invention using Arduino board.
- ❖ Students' innovative thinking and ideas.
- ❖ Contribution and support by management.
- ❖ Learned about the coding and Arduino usage.
- ❖ Observed the real time model (Live explanation).

## 4. Photographs





📍 GPS Map Camera



**Attayampatti, Tamil Nadu, India**  
 8/15, Nainampatty Irusanampatty road, Attayampatti, Tamil Nadu 637501, India  
 Lat 11.539047°  
 Long 78.055329°  
 23/02/23 11:31 AM GMT +05:30



**Attayampatti, Tamil Nadu, India**  
 8/15, Nainampatty Irusanampatty road, Attayampatti, Tamil Nadu 637501, India  
 Lat 11.539083°  
 Long 78.05521°  
 23/02/23 11:40 AM

**VIVEKANANDA BALAMANDIR MATRICULATION SCHOOL.**

பிரதான குவர்டர்சு நிறுவ: 03.06.1991. RUN BY SWAMI VIVEKANANDA EDUCATIONAL TRUST. REGD-755/95.27.10.95.  
 TEMP. REG [I-VII] K.DIS. NO. 52873/E2/2001 - DT 7.6.01  
 OPEN PER [IX-X] L.DIS. NO. 3155 E2/2002 - DT 24.4.02  
 TEMP. REG [IX-X] K.DIS. NO. 5647/E2/2002 - DT 26.7.02  
 தரு. 1924/83/2009 DT 23.6.09  
 தரு. 4631/83/2007 DT 04.6.07  
 தரு. 1511/03/2011 DT 05.03.2011  
 தரு. 7240/05/2013 DT 29.01.2013  
 சிறு. (கல்வி) குறிப்பிட்ட தரு. 17.01.2013  
 தரு. 5451/2004/2004 DT 09.04.2004  
 R.C. NO. 122B/A5/2019 DT 14.09.2019  
 R.C. NO. 17470/A3/2019 DT 04.09.2019  
 R.C. NO. 11409/A3/2020 DT 15.09.2020  
 R.C. NO. 11409/A3/2020 DT 15.09.2020

STRENGTH OF THE SCHOOL			
CLASS	GIRLS	BOYS	TOTAL
L.K.G	17	16	33
U.K.G	20	24	44
I	29	29	43
II	14	18	32
III	18	18	40
IV	21	21	44
V			28
			28
			28

## **5. Feedback**

Students got information about the real time scenario and gathered basic knowledge about Arduino coding with implementation.

**6. (i) Number of Staff Participants - 02**

**(ii) Number of Students Participants**

I BCA - 05

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM**  
**DEPARTMENT OF COMPUTER APPLICATION**  
**REPORT ON DEPARTMENT FUNCTION (FABULAE UTSAV - 2K23)**

**Objective**

To conduct Department festival with the title “Fabulae Utsav – 2K23” to showcase the talents of the students.

**Agenda**

31.03.2023	FRIDAY	10.00 AM
 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (AUTONOMOUS) (A Unit of VANETRA Group) Rasipuram – 637 408, Namakkal Dt. <b>DEPARTMENT OF COMPUTER APPLICATION</b> Organizes Department Festival <b><i>FABULAE UTSAV- 2K23</i></b> 		
<b>Venue : B – Block Conference Hall</b>		
9.55 AM	:	<b>Prayer Song</b>
10.00 AM	Welcome Address	: <b>Ms.B.Subikshaa Sree</b> IBCA
10.10 AM	Introductory Remarks	: <b>Dr. V.Vijayadeepa</b> Head - Department of Computer Application MCAS
10.20 AM	Felicitation	: <b>Dr.A.Stella Baby</b> Vice – Principal MCAS
10.30 AM	Presidential Address	: <b>Dr.R.Selvakumaran</b> Director – Academics/VMI
10.45 AM		: Release of Magazine “ <b>Techno Mag – 2K23</b> ”
10.50 AM	Programme	: BCA Students
03.30 PM	Valedictory Address & Prize Distribution	: <b>Dr.M.N.Periasamy</b> Dean – Administration VANETRA Muthayammal Institutions <b>Dr. P. Gowrishankar</b> Controller of Examinations MCAS <b>Dr.S.P.Vijeikumar</b> Principal MCAS
3.50 PM	Vote of Thanks	: <b>Mr.D.Murganand</b> IBCA
3.55 PM		: <b>National Anthem</b>

**About the Event:**

Department of computer application successfully conducted the department festival “Fabulae Utsav – 2K23” on 31 March 2023. Various events such as Dance, Singing, Presentation on latest technologies, Meme/Troll creation and Conceptual video editing were performed. Students also released a technical magazine, entitled as “Techno Mag -2k23”. Director-Academics inaugurated the function and the principal released the depa, Dean and CoE distributed the prizes in the valedictory function.

**Photographs 5 nos (for both FN and AN)**











5. Feedback

Students enjoyed and learned the new technologies through video presentation and PPT presentations. They said that it was an unforgettable moment in their life.

6. i) Number of Students Participants: 390  
ii) Number of faculty: 18

## Report on World Intellectual Property Day Celebration

### Objective

To make the participants know how intellectual property rights encourage innovation and creativity and to find out how the IP system can help accelerate innovation and creativity.

### Agenda

 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (AUTONOMOUS) (A Unit of VANETRA Group) Rasipuram - 637 408, Namakkal Dt.		
<b>DEPARTMENT OF COMPUTER APPLICATION</b> Organizes <b>WORLD INTELLECTUAL PROPERTY DAY</b>		
24.04.2023	MONDAY	2.00 PM
<b>Venue : B – Block Conference Hall</b>		
2.00 PM	Welcome Address	: <b>Ms. B. Subilshaa Sree</b> IBCA
2.05 PM	Introductory Remarks	: <b>Dr. V. Vijaya Deepa</b> Head - Department of Computer Application MCAS
2.10 PM	Principal Address	: <b>Dr. S. P. Vijeikumar</b> Principal Muthayammal College of Arts and Science, Rasipuram
2.15 PM	Presidential Address	: <b>Dr. R. Selvakumaran</b> Director – Academics Vanetra Muthayammal Institutions
2.20 PM	Keynote Address	: <b>Dr. P. K. Nizar Banu</b> Associate Professor Department of Computer Science, CHRIST (Deemed to be University) Central Campus Bangalore.
3.50 PM	Vote of Thanks	: <b>Mr. D. Murganand</b> IBCA

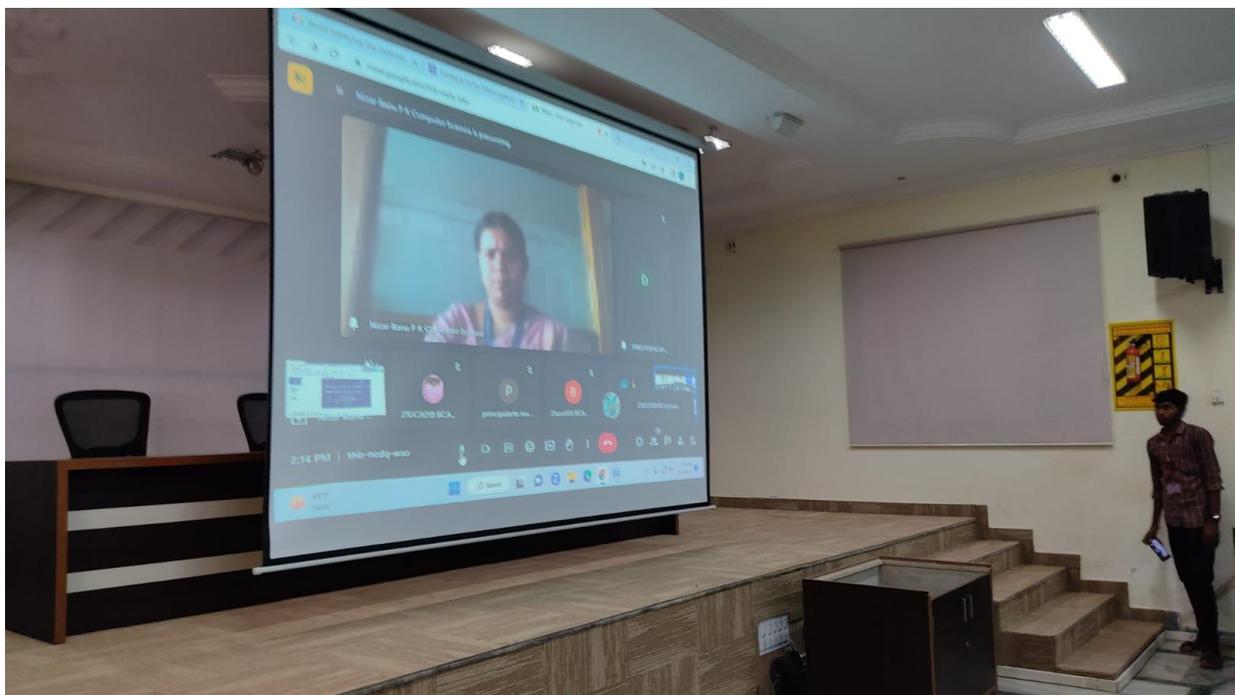
## **Brief about the Programme**

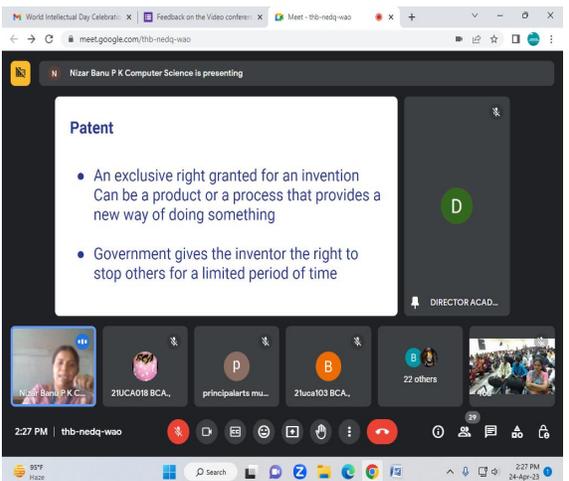
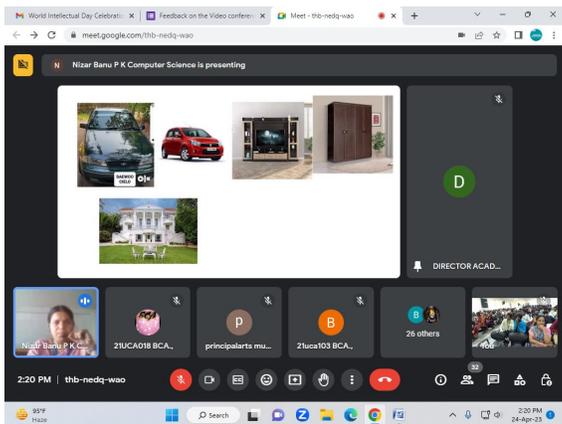
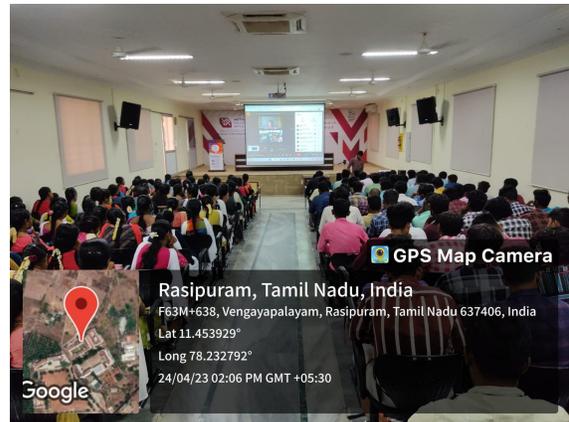
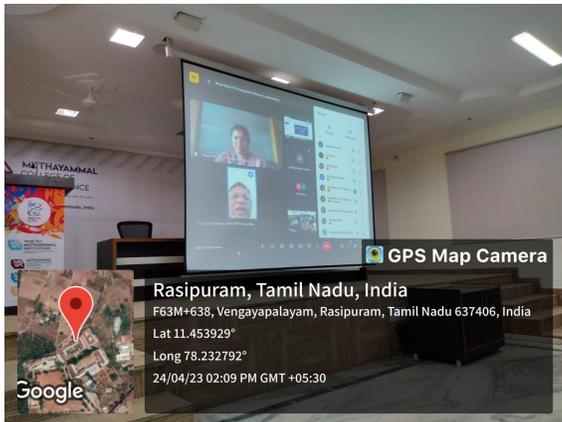
Department of Computer Application organized a video conferencing session to celebrate World Intellectual Property day with the 2023 theme “Women and IPR : Accelerating Innovation and Creativity” on 24<sup>th</sup> April 2023 at 2 PM. Dr.P.K.Nizar Banu, Associate professor of CS Department, CHRIST (Deemed to be university), Central Campus , Bangalore acted as a resource person and around 350 participants were benefited by this session.

The Resource Person touched upon the various aspects of Copyrights and Related Rights, their duration, fair use etc. She took a presentation session on “Women and IPR : Accelerating Innovation and Creativity” where she mentioned about What is intellectual Property, What is intellectual Property right ,its Benefits, IPR Acts in India, Non-Patentable Inventions, Women and IP, Who Can File, Where to File, Patent database search and so on.

This session was also very interactive with the students asking questions about patents.

## **Glimpses of the Session**





## Feedback

Department of Computer Application  
*celebrates*  
**World Intellectual Property Day**

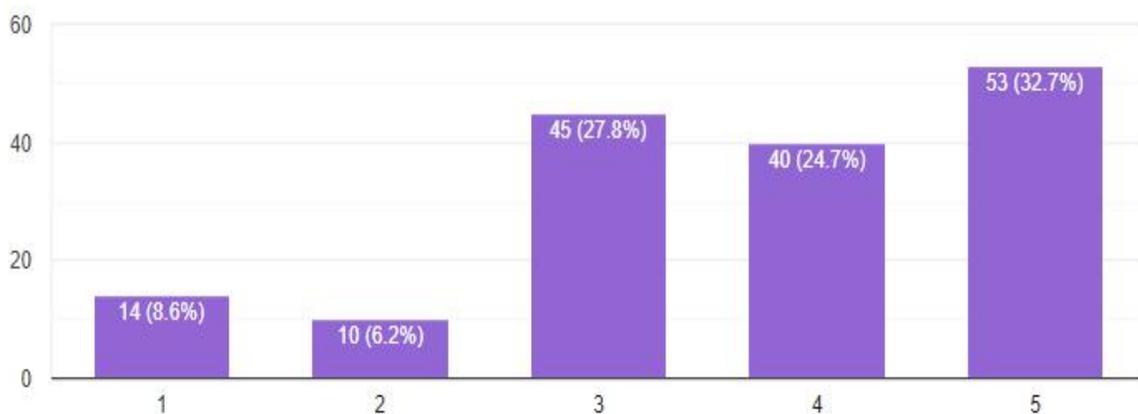
Feedback on the Video conferencing session- "*World Intellectual Property Day- Women and IP : Accelerating Innovation & Creativity*"  
24 Apr 23@2pm

**Resource Person**  
**Dr.P.K.Nizar Banu**, Associate Professor, Department of Computer Science,  
CHRIST  
(Deemed to be University), Central Campus Bangalore

How would you rate the speaker?

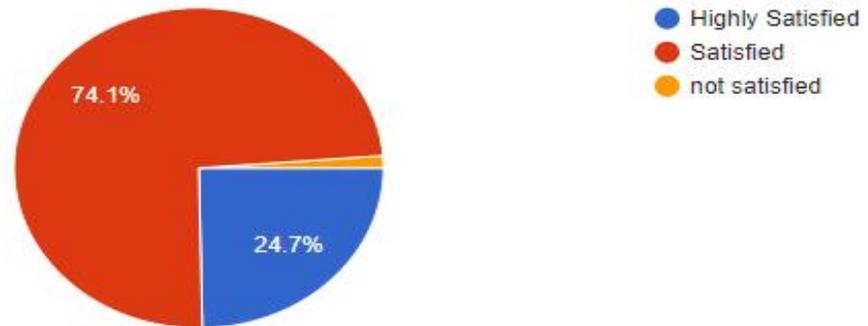
 Copy

162 responses



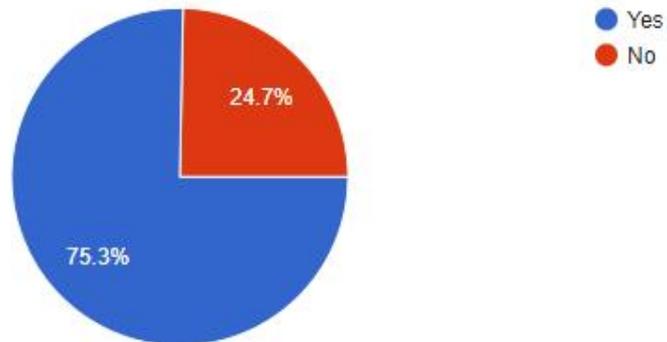
## How satisfied were you by this programme?

162 responses



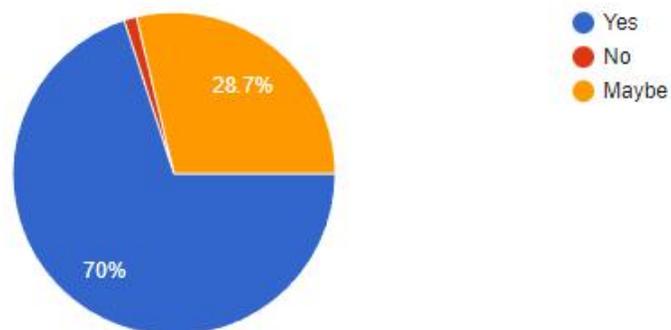
Did the event meet your expectations?

162 responses



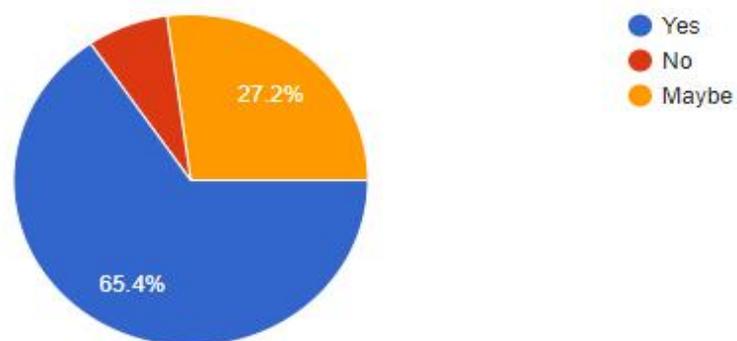
Were you satisfied with the quality of the content presented by the speaker?

160 responses



Are you interested in attending this kind of video conference session in future?

162 responses



Please share any additional comments, thoughts, suggestions for future events.

162 responses

- No
  - Good
  - Nothing
  - Good
  - Nice
  - Nice
  - Feel better
  - About intenship
  - Good information
  - No
  - Nil
  - None
  - Very useful and good 👍
  - Thanks for your information
  - It is useful and helpful session
-

It's good program to attend thanks for the meet

It was a wonderful event.

This session had full of useful content to everyone

It was very helpfull

Very important message for us mam

Very good 👍

Super session

It is very use full gather knowledge

Very useful

Nice session

It's very useful mam

No comments

Maybe Good

This better for our studies in future

It's usefull to me

Good speech mam ✨

## **Beneficiaries**

Student Beneficiaries: 350

Staff Beneficiaries: 10

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS),  
RASIPUIRAM**

**DEPARTMENT OF CHEMISTRY**

**WORKSHOP ON INTELLECTUAL PROPERTY RIGHTS AND IP MANAGEMENT**

**1. Objectives:**

The need of the hour is Innovation and Entrepreneurship. To make students interest in this, he/she should know about Intellectual Property Rights and the ways to manage IP.

**2. Agenda:**

**Topic: Intellectual Property Rights and IP Management**

**Resource Person:** Dr. N. Sudha, Assistant Professor and Head-IIC,

Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Venue: D Block AV Hall of MCAS**

**Date:** 04.04.2023

**Time:** 01.00 pm to 03:00 pm

**3. Subject/topic dealt with**

- Intellectual property protection like Patent, Copyright, Trademark etc
- The primary function of intellectual property rights.
- Benefits of intellectual property.
- Basic construction of human intelligence of technical scientific and constructions

#### 4. Photograph





 GPS Map Camera



Google

**Rasipuram, Tamil Nadu, India**

F63M+638, Vengayapalayam, Rasipuram,

Tamil Nadu 637406, India

Lat 11.453003°

Long 78.232902°

04/04/23 01:28 PM GMT +05:30



## 5. Feedback:

Students learned about the need of creative activity of the human mind for the benefits of all.

They understood that IP empowers individuals and enterprises.

They understood the ways to protect our publications and research works.

6. (i) Number of students benefited – 55

(ii) Number of Faculty Participated - 04

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, (AUTONOMOUS)  
RASIPURAM**

**Department of Chemistry**

**Workshop on - Research Methodology**

**1. Objective:**

To provide students a practical perspective of high-end instruments and it will make use of them in their research.

**2. Agenda:**

**Research person:** Dr. N. Sudhakar,

**Designation:** R& D Head, Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Venue:** R& D lab

**Date:** 16-11-2022

**Time:** 10 pm to 4.00 pm

**3. Subject/topic deal with (minimum 5-10 lines)**

The students learned about the functioning and uses of the following instruments:

- IR spectrometer
- UV-Visible spectrometer
- HPLC
- Deep freezer
- Gel Doc
- QPCR

#### 4. Photographs 4 nos (for both FN and AN session)



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Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 -2021)



RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

### Department of Chemistry

*Organizes*

### Workshop

on

## Research Methodology



16<sup>th</sup> NOV  
2022



01.30  
PM

Venue : R & D Lab

Participant: M.Sc., Chemistry Students



Speaker

**Dr. N. SUDHAKAR**

R & D Head

Muthayammal College of Arts and Science (Autonomous)  
Rasipuram

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[www.vanetrargroup.in](http://www.vanetrargroup.in)





## 5. Feedback:

- ✓ The students learnt about the handling of IR and UV Spectroscopy, HPLC and QPCR techniques.
- ✓ It's useful for their M. Sc., project.

6. (i) Number of Staff Participants – 3

(ii) Number of Students Participants - 56

Date of the Event	17.10.2022 (Monday)
Name of the Event	Awareness Programme on “Reserve Bank of India Integrated Ombudsman Scheme- 2021 and Safe Banking Practices”.
Department	Commerce
Venue	B-Block, Conference Hall, MCAS, Rasipuram.

**1. Objective of the Programme:**

- To create awareness about the Reserve Bank Integrated Ombudsman Scheme- 2021 and Safe Banking Practices.
- To give detailed description of the Ombudsman Scheme- 2021.
- To give a suitable explanation about the Banking online transaction.

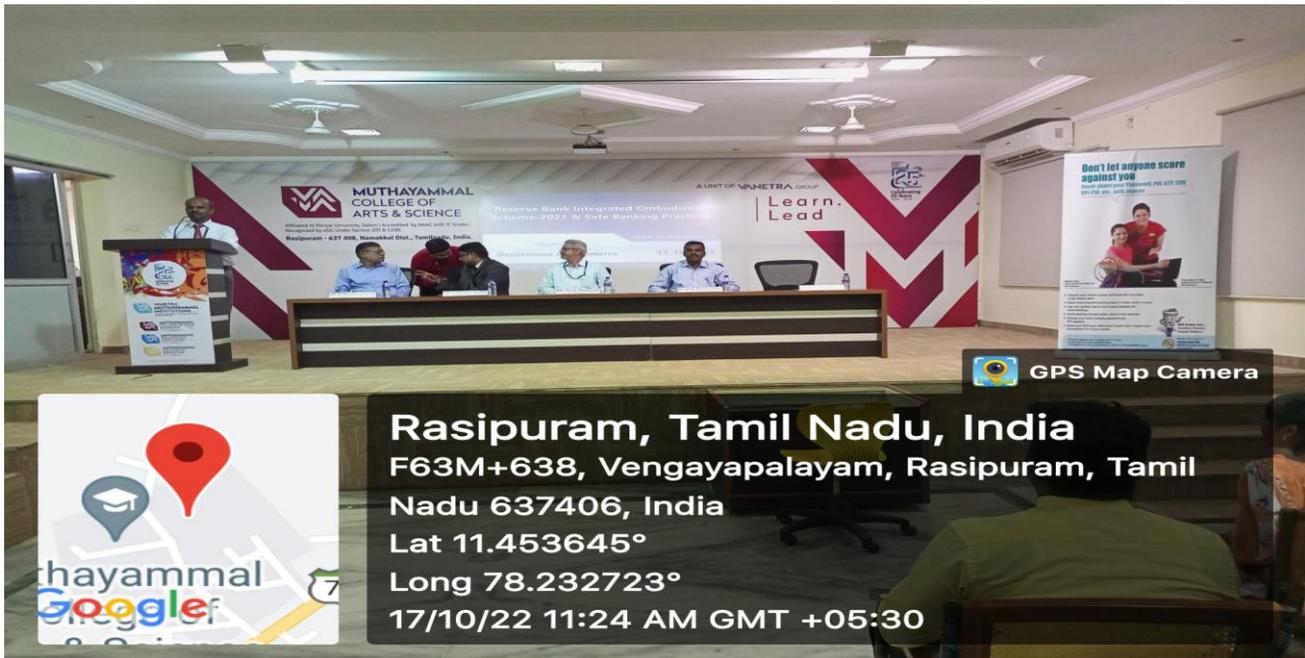
**2. Agenda:**

Date : 17.10.2022(Monday)  
 Time : 11.00 AM - 1.00 PM  
 Venue : Muthayammal College of Arts and Science, Rasipuram  
 Chief Guest : Mr. T.M.Senapathi & Mr.N.S.Raman  
 Assistant General Managers  
 Office of the Ombudsman, Reserve Bank of India, Chennai.

**3. Subject / Topic:**

- Create awareness about the various online transactions.
- Some harmful deficits in online transaction where make known to the students.
- Remedial measures for such transaction have been suggested.
- Helpline phone numbers were also given to the students and Case studies were also given.

#### 4. Photograph:



#### 5. Feed back:

- Got awareness about Reserve Bank of India Integrated Ombudsman Scheme - 2021.
- Realized the importance of Ombudsman scheme - 2021.
- The students got awareness about various deficits and remedial measures available in banking Ombudsman scheme – 2021.
- The students came to know about the helpline phone numbers.

<b>6.</b> Number of Staff participated : 10
Number of Students participated : 371
Number of External participants : Nil
Number of Beneficiaries : 381 (371 Students + 10 Faculty Members)

- ✓ Tally Prime 2.0, Tally Institute, Bangalore
- ✓ Insurance Course, Insurance Institute of India, Mumbai
- ✓ Beautician for Girls, I Glow Makeover, Rasipuram
- ✓ Internet of Things, Critac InfoTech, Namakkal
- ✓ British English Certificate (Cambridge)
- ✓ Diploma in Computer Application, BSS, Chennai.
- ✓ Diploma in Bakery & Confectionary, BSS, Chennai
- ✓ Workshop of Self Made Business Product
- ✓ Workshop on Ethical Hacking
- ✓ Workshop on Cyber Securities

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**  
**(A Unit of VANETRA Group)**  
**DEPARTMENT OF COMMERCE**  
**COMMERCE DAY – INTERCOLLEGIATE MEET – 2K22**  
**SIX POINTS STRUCTURE**

Date of the Event	10.11.2022(Thursday)
Name of the Event	Commerce Day - Intercollegiate Meet – 2k22
Department	Department of Commerce
Venue	B-Block, Conference Hall, MCAS, Rasipuram.

**1. Objective of the Programme:**

- To honor the achievers in the field of Commerce.
- To give detailed description of the Commerce Day – Intercollegiate Meet – 2K22.
- To give opportunities to students to explore their talents.

**2. Agenda:**

Date : 10.11.2022(Thursday)  
 Time : 9.00 AM to 4.00 PM  
 Venue : ‘B’- block Conference Hall ,Muthayammal College of Arts and Science,  
 Rasipuram.  
 Chief Guest : Dr. S.P. Vijeikumar – Principal – MCAS  
 Dr. A. Stella baby - Vice Principal – MCAS  
 Dr. M.N.Periasamy - Dean - Administration – VMI  
 Dr. P Gowrisankar - COE - MCAS

**3. Subject / Topic:**

- To highlight the honoring of the achievers in the field of Commerce. 16 events were conducted in this programme (8 on stage events + 8 off stage events).
- The Students got awareness about social moments of other college students.
- Our students have decided equip themselves towards impressive performance of certain events from the students of particular colleges.
- 18 colleges participated in intercollegiate meet among which certain college performed excellently in the competition.
- The best performers both on stage and off stage events were awarded with Prizes.

4. **Photos:**





#### 5. Feed back:

- Students got awareness about co-curricular and extracurricular activities and performance of both students from our college and other college.
- Students realized the importance of the responses and involvement from the student's side.
- The hidden talents and skills of students were exhibited during the commerce day.
- The students had interaction among themselves and staff members at state level.
- The prizes were distributed to the best performers.
- Overall championship trophy was awarded to the students of Jamal Mohamed College, Trichy.

6. Number of Staff participated : 23

Number of Students participated : 380

Number of External participants : 319

Number of Beneficiaries : 722 ( 699 Students + 23 Faculty Members)

Date of the Event	30.01.2023 (Monday)
Name of the Event	Investor Awareness Programme
Department	Department of Commerce and Knowise Learning Academy , Kerala
Venue	Zoom Meeting - B-Block, Mini Seminar Hall, MCAS, Rasipuram.

**1. Objective of the Programme:**

- To create awareness about the investors.
- To give detailed description of the recent trend opportunity towards new investors.
- To give a suitable suggestions about the investors threads.
- To create awareness about financial management amongst working professionals.

**2. Agenda:**

Date : 30.01.2023  
 Time : 4.30 PM – 5.30 PM  
 Venue : Zoom Meeting - B-Block, Mini Seminar Hall, MCAS, Rasipuram.  
 Chief Guest : Ms. Namrata Arora  
 SEBI Trainer  
 Knowise Learning Academy India Pvt. Ltd.,  
 Kerala.

**3. Subject / Topic:**

- The Faculty members got awareness about the various opportunities towards Investment.
- The participants got awareness about financial management in their day today life.

4. Photograph:



**5. Feed back:**

- We got awareness about financial management amongst working professionals.
- We realized the important terms of investment.
- The Post Graduate students got awareness about various deficits and remedial measures available in Investment management.

**6.** Number of Staff participated : 24

Number of PG Students participated : 61

Number of Beneficiaries : 85

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE

## DEPARTMENT OF COMPUTER SCIENCE

### One Day Workshop on – Photoshop, 3D Printer & Hologram

#### 1. Objective

To learn about Photoshop, It will helpful to know about how to editing the pictures and additionally learn about the 3D image dimension with Hologram.

#### 2. Agenda (Date & Time, Venue, Guest Details)

Date	:	12.09.2022
Time	:	10:00 A.M. to 12:00 P.M.
Venue	:	B-Block LAB – B4
Resource Person	:	<b>R.KARTHIK</b> Assistant Professor Department of Computer Science Muthayammal College of Arts & Science Rasipuram

#### 3. Subject

Students learnt about Adobe Photoshop

- ❖ Introduction of Photoshop
- ❖ Fundamentals of Photoshop
- ❖ Image Types and Colors
- ❖ Flex Designing
- ❖ Visiting Card Design
- ❖ Editing Passport Size Photos
- ❖ Invitation Creation

#### 4. Photographs 6 Nos.



**MUTHAYAMMAL**  
COLLEGE OF ARTS  
& SCIENCE  
(Autonomous)  
UNIT OF VANETRA GROUP

Affiliated to Periyar University, Salem  
Accredited by NAAC with 'A' Grade  
Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 -2021)



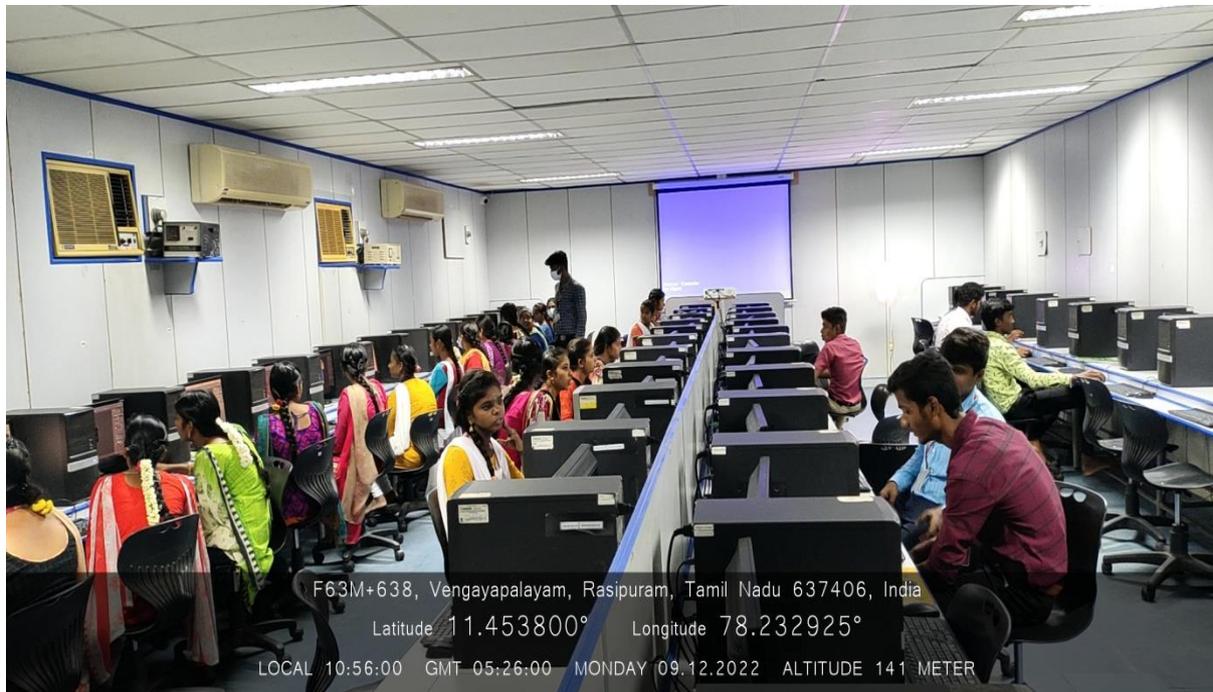
RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

**Department of Computer Science**  
Organizes  
**Interdepartmental Activity**  
**Workshop**  
on  
**Photoshop, 3D printer, Hologram**

**12<sup>th</sup> SEPT 2022** **10.00 AM** **Venue B-Block Lab-B4**

**Participation : II B.Sc Biotechnology**

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www.vanetrargroup.in



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Latitude 11.453800° Longitude 78.232925°

LOCAL 10:56:00 GMT 05:26:00 MONDAY 09.12.2022 ALTITUDE 141 METER



F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
Latitude 11.453784° Longitude 78.232946°  
LOCAL 10:56:17 GMT 05:26:17 MONDAY 09.12.2022 ALTITUDE 138 METER

## 5. Feedback

Copy of Feedback\_workshope (Responses) - Microsoft Excel

Timestamp	Name	Roll no	Department	1)How satisfied are	2)How satisfied are	3)Please rate your	3)Please rate your	3)Please rate your	3)Please rate your
9-14-2022 16:16:27	Dineshkumar S	20ubc002	Biochemistry	Very satisfied	Very satisfied	Very Good	Excellent	Very Good	Excellent
9-14-2022 21:27:21	KAVIN V	20UBC005	Biochemistry	Very satisfied	Very satisfied	Very Good	Good	Good	Good
9-14-2022 16:14:49	Kaviya A	20UBC007	Biochemistry	Very satisfied	Very satisfied	Good	Good	Good	Good
9-14-2022 17:55:37	NARMATHA R	20UBC009	Biochemistry	Very satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent
9-15-2022 7:58:50	SWETHA S	20UBC013	Biochemistry	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good
9-15-2022 18:14:01	YAZHINI S	20UBC014	Biochemistry	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good
9-15-2022 7:40:34	M. Vanmathi	21 ubc 011	Biochemistry	Very satisfied	Very satisfied	Good	Very Good	Good	Good
9-15-2022 7:21:34	S. ARUNA	21UBT003	Biotechnology	Very satisfied	Very satisfied	Excellent	Very Good	Good	Excellent
9-14-2022 16:21:10	BHARATH V	21UBT004	Biotechnology	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent
9-14-2022 19:03:32	DEVIKA S	21UBT007	Biotechnology	Very satisfied	Somewhat satisfied	Very Good	Very Good	Very Good	Very Good
9-15-2022 18:07:41	B.Dharani	21ubt008	Biotechnology	Very satisfied	Very satisfied	Good	Good	Very Good	Very Good
9-14-2022 18:55:35	DINESH G	21UBT010	Biotechnology	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent
9-15-2022 7:40:55	RAVEENA DHARANI	21UBT029	Biotechnology	Extremely satisfied	Very satisfied	Excellent	Good	Good	Very Good
9-14-2022 21:01:10	A.subhashri	21UBT035	Biotechnology	Extremely satisfied	Somewhat satisfied	Good	Good	Very Good	Good
9-14-2022 13:40:17	SUGUMARAN S	21UBT036	Biotechnology	Extremely satisfied	Very satisfied	Excellent	Excellent	Excellent	Very Good
9-14-2022 16:44:18	K. NEHASRI	21UCH021	Chemistry	Very satisfied	Very satisfied	Good	Good	Good	Good
9-14-2022 16:03:11	PREETHI S	21uch024	Chemistry	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent
9-14-2022 14:55:11	PREETHI. T	21uch025	Chemistry	Extremely satisfied	Very satisfied	Good	Good	Very Good	Excellent
9-14-2022 16:03:26	S. D. SUBHIKSHA	21uch033	Chemistry	Extremely satisfied	Very satisfied	Excellent	Good	Good	Good
9-14-2022 17:26:06	THENMOZHI S	21UCH037	Chemistry	Very satisfied	Somewhat satisfied	Good	Good	Good	Good
9-14-2022 17:35:47	THRISHA. T	21uch038	Chemistry	Extremely satisfied	Extremely satisfied	Good	Good	Good	Good
9-14-2022 14:52:14	R. BALASURIYA	21UCH044	Chemistry	Extremely satisfied	Extremely satisfied	Very Good	Very Good	Excellent	Excellent
9-23-2022 16:00:19	SRIPRIYA G	20uzo023	Zoology	Extremely satisfied	Very satisfied	Very Good	Excellent	Very Good	Excellent

## 6. No of Participants

i. Number of Students Participants : 39 Nos.



# **MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE**

## **DEPARTMENT OF COMPUTER SCIENCE**

### **One Day Workshop on – Photoshop, 3D Printer & Hologram**

#### **1. Objective**

To learn about Photoshop, It will helpful to know about how to editing the pictures and additionally learn about the 3D image dimension with Hologram.

#### **2. Agenda (Date & Time, Venue, Guest Details)**

Date	:	13.09.2022
Time	:	10:00 A.M. to 01:00 P.M.
Venue	:	B-Block LAB – B4
Resource Person	:	<b>R.KARTHIK</b> Assistant Professor Department of Computer Science Muthayammal College of Arts & Science

#### **3. Subject/Topic dealt with (minimum 5-10 lines)**

Students learnt about Adobe Photoshop

- ❖ Introduction of Photoshop
- ❖ Fundamentals of Photoshop
- ❖ Image Types and Colors
- ❖ Flex Designing
- ❖ Visiting Card Design
- ❖ Editing Passport Size Photos
- ❖ Invitation Creation

#### 4. Photographs 6 Nos.



## 5. Feedback

Testamp	Name	Roll no	Department	1)How satisfied are you with the presentation of the workshop?	2)How satisfied are you with the look and feel of the workshop?	3)Please rate your level of satisfaction with the following workshop ? [Understa ndability]	4)Please rate your level of satisfaction with the following workshop ? [Workflow]	5)Please rate your level of satisfaction with the following workshop ? [Reportin g]	6)Please rate your level of satisfaction with the following workshop ? [Assesse ment]	7)Please rate your level of satisfaction with the following workshop ? [Perfoma nce]	8)Please rate your level of satisfaction with the following workshop ? [Ease of use]	9)Please rate your level of satisfaction with the following workshop ? [Content r eview]	10)Please rate your level of satisfaction with the following workshop ? [Support]	11)Please rate your level of satisfaction with the following workshop ? [Flexibility]	4)What do you like most about workshop?
*****	Diveekumar S	20UBC02	Biochemistry	Very satisfied	Very satisfied	Very Good	Excellent	Very Good	Excellent	Very Good	Excellent	Very Good	Excellent	Very Good	don't workshop
*****	KAVIN V	20UBC06	Biochemistry	Very satisfied	Very satisfied	Very Good	Good	Good	Good	Good	Good	Good	Good	Good	Good teaching
*****	Kaalya A	20UBC07	Biochemistry	Very satisfied	Very satisfied	Good	Good	Good	Good	Good	Good	Good	Good	Good	Learning new things
*****	NARAYATHA R	20UBC09	Biochemistry	Very satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Image setting
*****	SWETHA S	20UBC015	Biochemistry	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Yes

## 6. No of Participants

i. Number of Students Participants : 29 Nos.

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE

## DEPARTMENT OF COMPUTER SCIENCE

### One Day Workshop on – Photoshop, 3D Printer & Hologram

#### 1. Objective

To learn about Photoshop, It will helpful to know about how to editing the pictures and additionally learn about the 3D image dimension with Hologram.

#### 2. Agenda (Date & Time, Venue, Guest Details)

Date	:	14.09.2022
Time	:	10:00 A.M. to 01:00 P.M.
Venue	:	B-Block LAB – B4
Resource Person	:	<b>R.KARTHIK</b> Assistant Professor Department of Computer Science Muthayammal College of Arts & Science

#### 3. Subject/Topic dealt with (minimum 5-10 lines)

Students learnt about Adobe Photoshop

- ❖ Introduction of Photoshop
- ❖ Fundamentals of Photoshop
- ❖ Image Types and Colors
- ❖ Flex Designing
- ❖ Visiting Card Design
- ❖ Editing Passport Size Photos
- ❖ Invitation Creation

#### 4. Photographs 6 Nos.



## 5. Feedback

*****	RAVEENA DHARANIS	21UBT029	Biotechnology	Extremely satisfied	Very satisfied	Excellent	Good	Good	Very Good	Excellent	Excellent	Very Good	Excellent	Excellent	Weekly once Photoshop iruntha useful ah irukum
*****	A.subhashri	21UBT035	Biotechnology	Extremely satisfied	Somewhat satisfied	Good	Good	Very Good	Good	Good	Good	Good	Good	Very Good	Photo editing
*****	SUGUMARAN S	21UBT036	Biotechnology	Extremely satisfied	Very satisfied	Excellent	Excellent	Excellent	Very Good	Very Good	Very Good	Excellent	Very Good	Very Good	Presentation of the workshop is most likely.
*****	K. NEHASRI	21UCH021	Chemistry	Very satisfied	Very satisfied	Good	All								
*****	PREETHIS	21uch024	Chemistry	Extremely satisfied	Extremely satisfied	Excellent	It's gives us additional knowledge								
*****	PREETHI. T	21uch025	Chemistry	Extremely satisfied	Very satisfied	Good	Good	Very Good	Excellent	Very Good	Very Good	Good	Good	Very Good	use full topics
*****	S.D.SUBHIKSHA	21uch033	Chemistry	Extremely satisfied	Very satisfied	Excellent	Good	Good	Good	Very Good	Good	Good	Very Good	Very Good	Photoshop

activate Windows  
Go to Settings to activate Windows.

## 6. No of Participants

i. Number of Students Participants : 35 Nos.





# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE

## DEPARTMENT OF COMPUTER SCIENCE

### One Day Workshop on – Photoshop, 3D Printer & Hologram

#### 1. Objective

To learn about Photoshop, It will helpful to know about how to editing the pictures and additionally learn about the 3D image dimension with Hologram.

#### 2. Agenda (Date & Time, Venue, Guest Details)

Date	:	15.09.2022
Time	:	10:00 A.M. to 12:00 P.M.
Venue	:	B-Block LAB – B4
Resource Person	:	<b>R.KARTHIK</b> Assistant Professor Department of Computer Science Muthayammal College of Arts & Science Rasipuram

#### 3. Subject

Students learnt about Adobe Photoshop

- ❖ Introduction of Photoshop
- ❖ Fundamentals of Photoshop
- ❖ Image Types and Colors
- ❖ Flex Designing
- ❖ Visiting Card Design
- ❖ Editing Passport Size Photos
- ❖ Invitation Creation

#### 4. Photographs



**MUTHAYAMMAL**  
COLLEGE OF ARTS  
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Lead

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Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 -2021)



RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

**Department of Computer Science**

Organizes

**Workshop**  
on

**Photoshop, 3D printer & Hologram**

**15<sup>th</sup> SEP**  
**2022**

**10.00**  
**AM**

**Venue**  
**B-Block Lab-B4**

**Participants : II & III B.Sc Zoology**

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F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India

Latitude 11.453766° Longitude 78.232935°

LOCAL 11:36:04 GMT 06:06:04 THURSDAY 09.15.2022 ALTITUDE 141 METER



F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
Latitude 11.453796° Longitude 78.232956°  
LOCAL 11:36:18 GMT 06:06:18 THURSDAY 09.15.2022 ALTITUDE 141 METER

## 5. Feedback

Copy of Feedback\_workshope (Responses) - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Name	Roll no	1)How satisfied are y	2)How satisfied are y	3)Please rat	3)Please rat	3)Please rate	3)Please r	3)Please rate	3)Please rate	3)Please rat	3)Please rate	3)Please rate	4)What do you like most abo
2	SRIPRIYA G	20uzo023	Extremely satisfied	Very satisfied	Very Good	Excellent	Very Good	Excellent	Very Good	Very Good	Very Good	Very Good	Very Good	Photo shop
3	NAVEEN S	20UZ0011	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Very Good	Excellent	Excellent	Excellent	Fovuite
4	APISHIKHAA T.J	20uzo028	Somewhat satisfied	Very satisfied	Good	Very Good	Very Good	Good	Good	Good	Good	Very Good	Very Good	photoshop techniques
5	G.Eshwaralakshmi	20UZ0025	Very satisfied	Very satisfied	Very Good	Good	Good	Good	Very Good	Good	Good	Good	Good	It's useful to who are intereste
6	M.widhya	21uzo014	Extremely satisfied	Very satisfied	Excellent	Very Good	Excellent	Excellent	Very Good	Excellent	Very Good	Very Good	Very Good	Good
7	SUNMATHI R	20UZ0016	Very satisfied	Extremely satisfied	Very Good	Good	Very Good	Very Good	Excellent	Very Good	Very Good	Excellent	Excellent	Photography
8	K.K.SEMBAGAPPRIYA	21UZ0010	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Please once again conduct th
9	Nandhini. S	20UZ0020	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Good	Poor	Good	Good	Good	Good	Performance
10	R.PRIYADHARSHINI	21uzo016	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Isolation of DNA in plant mate
11	E. SUDHARSHANA	20UZ0015	Very satisfied	Very satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Photoshop
12	S.jeeva	21uzo003	Somewhat satisfied	Somewhat satisfied	Good	Good	Good	Good	Good	Good	Good	Good	Good	Many one more time
13	Girvalan.M	20uzo003	Somewhat satisfied	Somewhat satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Learning time in short. Also i
14	JITHENTHIRAN. G	21UZ0004	Somewhat satisfied	Not satisfied	Good	Good	Good	Poor	Good	Poor	Poor	Good	Good	Photo shop
15	K.pavithra	21uzo009	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Very good
16	Raghul.R	20UZ0027	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	new methods are learning and
17	M.VIJAY	20uzo018	Extremely satisfied	Extremely satisfied	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Photo shop
18	Kaivriya G	20uzo007	Very satisfied	Very satisfied	Good	Excellent	Good	Good	Very Good	Excellent	Good	Excellent	Very Good	Picture cutting
19	Jagatheeshwaran R	20uzo006	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Good
20	HEMADEVI M R	20UZ0005	Somewhat satisfied	Somewhat satisfied	Good	Good	Good	Very Good	Good	Good	Good	Very Good	Good	Made better for students to le
21	SHAKITHA BANU R	21UZ0017	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very good
22	S.Logitha	Zuzo005	Very satisfied	Very satisfied	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very Good	Very good
23	K.MANIKANDAN	21uzo006	Extremely satisfied	Extremely satisfied	Very Good	Very Good	Very Good	Very Good	Excellent	Very Good	Excellent	Excellent	Excellent	
24	THIRUMOORTHY.P	21uzo015	Somewhat satisfied	Very satisfied	Good	Good	Good	Very Good	Very Good	Good	Very Good	Good	Good	Teaching is exclent
25														
26														
27														
28														
29														
30														

## 6. No of Participants

i. Number of Students Participants : 40 Nos. (B.Sc. Zoology students)

**Date** : 14.10.2022  
**Session** : FN (10.00AM to 1.30PM)  
**Programme** : “An Interactive Session on Front End Software Development”  
**Department** : Electronics & Communication  
**Venue** : D – Block AV Hall

### **1. OBJECTIVE:**

- ✓ To give the knowledge of front end software development among the students by which enhancing the awareness on job opportunities available in the IT companies.
- ✓ To know the software tools used to design front end software for various applications like Web design, Embedded Design, IoT Systems.

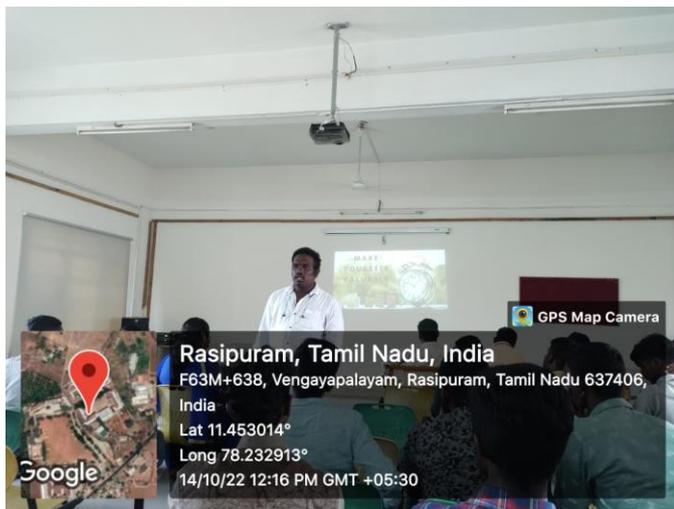
### **2. AGENDA:**

Welcome Address : R. Tharani, I-M.Sc (E&C)  
Introductory Remarks : Mr.S. Arulmani, Head - Department of E&C  
Felicitation : Dr.S.P.Vijeikumar, Principal, MCAS  
Presidential Address : Dr.R.Selvakumaran, Director – Academics, VMI  
Keynote Address : Mr.M. Narayanan, Senior Software Developer.,  
Innominds Software Pvt Ltd, Bangalore.  
Vote of Thanks : E. Malaravan, III B.Sc (E&C)

### **3. SUBJECT:**

- ✓ Head of the department Mr. S. Arulmani addressed the gathering and gave a brief introduction about the department and the chief guest.
- ✓ Dr. Dr.S.P.Vijeikumar, Principal, MCAS gave his valuable thoughts with the students and advised the students to make use of the session.
- ✓ The resource person Mr. M. Narayanan, Senior software Developer, Innominds Software Pv.Ltd shared his knowledge on software development and recent trends in IT field, key note to entering into the IT Company.
- ✓ He shared a basic and brief concepts of software development cycle and tools used for software development in various area.
- ✓ Finally our III B.Sc student E. Malaravan gave vote of thanks to the gatherings.

#### **4. PHOTOS:**



#### **5. FEED BACK:**

- ✓ The students gathered a basic knowledge on Front end software development and the job openings available in this era.
- ✓ All have been highly motivated to kick start their preparation towards a software engineer position in a MNC companies.

#### **6. ELECTRONICS & COMMUNICATION DEPARTMENT TEAM:**

- ✓ UG and PG Students
- ✓ Department Head and Faculty members

**Date** : **17.10.2022**  
**Session** : **FN (10.00AM to 12.30PM)**  
**Programme** : **An Interactive Session on “Business Ideas for Younger Generation”**  
**Department** : **Electronics & Communication**  
**Venue** : **D - Block AV Hall**

### **1. OBJECTIVE:**

- ✓ To give the ideas on some business to the younger generation students, by which motivate and enhance the thought of an entrepreneurship among students.
- ✓ To know the business plans and strategies of young students and encourage them towards their goal.

### **2. AGENDA:**

Welcome Address : R. Kavinkumar, II-B.Sc (E&C)  
Introductory Remarks : Mr.S. Arulmani, Head - Department of E&C  
Keynote Address : Mr.A. Karthigaiselvan, Asst.Prof/Economics,  
Coordinator EDC, Department of BBA,  
Muthayammal College of Arts and Science.  
Vote of Thanks : M. Boopathi, III B.Sc (E&C)

### **3. SUBJECT:**

- ✓ Head of the department Mr. S. Arulmani addressed the gathering and gave a brief introduction about the department and the chief guest.
- ✓ The resource person Mr.A. Karthigaiselvan, Asst. Prof/Economics, Coordinator EDC, Department of BBA, Muthayammal College of Arts and Science has shared his knowledge on Business Ideas over younger generation about digital marketing, Affiliate Marketing.
- ✓ He shared basic and brief concepts of business plans and concepts of marketing towards the stock holders.
- ✓ Finally our III B.Sc student M. Boopathi gave vote of thanks to the gatherings.

#### **4. PHOTOS:**



#### **5. FEED BACK:**

- ✓ The students gathered a basic knowledge and ideas on business strategies and ideas of current trend.
- ✓ All have been highly motivated to kick start their own business oriented ideas and work towards on it.

#### **6. ELECTRONICS & COMMUNICATION DEPARTMENT TEAM:**

- ✓ UG and PG Students
- ✓ Department Head and Faculty members

**Date** : **18.10.2022**  
**Session** : **FN (10.00AM to 12.30PM)**  
**Programme** : **An Interactive Session on “Course Content Design”**  
**Department** : **Electronics & Communication**  
**Venue** : **D – Block AV Hall**

### **1. OBJECTIVE:**

- ✓ To give the basic idea about the course content in the three year of B.Sc Electronics and Communication Degree program.
- ✓ To know the about the OBE system of study and the outcomes.
- ✓ To know how our syllabi is designed to make our students industry ready.

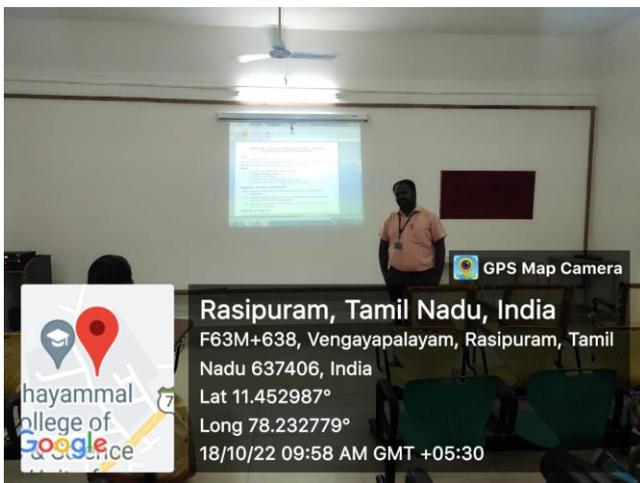
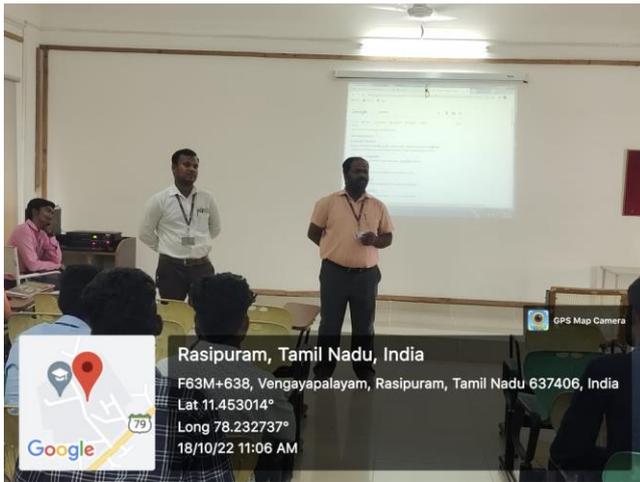
### **2. AGENDA:**

Welcome Address : P. Dhivakar, II-M.Sc (E&C)  
Introductory Remarks : Mr.S. Arulmani, Head - Department of E&C  
Keynote Address : Mr.I. Balakrishnan, Asst.Prof/E&C,  
Muthayammal College of Arts and Science.  
Vote of Thanks : M. Boopathi, III B.Sc (E&C)

### **3. SUBJECT:**

- ✓ Head of the department Mr. S. Arulmani addressed the gathering and gave a brief introduction about the department and Institution.
- ✓ Then Mr.I. Balakrishnan, Asst. Prof/E&C, Muthayammal College of Arts and Science has shared his knowledge on New educational Policies and OBE based education systems.
- ✓ He shared the skeleton and scheme of our autonomous curriculum design, the subject contents and their importance in the respective stages.
- ✓ He guided the students to register online courses available in Swayam, NPTEL and other online learning platforms; also he gave its importance of acquiring a job in industry.
- ✓ Finally our III B.Sc student M. Boopathi gave vote of thanks to the gatherings.

#### **4. PHOTOS:**



#### **5. FEED BACK:**

- ✓ The students gathered a basic knowledge and ideas on the course content that, they are learning in this three years of B.Sc. Electronics and Communication degree program.
- ✓ All have been highly motivated to do at least one online course in online learning platforms like Swayam, NPTEL, Coursera and so, by which they can improve their skill set towards the industrial needs.

#### **6. ELECTRONICS & COMMUNICATION DEPARTMENT TEAM:**

- ✓ UG and PG Students
- ✓ Department Head and Faculty members

**Date** : 31.10.2022 & 01.11.2022  
**Session** : FN (09.30AM to 03.30PM)  
**Programme** : Two Days Hands on Training on "Smartphone Servicing and Troubleshooting"  
**Department** : Electronics & Communication  
**Venue** : Electronics and Communication Laboratory

### **1. OBJECTIVE:**

- ✓ To give the basic fault finding and troubleshooting training on smart phones to the students, by which enhancing the servicing ability of the students.
- ✓ To get some business ideas over the cell phone servicing and becoming an entrepreneur.
- ✓ To do the hands on training on the smart phone servicing procedures in a step by step manner.

### **2. AGENDA:**

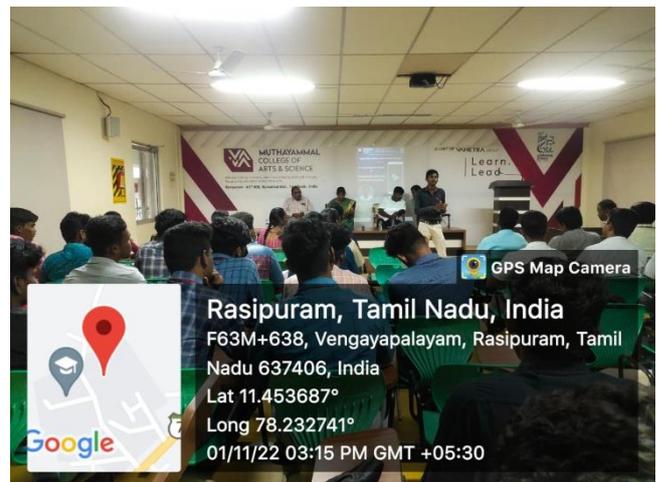
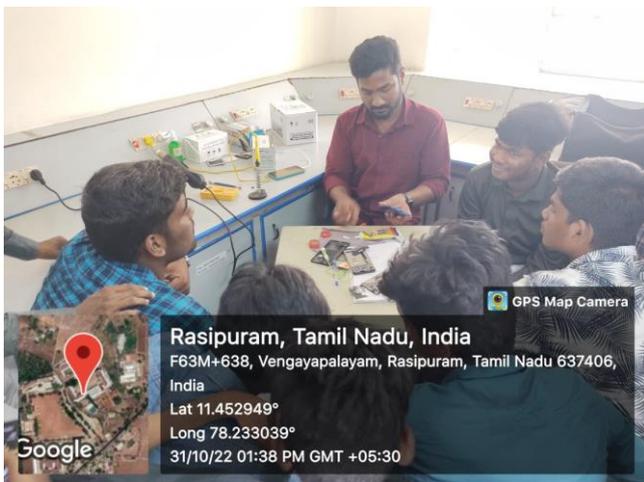
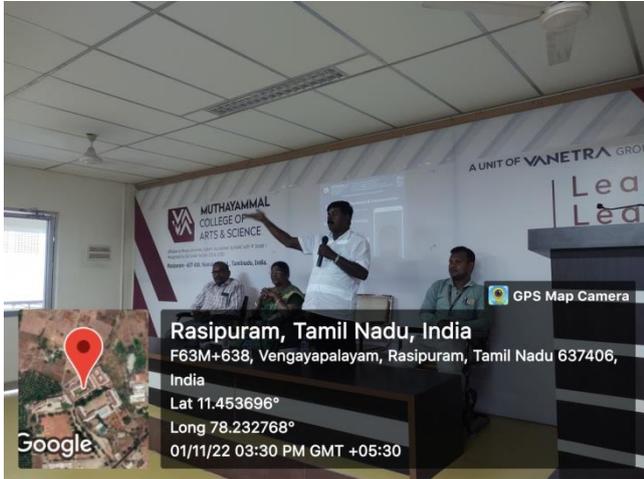
Welcome Address : Mr. I. Balakrishnan, Asst.Prof / E&C,  
Introductory Remarks : Mr.S. Arulmani, Head - Department of E&C  
Hands on Training : Mr.R. Adhithreyan, Technical Trainer,  
: Mr. A. Ranjith, Technical Trainer,  
New Technology Mobile Servicing and Training Center,  
Coimbatore.  
Special Address : Mr.B. Krishnakumar,  
Managing Director,  
New Technology Mobile Servicing and Training Center,  
Coimbatore.  
Valedictory Address : Dr.A. Stellababy, Vice Principal,  
Muthayammal College of Arts and Science,  
Vote of Thanks : Dr. M. Kutraleeswaran, Head - Department of E&C

### **3. SUBJECT:**

- ✓ Head of the department Mr. S. Arulmani addressed the gathering and gave a brief introduction about the department and the chief guest.
- ✓ The resource person Mr.R. Adhithreyan, Technical Trainer, New Technology presented some PPT regarding the various components of the cell phone and their identification during the servicing.
- ✓ The trainers gave hands on training to the students as step by step procedure mentioned below.
  - How to use the tools for servicing.
  - How to dismantle the cell phone.
  - Battery testing and boosting.
  - Identification of faults using multimeter.
  - Replacement of the faulty components on the board.
  - Checking the problem is whether resolved or not.
  - Reassembling the cell phone.

- ✓ The valedictory program had been held at B-Block Mini Seminar Hall and the chief guest Mr. B. Krishnakumar, Managing director felicitate the gathering and our Vice principal Dr. A. Stellababy address the gathering, finally our department faculty Dr. M. Kutraleeswaran delivered the vote of thanks.

#### **4. PHOTOS:**



#### **5. FEED BACK:**

- ✓ The students gathered a basic knowledge and ideas on the tools and servicing techniques of cell phones.
- ✓ All have been highly motivated and trained to service a mobile phone on their own hands.
- ✓ This training was very much useful to the electronics department students.

#### **6. PARTICIPANTS:**

- ✓ UG and PG Students of Electronics and Communication department
- ✓ Department Head and Faculty members.

<b>Date</b>	:	<b>01.02.2023 &amp; 02.02.2023</b>
<b>Session</b>	:	<b>FN (10.00 AM to 03.50PM)</b>
<b>Programme</b>	:	<b>Two Days Hands on Training on “Smart Phone Servicing”</b>
<b>Department</b>	:	<b>Electronics &amp; Communication</b>
<b>Venue</b>	:	<b>Electronics and Communication Laboratory</b>

### **1. OBJECTIVE:**

- ✓ To give the basic fault finding and troubleshooting training on smart phones to the students, by which enhancing the servicing ability of the students.
- ✓ To get some business ideas over the cell phone servicing and becoming an entrepreneur.
- ✓ To do the hands on training on the smart phone servicing procedures in a step by step manner.

### **2. AGENDA:**

Welcome Address	:	Mr. I. Balakrishnan, Asst.Prof / E&C,
Introductory Remarks	:	Mr.S. Arulmani, Head - Department of E&C.
Hands on Training	:	Mr. R. Sabareesan, Technical Trainer,
	:	Mr.R. Santhosh, Technical Trainer,
	:	Mr. P. Rajesh Kumar, Technical Trainer,
	:	Mr. S. Kishore, Technical Trainer,
		New Technology Mobile Servicing and Training Center, Coimbatore.
Chief Guest Address	:	Mr.B. Krishnakumar,
		Managing Director,
		New Technology Mobile Servicing and Training Center, Coimbatore.
Valedictory Address	:	Dr.R. Selvakuran, Director,
		Muthayammal College of Arts and Science,
Vote of Thanks	:	Mrs.P. Vijayalakshmi, Asst.Prof / E&C.

### **3. SUBJECT:**

- ✓ Head of the department Mr. S. Arulmani addressed the gathering and gave a brief introduction about the department and the chief guest.
- ✓ The resource person Mr. R. Sabareesan, Technical Trainer, New Technology presented a PPT regarding the various components of the cell phone and their identification during the servicing.
- ✓ The trainers gave hands on training to the students as step by step procedure mentioned below.
  - How to use the tools for servicing.
  - How to dismantle the cell phone.
  - Battery testing and boosting.
  - Identification of faults using multimeter.
  - Replacement of the faulty components on the board.
  - Checking the problem is whether resolved or not.
  - Reassembling the cell phone.

- ✓ The valedictory program had been held at B-Block Mini Seminar Hall and the chief guest Mr. B. Krishnakumar, Managing director felicitate the gathering and our Director Dr. R. Selvamumaran, addressed the gathering, finally our department faculty Mrs. P. Vijayalakshmi delivered the vote of thanks.

#### **4. PHOTOS:**



#### **5. FEED BACK:**

- ✓ The students gathered a basic knowledge and ideas on the tools and servicing techniques of cell phones.
- ✓ All have been highly motivated and trained to service a mobile phone on their own hands.

#### **6. PARTICIPANTS:**

- ✓ 93 UG and PG Students from All Departments.



**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE**  
**(Autonomous)**  
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**DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE**

**INTERNATIONAL CHEFS' DAY**

**OBJECTIVES:**

1. The feast provided the students an opportunity to learn signature tandoori dishes and biryani to shape them into efficient future chefs
2. To make the students learn the Tandoori skills.

**Agenda**

Department of HM & CS organized an **INTERNATIONAL CHEFS' DAY**

ON 20.10.2022 in E - Block

**Chief Guest:**

Mr. A. DEEPAN KUMAR & Mr. DINESH Tandoori Expert, Coimbatore. Had exhibited an extraordinary skill in tandoori that had made both the students and the visitors awestruck. He had demonstrated as many as ten varieties of tandoori dishes and made the students to Naan and Roti and chicken dishes. Our college Secretary Mr. Muthuvel Ramaswamy and Principal Dr. S.P.Vijeikumar had paid a visit and appreciated the chief guest, students and the department staff.

**SUBJECT / TOPIC**

- To know various Tandoori skills
- To make the students learn the all type of Naan, Roti, and Tandoori.
- The tandoori workshop will help all categories of skills for their business under one roof.

# PHOTOS:



**Feedback:**

- The event is expected to be a platform for Students to get Knowledge About tandoori Workshop
- It can be Increase Job opportunities for the students.

Number of Staff Participants: 05

Number of Students Participants: 75



**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE**  
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**DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE**

**REPORT OF VEGETABLE & FRUIT CARVING WORKSHOP**

**OBJECTIVES:**

1. To exhibit the carving skills of the expert
2. To make the students learn the carving skills
3. To give a decorative looks to the dish displayed
4. To make the dish attractive to the sight of the visitors

**Agenda**

Department of HM & CS organized a VEGETABLE & FRUIT CARVING WORKSHOP ON 08.11.2022 in E- Block

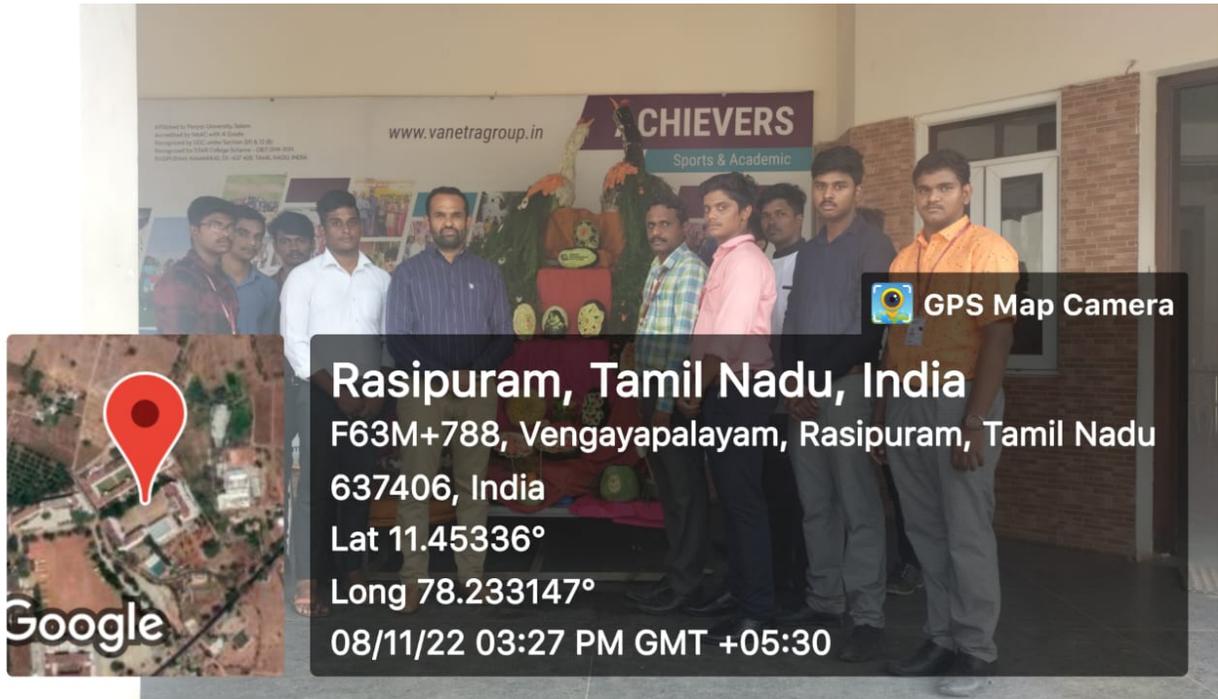
**Chief Guest:**

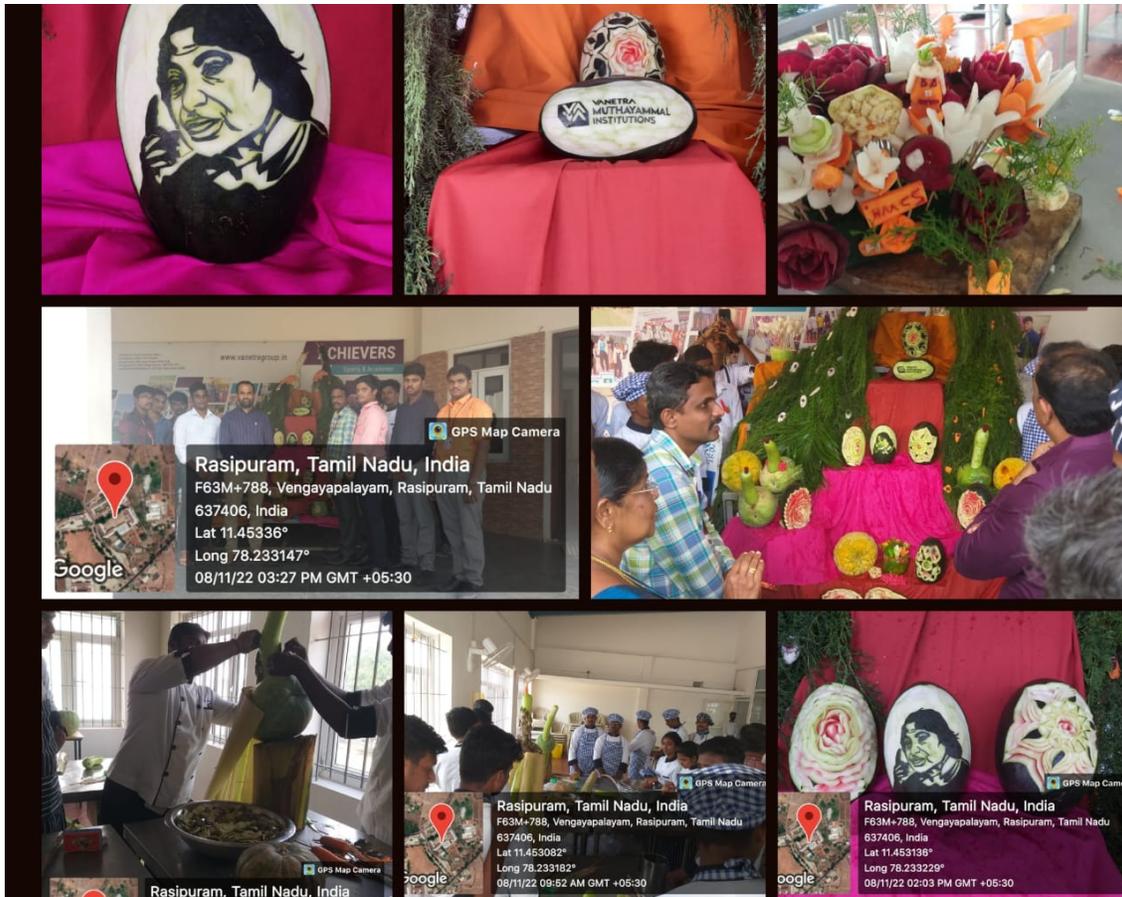
Mr.K.NANDHAKUMAR Carving Expert, Chennai. Had exhibited an extraordinary skill in carving that had made both the students and the visitors awestruck. He had demonstrated as many as twenty varieties of carvings and made the students to design carvings out of vegetables. Our college Secretary Mr. Muthuvel Ramaswamy and Principal Dr. S.P.Vijeikumar had paid a visit and appreciated the chief guest, students and the department staff.

**SUBJECT/TOPIC**

- To know various Shape of carving skills
- To make the students learn the all type of vegetable carving
- The carving workshop will help all categories of skills for their business under one roof.

**PHOTOS:**





**Feedback:**

- The event is expected to be a platform for Students to get Knowledge About Carving workshop
- It can be Increase Job opportunities for the students.

Number of Staff Participants: 05

Number of Students Participants: 75



**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE**  
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**DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE**

**REPORT OF ITALIAN PIZZA WORKSHOP**

**OBJECTIVES:**

1. To get knowledge about preparation of Pizza.
2. To make the students to be involved in Pizza preparation.
3. To get knowledge about the techniques used in commercial preparation of Pizza.

**Agenda**

Department of HM & CS organized a ITALIAN PIZZA WORKSHOP ON 16.03.2023 in E- Block

**Chief Guest:**

Dr.Chef.G.KUMARESAN Project Chef Shivaraj Holiday Inn, Salem. Had exhibited an extraordinary skill in Pizza Preparation that had made both the students and the visitors awestruck. He had demonstrated as many as Fifteen varieties of Pizza and made the students to involve in Pizza preparation. Our college Executive Director Mrs. Manju Muthuvel, Director Academic Dr. R.Selvakumaran and Principal Dr. S.P.Vijeikumar, COE Dr.P. Gowri sankar had paid a visit and appreciated the chief guest, students and the department staff.

**SUBJECT/TOPIC**

- To give exposure about the types of Pizza.
- The Pizza workshop will help all categories of skills for their business under one roof.

**PHOTOS:**



**Feedback:**

- The event is expected to be a platform for Students to get Knowledge About Pizza
- It can be Increase Job opportunities for the students.

Number of Staff Participants: 05

Number of Students Participants: 45

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, RASIPURAM-637 408**

**DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE**

**Workshop Program**

**BAKERY AND CONFECTIONARY WORKSHOP – 2023**

**OBJECTIVE:**

- To exhibit the baking Skills Practiced.
- To make the other department students learn the baking skills
- To give a decorative looks to the dish displayed
- To make the other department students to participate in cakes, pastries decorative.

**AGENDA**

- Department of HM & CS organized a BAKERY AND CONFECTIONARY WORKSHOP for other department ON 31.03.2023 in Catering Block

**Chief Guest:**

SUBJECT: Department of HM&CS organized a Bakery and Confectionary workshop on 31.03.2023. Mr.S.MUGUNTHAKUMAR Asst.Prof.in Hotel management and Catering Science, Muthayammal College of Arts and Science, Rasipuram had exhibited an extraordinary skill in Baking that had made both the students and the visitors awestruck. He had demonstrated as many as varieties of Baking and made the students to make cakes, pastries & bread. Our college Principal Dr.S.P.Vijeikumar and Vice Principal Dr.A.Stella Baby and Dean Administration Dr. M.N.Periyasamy, Head IQAC Dr.H.Lookman Sithic had paid a visit and appreciated the students and the department staff.

**SUBJECT/TOPIC**

- To know various bakery Varieties
- To know various bakery ingredients
- The Bakery Workshop will help other department students to learn about Bakery and Confectionery.

## PHOTOS:



## Feedback:

- The event is expected to be a platform for Students to get Knowledge About Bakery Products
- It can be Increase Job opportunities for the students.

Number of Staff Participants: 5

Number of Students Participants: 60

Number of External participants (Staffs/Students): NIL

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, RASIPURAM-637 408**

**DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE**

**THEME FESTIVAL**

**FOOD CARNIVAL – 2K23**

**OBJECTIVE:**

- To exhibit the carving Skills of the student.
- To exhibit the cooking skills for different dishes.
- To make the students to exhibit the baking skills

**AGENDA**

- Department of HM & CS organized a **FOOD CARNIVAL – 2K23** at **06.04.2023** in HMCS E Block

**Chief Guest:**

SUBJECT: Department of HM&CS organized a **FOOD CARNIVAL – 2K23** on **06.04.2023**  
Our Chief guest Mr. Prasanth Chef. Radisson Hotel in Salem, Our College Principal Dr.S.P.Vijeikumar, Dean Administration Dr. M.N.Periyasamy, COE Dr.P. Gowri sankar had paid a visit and appreciated the students and the department staff.

**SUBJECT/TOPIC**

- To exhibit the trained skill in carving and bakery.
- To know various ingredients and making foods.
- They exhibited various cooking skills in different dishes.

**PHOTOS:**



Feedback:

- The event is expected to be a platform for Students to get Knowledge About Bakery Products and carving techniques.
- It can be Increase Job opportunities for the students.

Number of Staff Participants: 5

Number of Students Participants: 70

Number of External participants (Staffs/Students): NIL

**(A unit of VANETRA Group)**

**Department of Mathematics**

**BRIDGE COURSE FOR I B.Sc., MATHEMATICS**

**1. Objective:**

The aim of the Bridge Course helps students to make a successful transition into their new academic programs by providing them with the necessary background knowledge about the topics that will be covered in their new courses. In addition, Bridge Courses can also help students to develop the skills and abilities that they need to succeed in their new academic programs.

**2. Agenda:**

**Date:** 16/08/2022 to 18/08/2022

**Venue:** D-303 CLASS ROOM

**3. Symposium:**

There are 6 club/Cell coordinators have been come to meet I B.Sc., Mathematics students physically and orienting their roles and responsibilities of activities. Discussed with the students about utilization of resources in their clubs.

**4. Photographs:**



Institution Innovation cell- Dr. N. Sudha



Placement Cell – Mr. Mugammed Igbal



NSS – Mr. P. Gowrishankar



Fine Arts Club – Mrs. Deepa



EDC- Mr. A. Karthikai Selvam



SDP- Mrs. Menaka

## 5. Feedback

Over all, the bridge course was very much helpful to the students to adjust themselves in new environment and methodology as well as to get good result in exams and in life.

6. (i) Number of Staff Participants : 6

(ii) Number of Students Participants : 31

**HOD**

**PRINCIPAL**



**Muthayammal College of Arts & Science, Rasipuram.**

**(A unit of VANETRA Group)**



**Department of Mathematics**

**Faculty Development Programme on SciLab**

**Six Point Structure**

**1. Objective:**

- (i) To provide the knowledge of SciLab & MatLab
- (ii) To provide practical knowledge on SciLab

**2. Agenda:**

Chief Guest: **Mr.T.RajendarKumar, M.Sc., M.Phil., PGDCA.,**

Assistant Professor and Head

Department of Mathematics

K.S.Rangasamy College of Arts and Science

Tiruchengode.

Date: 10.09.2022

Place: B Block – Lab B1

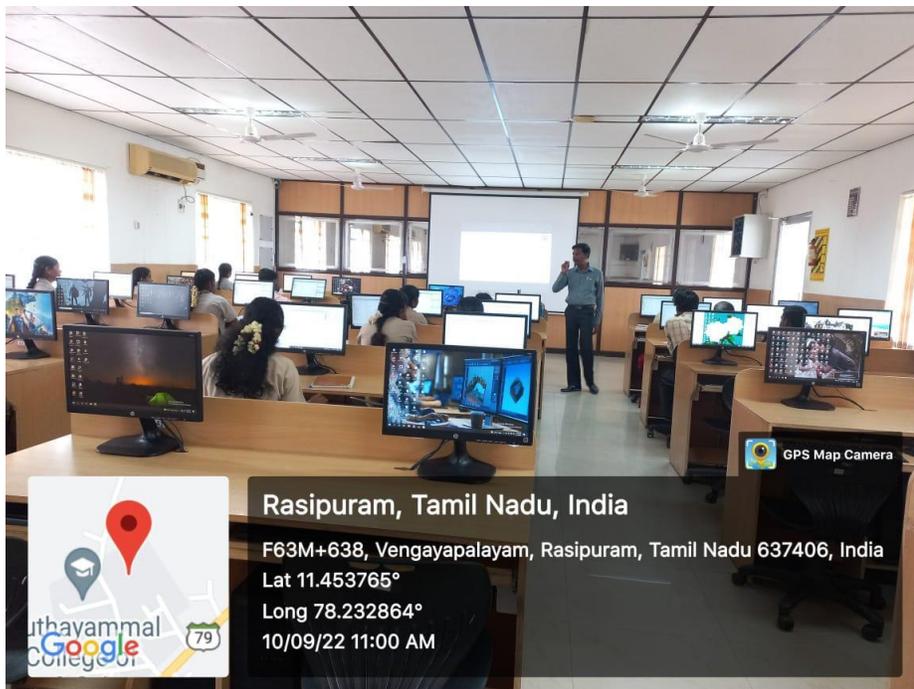
Time: 10.00 am – 04.00 pm

**3. Subject/topic dealt with (minimum 5-10 lines)**

Scilab is open-source software that is used for data analysis and computation. It is also an alternative for MatLab as this is not open-source. Scilab is named as Scientific Laboratory which resolves the problem related to numeric data. It uses an approximation technique which is called as Scientific Computing.

The Purpose of the Faculty Development Programme is to develop the in data analysis among the students. We have planned to give the practical knowledge in SciLab to the students.

#### 4. Photographs.





**5. Feedback:**

- (i) The Faculty Development Programme is very useful for the faculties.
- (ii) The Faculty members get more practical knowledge in programming language.

**6. (i) Number of Staff Participants: 21**

**(A unit of VANETRA Group)**

**Department of Mathematics**

**ORIENTATION PROGRAMME FOR CSIR NET/SET EXAMINATION  
ON MATHEMATICAL SCIENCE**

**1. Objective:**

The aim of Orientation Programme for CSIR NET/SET Examination on Mathematical Science is to improve student's talent in Mathematical line and create an awareness about the way of studying the subject content.

**2. Agenda:**

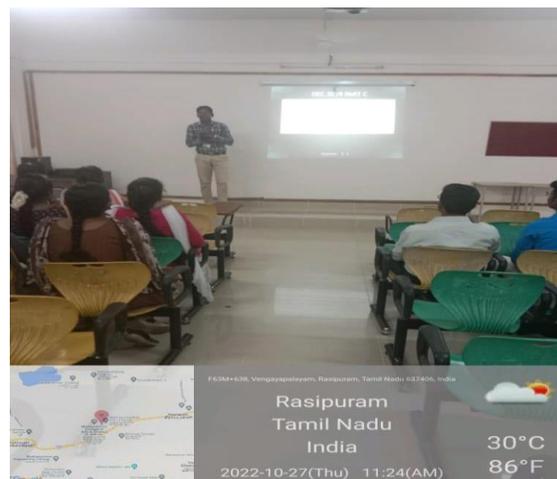
**Date:** 27/10/2022

**Venue:** D-Block AV Hall

**3. Symposium:**

In this course, students are participated eagerly towards the learning the subject content along with the applications. They also learn about how to study the subject with application and know about the problematic approach in wide area.

**4. Photographs:**





## 5. Feedback

We got an idea about how to learn for mathematical related competitive examinations conducted by various institute and we learnt many ideas from this orientation programme.

6. (i) Number of Staff Participants : 01

(ii) Number of Students Participants : 62

**HOD**

**PRINCIPAL**



**Muthayammal College of Arts and Science,  
Rasipuram.**

**(A unit of VANETRA Group)**

**Department of Mathematics**

**SWAYAM ORIENTATION**

**Six Point Structure**

**1. Objective:**

- (i) To provide the knowledge of Swayam course
- (ii) To develop knowledge about the online course for PG students

**2. Agenda:**

Chief Guest: Mrs.G.Selvi,  
Assistant professor,  
Department of Mathematics,  
Muthayammal College of Arts and Science,  
Rasipuram, Namakkal.

Date: 15.11.2022

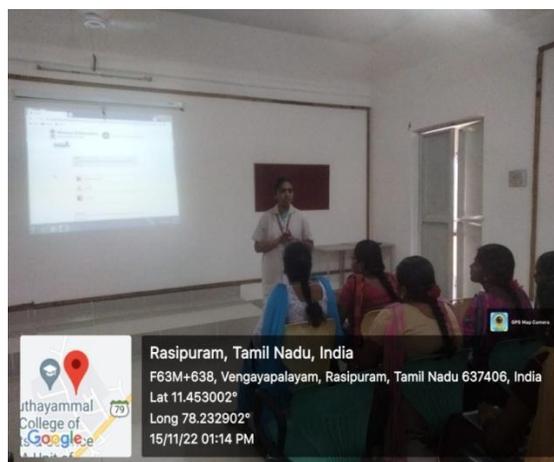
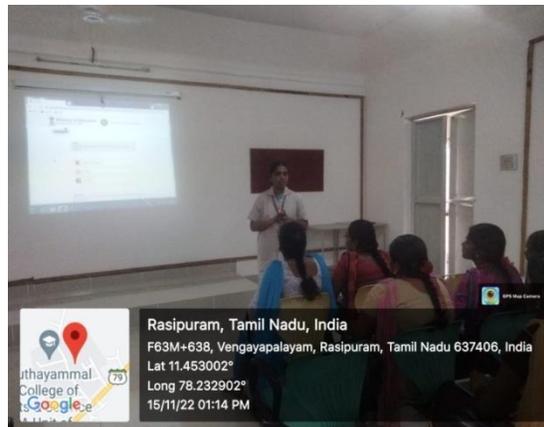
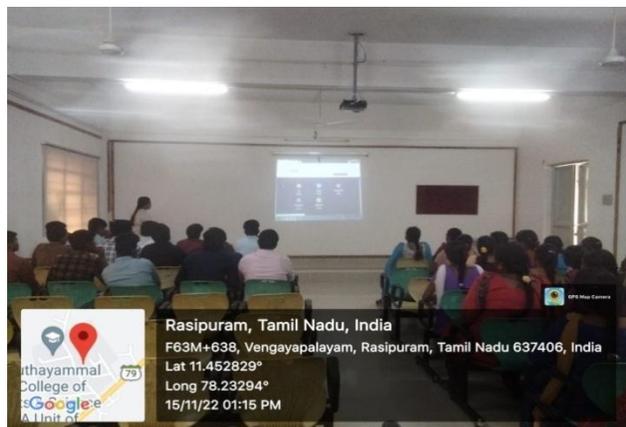
Place: D – Block AV Hall

Time: 1.00 pm – 2.00 pm

**3. Subject/topic dealt with (minimum 5-10 lines)**

SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. We discuss about the process of registration and course enrollment in Swayam portal

#### 4. Photographs.



#### 5. Feedback:

- (i) Swayam Orientation is very useful to PG Students and Faculty members for enrolling the Swayam course.
- (ii) This helps to get the clarity about the Online courses and its uses.

6. (i) Number of Staff Participants: 02

(ii) Number of Students Participants: I B.Sc & M.Sc., Mathematics - 60

HOD

PRINCIPAL

**(A unit of VANETRA Group)**

**Department of Mathematics**

**ORIENTATION ON COMPETITIVE EXAMINATION**

**1. Objective:**

The aim of Orientation Programme on Competitive Examination in Mathematics is to improve students talent in Mathematics line and create an awareness about how to apply the Competitive Examination.

**2. Agenda:**

**Date:**29/03/2023

**Venue:** D-Block AV Hall

**Time :** 11.15am – 12.15pm

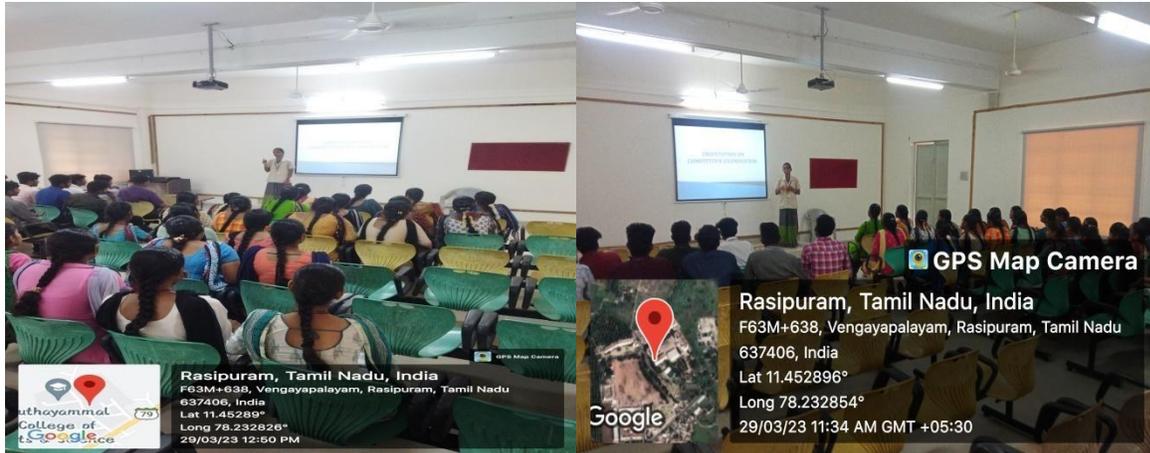
**3. Subject/topic dealt with (minimum 5-10 lines)**

An orientation programme was organised for the students of III B.Sc Mathematics on 29.03.2023 at the D- block AV hall.

Mrs. A.Suganya, Assistant Professor of Mathematics made it clear to the students about the preparation for competitive examinations and also she listed out the competitive examinations such as TNTET, TRB, TNPSC, UPSC and SSC.

**4. Photographs:**





## 5. Feedback

We got an idea about how to apply for mathematical related competitive examinations conducted by State government , Central government and we learnt many ideas from this orientation programme.

**6. (i)Number of Staff Participants : 01**

**(ii) Number of Students Participants :50**

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM

INTERDEPARTMENTAL ACTIVITY FOR BIOCHEMISTRY STUDENTS

"ANTIMICROBIAL SENSITIVITY TEST"

**ORGANIZED BY**

**DEPARTMENT OF MICROBIOLOGY**

**Date:** 27.10.2022

**Time:** 10.00 am to 01.00pm

**Venue :** PG Microbiology lab

**Participants :** III B.Sc., Biochemistry & II M.Sc., Biochemistry students

## **OBJECTIVE:**

- This training aims to make conditions as realistic as possible
- Describe the basic classification/nomenclature system(s) of microorganisms
- List and compare common methods for isolation, identification and antimicrobial susceptibility testing of microorganisms
  - State the basic mechanisms of antimicrobial resistance
  - List those pathogenic microorganisms that currently present major treatment challenges due to antimicrobial resistance
    - Describe strategies to identify problematic pathogens and propose actions to address those challenges to patient care
    - To assess discuss develop and test ways or better ways of using hands-on active learning and in non-formal and informal contexts

The biggest benefit of hands-on training is the opportunity for repeated practice. It doesn't matter how much natural talent a worker has, he can still improve in a skill by practicing. Training programs are more beneficial when they provide many opportunities for practicing a skill.

## **AGENDA:**

- 10.00am – Welcome address by HOD
- 10.05am – Activity started
- 01.00pm – Vote of Thanks by HOD

## **TOPIC DEALT WITH:**

The introduction of various antimicrobials for treating variety of infections showed the necessity of performing antimicrobial susceptibility testing as a routine procedure in all microbiology laboratories.

In laboratories it can be made available by using antibiotic disk which will diffuse slowly into the medium where the suspected organism is grown. The basic principle of the antibiotic susceptibility testing has been used in microbiology laboratories over 80 years.

Various chemical agents such as antiseptics, disinfectants, and antibiotics are employed to combat with the microbial growth. Among these, antibiotics are generally defined as the substances produced by the microorganism such as *Penicillium*, which has the ability to kill or inhibit the growth of other microorganisms, mainly bacteria. Antimicrobial susceptibility tests (ASTs) basically measures the ability of an antibiotic or other antimicrobial agent to inhibit the invitro microbial growth.

There are many different procedures that microbiologists use to study the effects of various antimicrobial agents in treating an infection caused by different microorganisms.

Mueller Hinton Agar is considered as best for the routine susceptibility testing since it is has batch-to-batch reproducibility, low concentration of inhibitors of sulphonamide, trimethoprim and tetracyclines and produce satisfactory results for most of the non-fastidious pathogens.

Fastidious organisms which require specific growth supplements need different media to grow for studying the susceptibility patterns.

The Kirby Bauer test is a qualitative assay whereby disks of filter paper are impregnated with a single concentration of different antibiotics or any chemicals that will diffuse from the disk

into the agar. The selected antibiotic disks are placed on the surface of an agar plate which has already been inoculated with test bacteria.

During the incubation period, the antibiotics/chemicals diffuse outward from the disks into the agar. This will create a concentration gradient in the agar which depends on the solubility of the chemical and its molecular size.

The absence of growth of the organism around the antibiotic disks indicates that, the respected organism is susceptible to that antibiotic and the presence of growth around the antibiotic disk indicates the organism is resistant to that particular antibiotic. This area of no growth around the disk is known as a zone of inhibition, which is uniformly circular with a confluent lawn of growth in the media.

The diameters of the zone of inhibition are measured (including disk) using a metric scale or a sliding caliper. The measured zone diameter can be compared with a standard chart for obtaining the susceptible and resistant values.

There are zone of intermediate resistance which means that the antibiotic may not be sufficient enough to eradicate the organism from the body.

## **Factors affecting Antibiotic Susceptibility Testing**

Many conditions can affect the accuracy of the AST results, which is described in detail below.

### **1. pH**

pH of the medium is an important factor which influences the accuracy of the antibiotic susceptibility testing. If the pH of the medium is too low than the desired pH, certain drugs such as amino glycosides, quinolones and macrolides lose their potency, on the other hand, antibiotic classes such as tetracyclines appear to have excess activity a lower Ph and the vice versa happens in the case of the higher pH.

### **2. Moisture**

The presence of moisture content on the medium can counter act with accuracy of the susceptibility testing. It is important to remove the excess moisture present in the agar surface, by keeping it in the laminar flow hood for few minutes.

### **3. Effects of medium components**

If the media selected for the antibiotic susceptibility contains excessive amounts of thymine or thymidine compounds, they will reversibly inhibit the action of certain antimicrobial agents such as trimethoprim groups. This reversible inhibition yields smaller or less distinct or even no zones and will be misinterpreted as resistant antibiotics. MHA is low in thymine and thymidine content and it can be used successfully to study the susceptibility of antibiotics. Also the medium containing excessive cation reduces the zone size, while low cation content results in unacceptably large inhibition zones.

### **4. Amount of organism**

The amount of the organism used for the susceptibility testing is standardized using a turbidity standard. This is obtained by a visual approximation using McFarland standard of 0.5 or else it can be determined by using a spectrophotometer with Optical density of 1 at 600 nm wavelength.

In addition to this, the antibiotic concentration for the susceptibility testing is pre-determined and is commercially available.

### **Materials Required**

Petriplate containing microbial culture (For example, *Escherichia coli*)

Inoculation loop

Bunsen burner

Saline solution

McFarland solution

MHA plate

Cotton swab

Antibiotic disks

Tooth pick

Incubator

Ruler

### **Procedure**

1. Select a pure culture plate of one of the organisms to be tested.
2. Aseptically emulsify a colony from the plate in the sterile saline solution. Mix it thoroughly to ensure that no solid material from the colony is visible in the saline solution.

3. Repeat until the turbidity of the saline solution visually match that of the standard turbidity.
4. Take a sterile swab and dip it into the broth culture of organism.
5. Gently squeeze the swab against the inside of the tube in order to remove excess fluid in the swab.
6. Take a sterile Mueller-Hinton agar (MHA) plate or a nutrient agar (NA) plate.
7. Use the swab with the test organism to streak a MHA plate or a NA plate for a lawn of growth.
8. After the streaking is complete, allow the plate to dry for 5 minutes.
9. Antibiotic discs can be placed on the surface of the agar using sterilized forceps.
10. Gently press the discs onto the surface of the agar using flame sterilized forceps or inoculation loop.
11. Carefully invert the inoculated plates and incubate for 24 hours at 37° C.
12. After incubation, use a metric ruler to measure the diameter of the zone of inhibition for each antibiotic used.
13. Compare the measurement obtained from the individual antibiotics with the standard table to determine the sensitivity zone.
14. Compare the measurement obtained from the individual antibiotics to the standard table to determine whether the tested bacterial species is sensitive or resistant to the tested antibiotic.

## **References**

### **Text Books**

1. Cappuccino G .James, Sherman Natalie, Microbiology A laboratory manual, seventh edition, Pearson Education
2. Brown E. Alfred, Benson's Microbiological Applications, ninth edition, McGraw Hill Publication
3. Pelczar J. Michael, Chan E.C.S, Krieg R. Noel, Microbiology, fifth Edition, Tata McGraw-Hill Publishing Company Limited
4. Prescott M. Lansing, Harley P. John, Klein A. Donald, Microbiology, sixth edition, McGraw-Hill Higher Education

### **Webliography**

1. [www.microrao.com/micronotes/antibiotic.pdf](http://www.microrao.com/micronotes/antibiotic.pdf)

2. [amrls.cvm.msu.edu/microbiology/detecting-antimicrobial-resistance/test-methods/examples-of-antibiotic-sensitivity-testing-methods](http://amrls.cvm.msu.edu/microbiology/detecting-antimicrobial-resistance/test-methods/examples-of-antibiotic-sensitivity-testing-methods)

3. [cid.oxfordjournals.org/content/49/11/1749.full](http://cid.oxfordjournals.org/content/49/11/1749.full)

### **PHOTOGRAPHS:**





**PARTICIPANTS:**

STUDENT : 31 Students participated

**FEEDBACK:**

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM**  
**DEPARTMENT OF MICROBIOLOGY**  
**BRIDGE COURSE**

**DATE :** 17, 24, 25, 26/08/2022

**VENUE:** I B.Sc., MB Classroom & D block AV Hall

**OBJECTIVE:**

A bridge course for newly admitted students is conducted every year before the commencement of the first semester classes. The main objective of the course is to bridge the gap between subjects studied at school level and subjects they would be studying in Microbiology. The syllabus for the course is framed in such a way that, equal importance is given to both major discipline subjects and personality development.

Bridge course helps the students to open up, think creatively and become responsible and independent students. The objective of the bridge course is to demystify what is expected of students in school and to provide adequate foundation in the core applied science subjects, limited to moderate level so that students do not face any difficulty when the classes commence.

Bridge Course will help the students to have a smooth transition to the course.

**AGENDA:**

<b>Date</b>	<b>Venue</b>	<b>Speaker</b>
17.08.2022	Class room	A. Karthigai Selvam, Asst. Prof in Dept of Business Administration, Co-Ordinator - Entrepreneurship Development Cell.
24.08.2022	'D' Block AV Hall	Mr.U.Mohamed Iqbal, Co-Ordinator, Placement Cell.
24.08.2022	'D' Block AV Hall	Mr. Rajakarthiskeyan.K.R, Asst. Prof. Department of English, Co-ordinator, Magazine Committee

25.08.2022	'D' Block AV Hall	Dr. P. SELVAMALEESWARAN Asst. Prof. Department of Biotechnology, Co-ordinator, YRC & RRC .
24.08.2022	Class room	Mrs. S.Deepa Asst. Prof. of Tamil, Co-ordinator, Fine Arts.

### **PARTICIPANTS:**

STUDENT : 87 Students participated  
87 Nos (I B.Sc Microbiology)

STAFF : 05 Nos

### **TOPIC DEALT WITH:**

#### **Placement Cell**

Placement processes play a foremost role in shaping up the career objectives of rural students. It is the dream of every graduate student to get placed in a top organization visiting their campus for recruitment. In this key aspect into consideration, it is observed that training is important for both undergraduate and postgraduate students to develop their employability skills and achieve good placement in several industries and MNCs around the world.

#### **Process of placement cell**

- Student's orientation
- Placement form distribution
- Placement registration
- Internal training
- CSR Training from Infosys TCS and GTT
- Alumni nitration
- Mock interview

- On and Off campus drive
- Date of joining follow-up

### **Magazine Committee**

Communication helps us build relationships by allowing us to share our experiences, and needs, and helps us connect to others. It's the essence of life, allowing us to express feelings, pass on information and share thoughts. We all need to communicate.

For a student, learning good communication skills—which involve reading, writing, listening, and speaking—will not only help with socialization and classroom performance, but will serve them well in all areas of their life.

### **YRC & RRC**

The Youth Red Cross is the most important constituent of its mother organization, Indian Red Cross. It is a group movement organized at the initial stages for students between 18 and 25 years of age within the colleges.

A qualified lecturer is recognized as the leader and he is called the Programme Officer under his guidance, the students are trained and encouraged to manage the affairs of the group, electing their own office-bearers.

### **THE BLOOD DONOR SELECTION PROCESS**

#### **Donor registration**

All prospective donors who meet the general criteria for blood donation such as age and good health should be registered when they attend a blood donation session. Only individuals in good health should be accepted as blood donors.

Good health is difficult to define, but certain associated parameters may be established from a brief medical history, observation and simple tests. Essential donor registration information includes the individual's full name, date of birth, gender and contact details.

#### **Pre-donation information**

Pre-donation information provides an opportunity for the prospective donors to know about health conditions or high-risk behaviour that would make them unsuitable to donate blood.

## AGE

The lower age limit for blood donation in most countries is 18 years, although in some countries national legislation permits 16–17 year-olds to donate provided that they fulfil the physical and hematological criteria required and that appropriate consent is obtained. The usual upper age limit for blood donation is 65 years

## DONOR APPEARANCE AND INSPECTION

The prospective donor should appear generally well and should not be febrile, breathless or suffering from a persistent cough. Donors should be observed to rule out malnutrition or any debilitating condition. The colour of exposed skin and mucous membranes should be normal, with no jaundice, cyanosis, flushing or pallor, and no signs of skin infection, rash or obviously enlarged lymph nodes.

## WEIGHT

It is important to set weight limits for blood donation to protect donors from adverse effects, in particular vasovagal episodes and anaemia. Low body weight and low blood volume have been shown to be independent predictors for vasovagal reactions Donor should weigh at least 45 kg to donate 350 ml ( $\pm 10\%$ ) or 50 kg to donate 450 ml  $\pm 10\%$  Prospective donors of apheresis platelet or plasma donations should weigh at least 50 kg

## VITAL SIGNS

**Pulse** A normal pulse rate of 60–100 per minute and a regular rhythm are indicators of good health

### Body temperature

A prospective donor who is febrile – defined as a core oral temperature more than 37.6°C

### Blood pressure (BP)

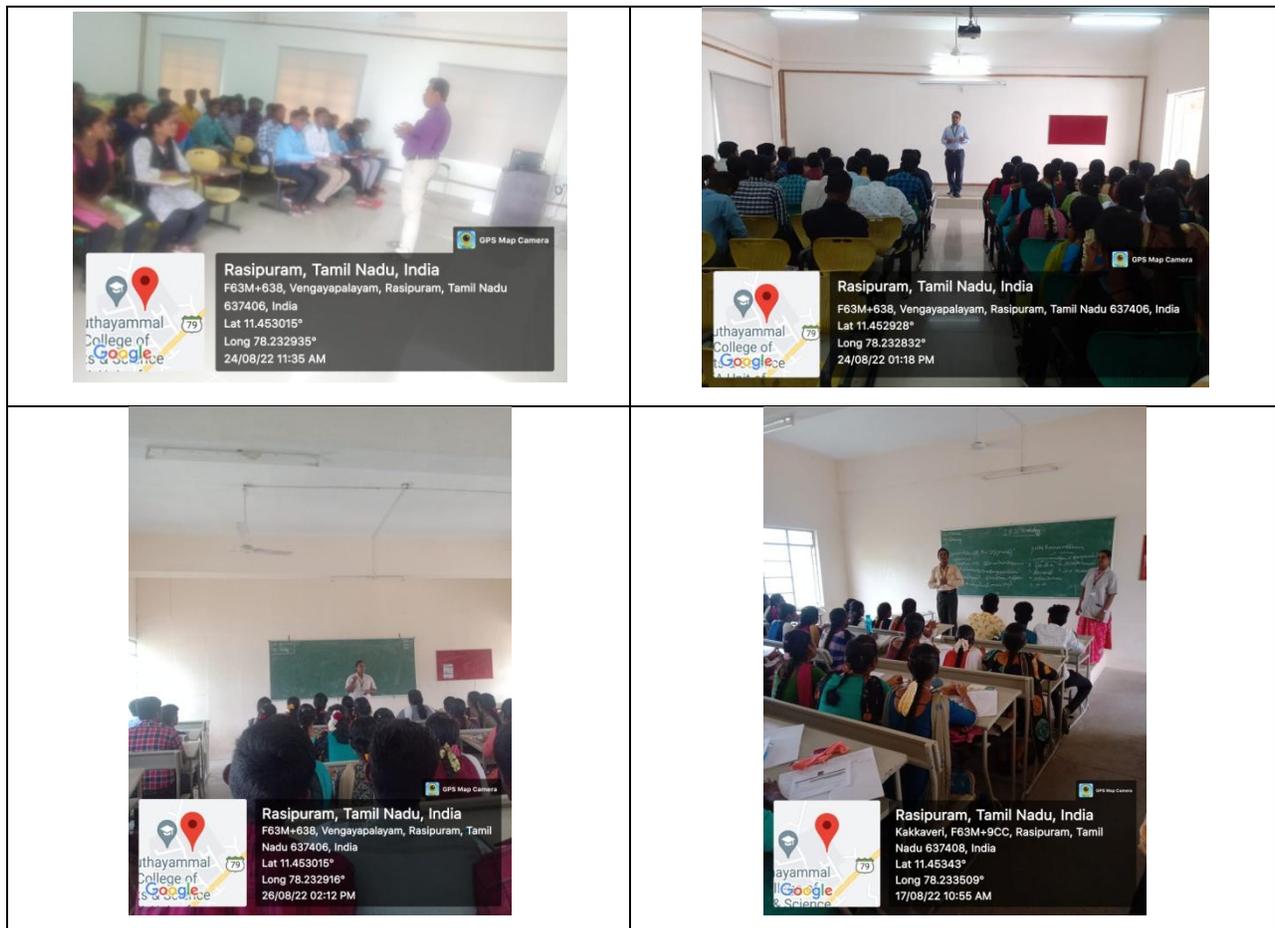
A normal blood pressure (systolic 120–129 mmHg, diastolic 80–89 mmHg) is generally regarded as an indicator of good health

## Fine Arts

The fine arts club is to encourage students to express their thoughts, feelings and creativity through the various visual art forms. The club provides an opportunity to the students to let their imagination run wild and provides them with the sight to see things in a different way.

The Art Club is a place for practicing artists to hone in on their skills, develop their techniques and portfolios, collaborate with other artists like themselves, create bonds with the community through the arts, and learn how to work together through group projects that will beautify the college and community.

## PHOTO:



**FEEDBACK:**

Overall, the bridge course was very much helpful to the students to adjust themselves in new environment and methodology as well as to get good results in exams and in life.

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM

workshop on

## "ELISA TECHNIQUE"

ORGANIZED BY

DEPARTMENT OF MICROBIOLOGY

**Date:** 20.10.2022

**Time:** 01.10 pm to 04.00pm

**Venue :** PG Microbiology lab

**Participants :** I M.Sc., MB (20 students)

**Activity Taught by :** Dr.K.Vithiya , Asst. Professor, Dept of Microbiology, MCAS

### **OBJECTIVE:**

The aim of this workshop is to introduce students to advances in contemporary lectures and hands-on training .

Gain experience and develop an understanding of what can be achieved with each one.

Describe and perform different types of Enzyme linked immunosorbent assay (ELISA) technique and its Clinical application aspects.

### **AGENDA:**

- 01.05pm Welcome address by HOD
- 01.15pm activities taught by staff
- 03.50pm vote of thanks by HOD

## **TOPIC DEALT WITH:**

The ELISA (Enzyme Linked ImmunoSorbent Assay) is the gold star immunoassay, which means that it is the standard procedure that all new assay technology is compared to during research and development.

The ELISA is also fundamental to most clinical tests for diagnosis of disease because it is currently the most characterized and standardized method. The ELISA is an immunoassay, the principle of which relies on the specific recognition between an antibody and antigen. This specificity comes from the unique three dimensional structure of the antibody paratope and the antigen epitope. These two regions fit like a lock and key via non-covalent, charge-based, and/or hydrophobic interactions. The clinical purpose of the ELISA is to detect either antibody or antigen from a biological fluid such as blood (serum), urine, or saliva.

When the ELISA is used to antibody, the assay is being used to assess whether or not the patient has been exposed to a certain antigen at some point. It is difficult to assess current infection with this method because the body retains antibodies forever after the first introduction. However, elevated amounts of antibody can be indicative of active immune response to the pathogen. One major benefit of the ELISA is that it is quantitative, meaning that an actual number of protein can be evaluated. When the ELISA is used to detect antigen it provides a better understanding of current infection since the antigen would be cleared if it was no longer active in the body.

### **Different Stages Of Indirect ELISA:**

#### **Coating ELISA Plates :**

Coating is achieved through passive adsorption of the antigen to the assay microplate. This process occurs through hydrophobic interactions between the micro titer plate and non-polar protein residues. Although individual proteins may require specific conditions or pretreatment for optimal binding, the most common method for coating plates involves adding a 2-10 µg/ml solution of protein dissolved in an alkaline buffer such as phosphate-buffered saline (pH 7.4) or carbonate-bicarbonate buffer (pH 9.4).

The buffer contains no other proteins that might compete with the target antigen for attachment to the micro titer plate. Antigens, which are protein in nature will attach passively to the micro titer well plate during incubation in incubator at 37°C.

**Washing step:**

After incubation any excess antigen is removed by washing steps by flooding and emptying the wells with neutral phosphate buffered saline (PBS) or deionized water. Washing steps are necessary to remove nonbound reagents and decrease background, thereby increasing the signal: noise ratio. Insufficient washing will allow high background, while excessive washing might result in decreased sensitivity caused by elution of the antigen from the well.

**Add blocking buffer :**

The binding capacity of microplate wells is typically higher than the amount of protein coated in each well and the residual binding capacity of the plate is blocked in this step. The ideal blocking buffer will bind to all potential sites of nonspecific interaction, eliminating background altogether, without altering or obscuring the epitope for antibody binding.

The blocking buffer is effective if it improves the sensitivity of an assay by reducing background signal and improving the signal-to-noise ratio. Tween 20 (0.05%) by itself is more effective at blocking than any protein tested, but because the combination of protein and Tween 20 may be more effective than Tween 20 alone in some cases, bovine serum albumin (BSA; 0.25%) is included in the blocking buffer. Coated plates can be used immediately or dried and stored at 4°C for later use, depending on the stability of the coated protein.

**Add primary antibody :**

This step involves the addition of detecting antibodies (test sample) being directed against the coated antigen. The antibody is usually diluted in blocking buffer to prevent non specific attachment of protein in the antiserum on the solid phase. The antibody present in the serum which are specific to the antigen, binds the coated antigen on incubation.

**Washing step :**

Excess antibody or unbound antibodies are removed by washing step and is followed by addition of blocking solution.

**Add secondary antibody (antibody enzyme conjugate):**

The next step is the addition of secondary antibody, diluted in blocking buffer directed against the primary antibody. Followed by incubation to achieve the binding of the enzyme-conjugated secondary antibody.

The choice of antibody enzyme conjugate is determined by the goals of the assay. If it is necessary to detect all antibodies that bind to antigen, conjugates prepared with antibodies specific for Ig  $\kappa$  and  $\lambda$  light chains should be used. Alternatively, protein A or protein G-enzyme conjugates may be preferable when screening monoclonal antibodies. Such antibodies are produced against immunoglobulins (Ig's) of species in which the detecting antibodies are produced and are termed anti-species conjugates. Thus, if detecting antibodies are produced in rabbits, the enzyme-labeled antibodies would have to be anti-rabbit Ig's in nature.

This allows greater flexibility in use of anti-species conjugates in that different specificities of conjugate can be used to detect particular Ig's binding in the assay. For example, the anti-species conjugate could be anti- IgM, igg1, igg2 and so on.

The enzyme can be linked to a protein such as streptavidin if the primary antibody is biotin labeled. The most commonly used enzyme labels horse radish peroxidase (HRP) and alkaline phosphatase (AP). Other enzymes have been used as well, but they have not gained widespread acceptance because of limited substrate options. These include  $\beta$ -galactosidase, acetylcholinesterase and catalase.

**Washing step:**

Unbound antibody enzyme conjugate is washed away after incubation phase.

**Adding substrate :**

Substrates are critical for the detection and visualization steps of an ELISA. The step involves the addition of suitable substrate solution for the particular enzyme conjugated to the antibodies. The

objective is to allow development of color reaction through enzyme catalysis. A large selection of substrates is available for performing the ELISA with an HRP or AP conjugate. TMB (3, 3', 5, 5'-tetramethyl benzidine) is the most commonly used substrate for the enzyme horseradish peroxidase (HRP). The substrates of alkaline phosphatase (AP), 4-methylumbelliferyl phosphate (MUP) and PNPP (p-Nitro phenyl-phosphate) are nontoxic and relatively stable. Solutions of p-nitrophenyl phosphate (NPP) are stable for months at 4°C, while solutions of 4-methylumbelliferyl phosphate (MUP) can be kept for months at room temperature without any significant spontaneous hydrolysis. The biggest disadvantage if NPP is used as a substrate is that, the yellow color of the nitro phenyl product is relatively difficult to detect visually. Using the substrate MUP instead of NPP can greatly enhance the sensitivity of the assay. The fluorogenic system using MUP is 10 to 100 times faster than the chromogenic system using NPP, and appears to be as sensitive as an enhanced chromogenic assay in which alkaline phosphatase generates NAD<sup>+</sup> from NADP. The disadvantage of using fluorogenic substrates is that they require a microplate fluorometer costing twice as much as a high quality micro titer plate spectrophotometer.

The choice of substrate depends upon the required assay sensitivity and the instrumentation available for signal-detection (spectrophotometer, fluorometer or luminometer).

### **Stop solution :**

The reaction is allowed to progress for a defined period after which the reaction is stopped by altering the pH of the system. Stop Solution is used to terminate the enzyme substrate reaction for ELISA applications after attaining the desired color intensity which is an indication of analyte level. For e.g. The TMB substrate reacts with immobilized horseradish peroxidase (HRP) conjugated secondary antibodies to produce a blue solution. Reaction may be stopped by 0.2 M sulphuric acid which offers a yellow end product read at 450 nm. AP stop solution (0.5M NaOH) does not change the yellow color or the absorbance of the chromogen, and so the absorbance is read at 405 nm to 420 nm.

### **Quantification:**

Specially designed spectrophotometers are available which reads through the micro titer wells either singly or in rows. Several ELISA plate readers are available, with increasing levels of sophistication. Some of these provide a measurement of optical density while some tabulate data and apply statistical analysis. Compatibility with a small computer, and availability of a suitable program to process the results and transform the optical density readings into concentrations of protein are important additional things to look for when selecting an instrument.

Most ELISA readers can be set to measure the absorbance of the colors produced by the action of antibody- conjugated enzymes on their respective substrates the microplate reader works by shining a particular type of light at each of the samples in the micro well plate. Common detection modes for microplate assays are absorbance, fluorescence intensity, luminescence, time-resolved fluorescence and fluorescence polarization.

A light source illuminates the sample using a specific wavelength (selected by an optical filter, or a monochromator), and a light detector located on the other side of the well measures how much of the initial (100%) light is transmitted through the sample, the amount of transmitted light will typically be related to the concentration of the molecule of interest. This is called absorption detection.

The range of application of fluorescence intensity detection is much broader than when using absorbance detection, but instrumentation is usually more expensive. Microplate readers feed the absorbance or fluorescence measures into a computer program that analyses the particular information being collected.

### **Assay optimization :**

Serial dilution titration analyses are performed to determine optimal concentrations of reagents to be used in Elisa's. All three reactants in ELISA, a solid-phase coating reagent, a secondary reagent that binds the primary reagent, and an enzyme-conjugated tertiary developing reagent that binds to the secondary reagent are serially diluted and analyzed by a criss-cross matrix analysis. Once the optimal concentrations of reagents to be used under particular assay conditions are determined, these variables are kept constant from experiment to experiment.

### **Assay validation :**

ELISA kits that are commercially available which are used for diagnostic purposes in the detection of specific antigen or antibody in the serum sample. For e.g., ovarian cancer antigen (CA-125) enzyme immunoassay test kit is intended for use as a monitoring and screening test for serum CA-125 level. An elevated serum CA-125 level can indicate ovarian cancer and suggests the need for further clinical management, also determining serum CA-125 concentration may be useful in monitoring patients with diagnosed ovarian cancer.

Materials provided with the test kits includes antibody coated micro titer plate with 96 wells, enzyme conjugate reagent, substrate solution, stop solution, wash buffer concentrate, sample diluents, reference standards, positive and negative controls.

ELISA results are reported as a number and the most controversial aspect of this test is determining the "cut-off" point between a positive and negative result. A cut-off point may be determined by comparing the ELISA plate reader value with a known reference standard. If an ELISA test is used for drug screening at workplace, a cut-off concentration, 50 ng/ml, for example, is established, and a sample will be prepared which contains the standard concentration of analyte. Unknowns that generate a signal that is stronger than the known sample are "positive" and those that generate weaker signal are "negative."

## **PHOTOGRAPHS:**





Rasipuram, Tamil Nadu, India  
Muthayammal College of Arts and Science,  
Rasipuram, Tamil Nadu 637406, India  
Lat 11.453555°  
Long 78.231664°  
20/10/22 01:25 PM GMT +05:30



Rasipuram, Tamil Nadu, India  
F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu  
637406, India  
Lat 11.454077°  
Long 78.23209°  
20/10/22 01:24 PM GMT +05:30



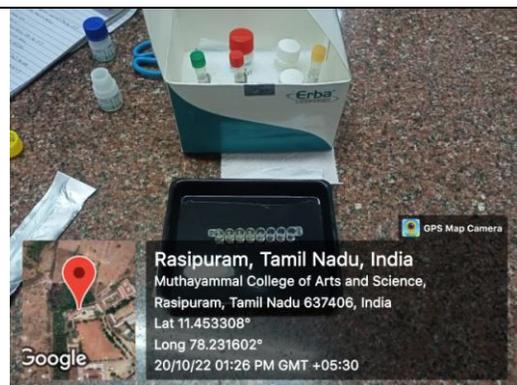
Rasipuram, Tamil Nadu, India  
F62J+FR9, SH 79, Vengayapalayam, Rasipuram, Tamil  
Nadu 637406, India  
Lat 11.451207°  
Long 78.232289°  
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Rasipuram, Tamil Nadu, India  
F62J+FR9, SH 79, Vengayapalayam, Rasipuram, Tamil  
Nadu 637406, India  
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Rasipuram, Tamil Nadu, India  
Muthayammal College of Arts and Science,  
Rasipuram, Tamil Nadu 637406, India  
Lat 11.453308°  
Long 78.231602°  
20/10/22 01:26 PM GMT +05:30

**FEEDBACK:**

Activity  
06

# Inter Departmental Activity for Biochemistry students [Antimicrobial Activity]

Date : 27-10-2022

Time : 10:00 am - 01:00 pm

Venue : Pa microbiology laboratory - 'A' - block, MCAS

Participants: III - B.Sc., Biochemistry - 19  
 II - M.Sc., Biochemistry - 12  
 I -

Technique Taught by :

Dr. S. Anbalagan  
 Assistant Professor  
 Department of Microbiology  
 MCAS, Rasipuram.

Technique Taught :

- \* Antibiotic Sensitivity Test
- \* Culture Preparation
- \* Media Preparation.



*[Signature]*  
 27/10/22

Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,  
 Assistant Professor and Head  
 Department of Microbiology  
 Muthayammal College of Arts & Science  
 Rasipuram-637 408, Namakkal (Dt.)  
 Tamilnadu.

*[Signature]*

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 Namakkal District  
 TamilNadu India

Activity  
02

## BRIDGE COURSE

Date : 17/8/2022, 24/8/2022, 25/8/2022, 26/8/2022

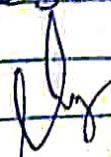
Time : During class hours [9:30am to 4:00pm]

Venue : T. B.Sc MB classroom [D-202, 203] E.D-block  
AV Hall

Participants :

1) Mr A. Karthiga Selvam, Asst. Prof, Dept of BBA  
Co-ordinator - Entrepreneurship Development cell2) Mr. U. Mohamed Tqbal  
Co-ordinator, Placement cell3) Mr. Raja Karthikeyan. K.R, Asst. Prof. of English  
Co-ordinator, Magazine committee.4) Dr. P. Selva maleeswaran, Asst. Prof of Biotechnology  
co-ordinator - YRC/RRC cell.5) Mrs. S. Deepa, Asst. Prof of Tamil.  
Co-ordinator - Fine arts.

Beneficiary : 89 students of T. B.Sc. MB.

  
 29/8/22  
**DR. M. SELVAN**, M.Sc., M.Phil., Ph.D.,  
 Assistant Professor and Head  
 Department of Microbiology  
 Muthayammal College of Arts & Science  
 Rasipuram-637 408, Namakkal (Dt.)  
 Tamilnadu.



  
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 RASIPURAM - 637 408.  
 Namakkal District,  
 TamilNadu, India.

Activity  
05

## Workshop on ELISA Technique

Date: 20.10.2022

Time: 09:10pm - 04:00pm

Venue: PA microbiology Laboratory - A-block, MCAS

Participants: 20 students

\* I - M.Sc - microbiology

Technique Taught by:

Dr. K. Vithiya

Assistant Professor

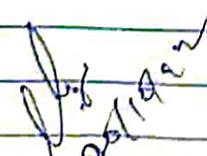
Dept of microbiology, MCAS

Technique Taught:

\* ELISA Technique

- Indirect ELISA Technique.
- Preparation of substrate
- Types of ELISA.



  
**Dr. M. SELVAN**, M.Sc., M.Phil., Ph.D.,  
 Assistant Professor and Head  
 Department of Microbiology  
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 Tamilnadu.

  
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 TamilNadu, India.

Activity

09

Workshop on Serological Techniques  
"ELISA METHOD."

Date : 10.11.2022

Time : 9:30am to 12:15pm

Venue : PA Microbiology Laboratory, MCAS

Participants:

- \* III - B.Sc., MB - A - 37 students
- \* III - B.Sc., MB - B - 32 students

Technique Taught by :

Mrs. S. Subana

Assistant Professor

Department of Microbiology.

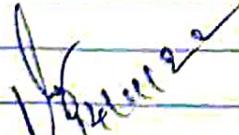
Technique Taught :

ELISA Technique

Indirect ELISA

Preparation of substrate

Types of ELISA.

  
Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,  
Assistant Professor and Head  
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Namakkal District,  
TamilNadu, India

Activity

08

Alumni Interaction Cum Seminar on  
"How to become an Entrepreneur"

Date : 09.11.2022

Time : 10:30am to 12:15pm

Venue : 'B'-block conference Hall, MCAS, Rasipuram.

Alumni Guest Details: Mr. L. Krishnaraj  
Trainer & Technician  
Reema Mushrooms  
Reema Spawn Laboratory  
Mullukuruchi

Participants : 260 students

I - B.Sc MB - 90

II - B.Sc MB - 63

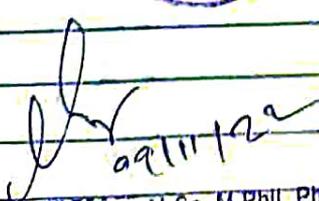
III - B.Sc MB - 69

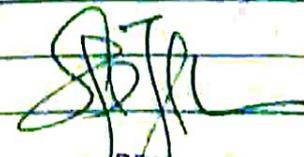
I - M.Sc MB - 19

II - M.Sc MB - 19

Technique Taught : \* Mushrooms - Benefits  
\* Mushroom - types  
\* Mushroom cultivation technique  
\* spawn preparation  
\* Maintenance of mushroom  
\* Marketing & starting new startup.



  
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Tamilnadu.

  
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RASHMI, 637 408  
Namakkal District  
TamilNadu, India

Activity  
07

## Workshop on Isolation of Genomic DNA From Bacteria.

Date : 02.11.2022 & 03.11.2022

Time : 01:15pm to 04:00pm

Venue : PA Microbiology Laboratory, 'A' block, MCAS

Participants : 64 students

\* II - B.Sc., MB - 'A' - 32 students [02.11.2022]

\* II - B.Sc., MB - 'B' - 32 students [03.11.2022]

Technique Taught by :

Mrs. C. Subana

Assistant Professor

Department of Microbiology, MCAS

Technique Taught :

\* Genomic DNA isolation

\* Reagent preparation

\* buffer preparation

\* Agarose Gel electrophoresis.



*[Signature]*  
09/11/22

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Assistant Professor and Head  
Department of Microbiology  
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*[Signature]*

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Namakkal District,  
TamilNadu, India.

Activity  
03

## Workshop on Trinocular microscope

Date : 11.10.2022 &amp; 12.10.2022

Time : 9:30 am to 12:15 pm

Venue : Microbiology laboratory - A' block, mcas

Participants : 110 students

I - B.Sc, MB - 90 students

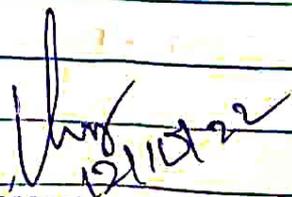
I - M.Sc, MB - 20 students

Activity / Technique Taught by:

- 1) Dr. M. Selvan, Head. Dept of microbiology
- 2) N. Radhakrishnan, Asst. Prof, Microbiology

Technique Taught by :

- \* Handling and operation of Trinocular microscope
- \* Differential staining - Gram staining
- \* Motility Test.
- \* Maintenance of Trinocular microscope.



**Dr. M. SELVAN**, M.Sc., M.Phil., Ph.D.,  
Assistant Professor and Head  
Department of Microbiology




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Activity: Interdepartment Activity for Biochemistry students  
 II: Antibiotic Sensitivity Test - Kirby-Bauer method

Date: 06/02/2023

Time: 10:00am - 01:00pm

Venue: PA microbiology lab, A-block, MCAS

Participants: III - B.Sc., Biochemistry - 16 students

II - M.Sc., Biochemistry - 07 students

Technique Taught by:

N. Radhakrishnan

Assistant Professor

Dept of microbiology, MCAS

Technique Taught:

- \* Culture Preparation
- \* sample collection & Processing
- \* Media preparation
- \* Antibiotic Sensitivity Test
- \* Interpretation of Results
- \* Broth Dilution Technique

*[Signature]*  
6/2/23



Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,  
 Assistant Professor and Head  
 Department of Microbiology  
 Muthayammal College of Arts & Science  
 Rasipuram - 637 408, Namakkal (Dt.),  
 Tamil Nadu.

*[Signature]*

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 RASIPURAM - 637 408,  
 NAMAKKAL DISTRICT.

Activity 13 Interdepartment Activity for chemistry students  
Antibiotic sensitivity Test - Kirby-Bauer Test

Date : 06/03/2023

Time : 10:00am - 01:00pm

Venue : PG microbiology lab - A' block, mcas

Participants : 35 students

\* II - m.sc - chemistry -

\* II - m.sc - organic chemistry -

Technique Taught by :

Dr. M. Selvan

Head, Department of Microbiology  
mcas.

Techniques Taught :

\* Antibiotics

\* Antibiotic Sensitivity Test

\* Interpretation of Results

\* media Preparation etc.



Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,  
Assistant Professor and Head  
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Rasipuram - 637 408, Namakkal (Dt.)  
Tamilnadu.

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RASIPURAM - 637 408,  
NAMAKKAL DISTRICT.

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM

Workshop on Serological technique

**"ELISA METHOD"**

**ORGANIZED BY**

**DEPARTMENT OF MICROBIOLOGY**

**Date:** 10.11.2022

**Time:** 09.30 am to 12.15pm

**Venue :** PG Microbiology lab

**Participants :** III B.Sc., MB (69 students)

**Activity Taught by :** Mrs.S.Subana , Asst. Professor, Dept of Microbiology, MCAS

## **OBJECTIVE:**

The aim of this workshop is to introduce students to advances in contemporary lectures and hands-on training .

Gain experience and develop an understanding of what can be achieved with each one.

Describe and perform different types of Enzyme linked immune sorbent assay (ELISA) technique and its Clinical application aspects.

## **AGENDA:**

- 09.30 am Welcome address by HOD
- 09.35 am activities taught by staff
- 12.10 pm vote of thanks by HOD

## **TOPIC DEALT WITH:**

The ELISA (Enzyme Linked ImmunoSorbent Assay) is the gold star immunoassay, which means that it is the standard procedure that all new assay technology is compared to during research and development.

The ELISA is also fundamental to most clinical tests for diagnosis of disease because it is currently the most characterized and standardized method. The ELISA is an immunoassay, the principle of which relies on the specific recognition between an antibody and antigen. This specificity comes from the unique three dimensional structure of the antibody paratope and the antigen epitope. These two regions fit like a lock and key via non-covalent, charge-based, and/or hydrophobic interactions. The clinical purpose of the ELISA is to detect either antibody or antigen from a biological fluid such as blood (serum), urine, or saliva.

### **Different Stages of Indirect ELISA:**

#### **Coating ELISA Plates:**

Coating is achieved through passive adsorption of the antigen to the assay microplate. This process occurs through hydrophobic interactions between the micro titer plate and non-polar protein residues. Although individual proteins may require specific conditions or pretreatment for optimal binding, the most common method for coating plates involves adding a 2-10 µg/ml solution of protein dissolved in an alkaline buffer such as phosphate-buffered saline (ph 7.4) or carbonate-bicarbonate buffer (ph 9.4).

The buffer contains no other proteins that might compete with the target antigen for attachment to the micro titer plate. Antigens, which are protein in nature will attach passively to the micro titer well plate during incubation in incubator at 37<sup>0</sup>C.

#### **Washing step:**

After incubation any excess antigen is removed by washing steps by flooding and emptying the wells with neutral phosphate buffered saline (PBS) or deionized water. Washing steps are necessary to remove nonbound reagents and decrease background, thereby increasing the signal: noise ratio. Insufficient washing will allow high background, while excessive washing might result in decreased sensitivity caused by elution of the antigen from the well.

**Add blocking buffer :**

The binding capacity of microplate wells is typically higher than the amount of protein coated in each well and the residual binding capacity of the plate is blocked in this step. The ideal blocking buffer will bind to all potential sites of nonspecific interaction, eliminating background altogether, without altering or obscuring the epitope for antibody binding.

The blocking buffer is effective if it improves the sensitivity of an assay by reducing background signal and improving the signal-to-noise ratio. Tween 20 (0.05%) by itself is more effective at blocking than any protein tested, but because the combination of protein and Tween 20 may be more effective than Tween 20 alone in some cases, bovine serum albumin (BSA; 0.25%) is included in the blocking buffer. Coated plates can be used immediately or dried and stored at 4°C for later use, depending on the stability of the coated protein.

**Add primary antibody :**

This step involves the addition of detecting antibodies (test sample) being directed against the coated antigen. The antibody is usually diluted in blocking buffer to prevent non specific attachment of protein in the antiserum on the solid phase. The antibody present in the serum which are specific to the antigen, binds the coated antigen on incubation.

**Washing step :**

Excess antibody or unbound antibodies are removed by washing step and is followed by addition of blocking solution.

**Add secondary antibody (antibody enzyme conjugate):**

The next step is the addition of secondary antibody, diluted in blocking buffer directed against the primary antibody. Followed by incubation to the achieve the binding of the enzyme-conjugated secondary antibody.

**Washing step:**

Unbound antibody enzyme conjugate is washed away after incubation phase.

**Adding substrate :**

Substrates are critical for the detection and visualization steps of an ELISA.

The step involves the addition of suitable substrate solution for the particular enzyme conjugated to the antibodies.

The objective is to allow development of color reaction through enzyme catalysis. A large selection of substrates is available for performing the ELISA with an HRP or AP conjugate.

The choice of substrate depends upon the required assay sensitivity and the instrumentation available for signal-detection (spectrophotometer, fluorometer or luminometer).

**Stop solution :**

The reaction is allowed to progress for a defined period after which the reaction is stopped by altering the pH of the system. Stop Solution is used to terminate the enzyme substrate reaction for ELISA applications after attaining the desired color intensity which is an indication of analyte level. For e.g. The TMB substrate reacts with immobilized horseradish peroxidase (HRP) conjugated secondary antibodies to produce a blue solution. Reaction may be stopped by 0.2 M sulphuric acid which offers a yellow end product read at 450 nm. AP stop solution (0.5M NaOH) does not change the yellow color or the absorbance of the chromogen, and so the absorbance is read at 405 nm to 420 nm.

**Quantification:**

Specially designed spectrophotometers are available which reads through the micro titer wells either singly or in rows. Several ELISA plate readers are available, with increasing levels of

sophistication. Some of these provide a measurement of optical density while some tabulate data and apply statistical analysis. Compatibility with a small computer, and availability of a suitable program to process the results and transform the optical density readings into concentrations of protein are important additional things to look for when selecting an instrument.

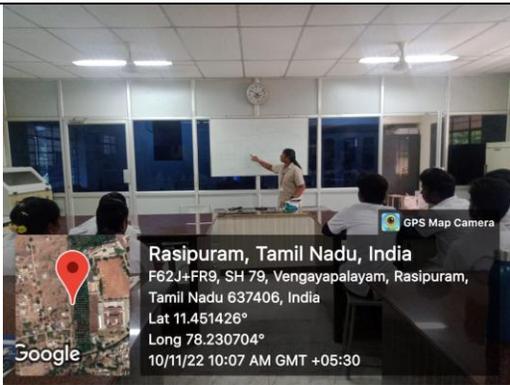
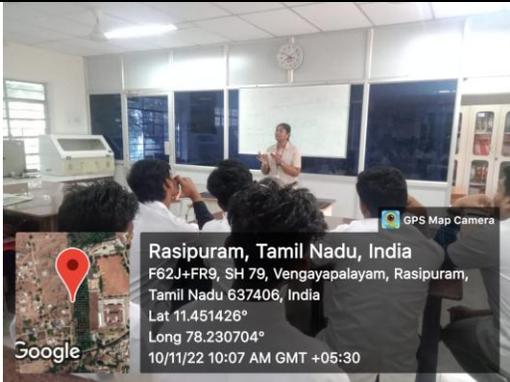
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A light source illuminates the sample using a specific wavelength (selected by an optical filter, or a monochromator), and a light detector located on the other side of the well measures how much of the initial (100%) light is transmitted through the sample, the amount of transmitted light will typically be related to the concentration of the molecule of interest. This is called absorption detection.

### **Assay optimization :**

Serial dilution titration analyses are performed to determine optimal concentrations of reagents to be used in Elisa's. All three reactants in ELISA, a solid-phase coating reagent, a secondary reagent that binds the primary reagent, and an enzyme-conjugated tertiary developing reagent that binds to the secondary reagent are serially diluted and analyzed by a criss-cross matrix analysis. Once the optimal concentrations of reagents to be used under particular assay conditions are determined, these variables are kept constant from experiment to experiment.

## PHOTOGRAPHS:



**FEEDBACK:**

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM**

**DEPARTMENT OF MICROBIOLOGY**

**ORGANIZED**

**Alumni Interaction Cum Seminar  
On  
“How to become an Entrepreneur”**

**Date:** 09.11.2022

**Time:** 10.30 am to 12.30pm

**Venue :** B block Conference hall

**Participants :** I, II, III B.Sc., MB & I, II M.Sc., MB (260 students)

**Alumni guest details:**

**Mr. L. Krishnaraj** (2015 – 2018 Batch)

Trainer & technician

Reema Mushrooms

Reema spawn Laboratory

Mullukuruchi

**OBJECTIVE:**

The alumni interaction aims to foster a sense of community among alumni, while supporting a sense of connectedness back to the institution feeling. The young students can meet with alumni of the Department. This allows them to meet others who share the institutional connection and to start their academic career with a new social connections.

## INVITATION:



**MUTHAYAMMAL  
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Lead.

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Recognized by **UGC** under Section 2(f) & 12 (B)  
Recognized by **STAR** College Scheme - DBT (2018 -2021)



RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

# Department of Microbiology

*Organizes*

## Alumni Interaction Programme



**Speaker**

**Mr.L.Krishnaraj**

Alumni - B. Sc. Microbiology  
(2015-2018 Batch)

Trainer and Technician  
Reema Mushrooms  
Mullukkurichi



**9<sup>th</sup> NOV  
2022**



**10.00  
AM**

**Venue : B - Block Conference Hall**

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## **AGENDA:**



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### **MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (Autonomous)**

**A Unit of VANETRA Group  
Rasipuram – 637 408, Namakkal Dt.**

**Department of Microbiology  
Organizes**



## **Alumni Interaction Cum Seminar On “How to become an Entrepreneur”**

**09.11.2022**

**WEDNESDAY**

**10.30 AM**

#### **B -Block Conference Hall**

- |                 |   |          |   |
|-----------------|---|----------|---|
| <b>10.30 AM</b> | <b>Welcome Address</b>                            | <b>:</b> | <b>Ms. G. Priya</b><br>I- M.Sc MB,<br>MCAS  |
| <b>10.35 AM</b> | <b>Introductory Remarks</b>                       | <b>:</b> | <b>Dr. M. Selvan</b><br>Head – Department of Microbiology<br>MCAS   |
| <b>10.40 AM</b> | <b>Felicitations</b>                              | <b>:</b> | <b>Dr. A. Stella Baby</b><br>Vice – Principal,<br>MCAS  |
| <b>10.45 AM</b> | <b>Principal Address</b>                          | <b>:</b> | <b>Dr. S. P. Vijeikumar</b><br>Principal,<br>MCAS   |
| <b>11.00 AM</b> | <b>Alumni Interaction<br/>(2015 – 2018 Batch)</b> | <b>:</b> | <b>Mr. L. Krishnaraj</b><br>Trainer & technician<br>Reema Mushrooms<br>Reema spawn Laboratory<br>Mullukuruchi |
| <b>12.00 PM</b> | <b>Vote of Thanks</b>                             | <b>:</b> | <b>Ms. M. Gokulapriya</b><br>II – M.Sc MB,<br>MCAS  |

## **TOPIC DEALT WITH:**

### **Concept of Entrepreneurship**

Entrepreneurship is the ability and readiness to develop, organize and run a business enterprise, along with any of its uncertainties in order to make a profit. The most prominent example of entrepreneurship is the starting of new businesses.

In entrepreneurship connected with land, labour, natural resources and capital can generate a profit. The entrepreneurial vision is defined by discovery and risk-taking and is an indispensable part of a nation's capacity to succeed in an ever-changing and more competitive global marketplace.

### **MEANING OF ENTREPRENEUR**

The entrepreneur is defined as someone who has the ability and desire to establish, administer and succeed in a startup venture along with risk entitled to it, to make profits. The best example of entrepreneurship is the starting of a new business venture. The entrepreneurs are often known as a source of new ideas or innovators, and bring new ideas in the market by replacing old with a new invention.

### **MUSHROOM FARMING**

Mushroom farming is one of the most profitable agri-business that you can start with a low investment and less space. Mushroom farming in India is growing gradually as an alternative source of income for many people.

### **Nutritional Value of Mushrooms**

Mushrooms contain more protein than fruits & vegetable and, Mushrooms can also be low in cholesterol. Apart from their protein content, mushrooms can also be high in certain vitamins like B, C, vitamin D, riboflavin, thiamine nicotinic acid.

## **Mushroom Cultivation in India**

In India, a marginal farmer and small manufacturing units produce Fifty percent of mushroom and the remaining mushroom produce by industrial institutions.

There are two types of mushroom growers in India, seasonal farmers produce in small scale.

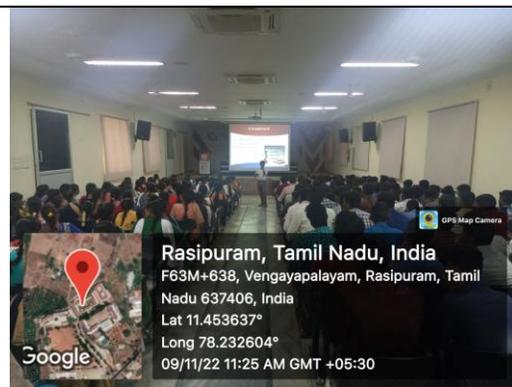
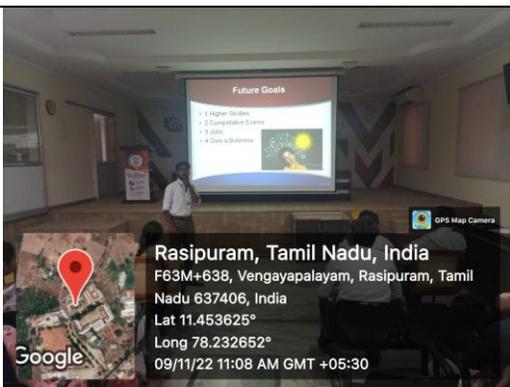
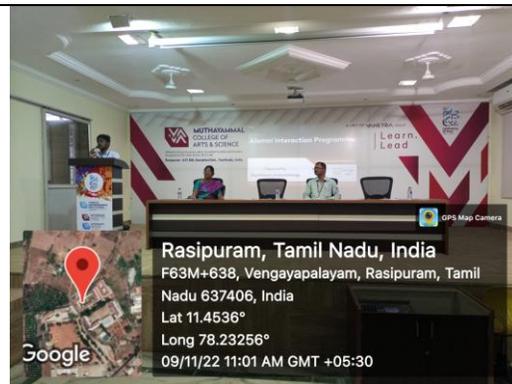
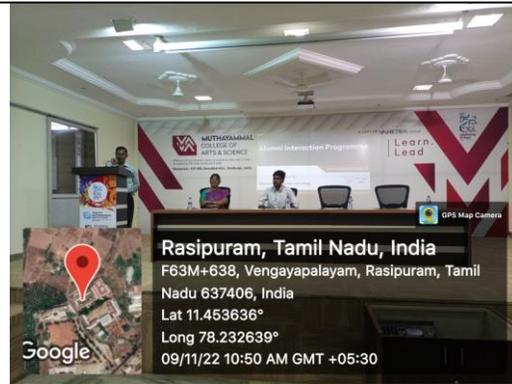
While commercial mushroom farmer who takes production continue entire year in large scale.

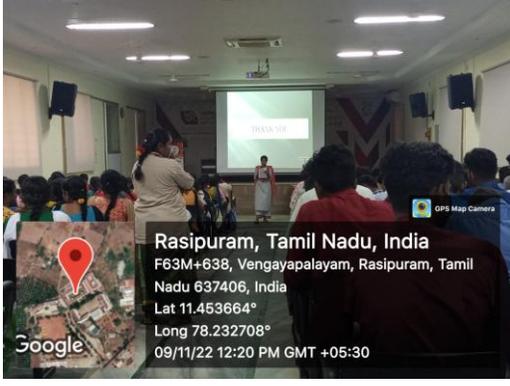
Mostly both develop white button mushroom to your domestic market and export.

Before making to start mushroom farming decision following Factors have to be Considered to become successful in commercial mushroom production business :

1. The mushroom farm should be closer to the house of the farmer for successful Participation and monitoring purpose
2. Availability of lots of water in the farm
3. Easy accessibility to raw materials at competitive prices in the region
4. Simple access to labor at more affordable prices.
5. Availability of power at competitive prices, as electricity is a significant input in mushroom cultivation
6. The farm should be from industrial pollutants such as chemical fumes,
7. There should be provision for sewage disposal
8. There should be provision for future growth in the farm.

# PHOTOGRAPHS:





## FEEDBACK:

09/11/2022

Feedback for alumni Interaction Programme

Name : P. Devapriya  
II - B.Sc., Microbiology 'A'

கிணறு நான் Alumni Interaction Programme-ல் கலந்து கொண்டேன். அங்கு தொழில் அதிபர் சிவசுந்தரி பல வாழ்முறைகளைக் கூறினார். காரணம் வளர்ச்சி முறைகள் பற்றியும் அவற்றால் கிடைக்கும் உருவாய் பற்றியும் மிக உணக்கமாகக் கூறினார். தொழிலதிபர் சிவசுந்தரி அரசாங்கம் வாடிங்கும் திட்டங்கள் பற்றியும் அவற்றில் நான் சேர்ந்து எவ்வாறு உபயோகம் அடைவது என்று கூறினார். கிணறு நடந்து சந்திப்பு எண்கூடு மிகவும் பயனுள்ளதாக கிடைந்தது. கிதற்காக என்னது துறைக்கீதவைவகீடு மிக்க நன்றி.

9/11/2022

## Feedback for alumni Interaction Programme

Name: S. Gowtham

II - B. Sc., Microbiology 'A'

### கிண்டி நான் Alumni Interaction

Programme-ல் கலந்து கொண்டேன்.

கிண்டி மாணவர்கள் மாண்பு மருகன் சிதாபல்  
மாணவர்கள் சிதாபல் கலந்துகொள்ளும் மாணவர்கள்

சிதாபல் மாணவர்கள் பற்றி தெரிந்துகொண்டேன்

கிண்டி Interaction Program எனக்கும் சிதாபல்  
மாணவர்களுக்கும் தொடர்பில் சிதாபல் சிதாபல்

கிண்டி பயனுள்ளதாக சிதாபல் சிதாபல்.

சிதாபல் சிதாபல் சிதாபல் சிதாபல் சிதாபல்.

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM

## WORKSHOP ON

"GENOMIC DNA ISOLATION"

## ORGANIZED BY

## DEPARTMENT OF MICROBIOLOGY

**Date:** 02.11.2022 & 03.11.2022

**Time:** 01.15 pm to 04.00pm

**Venue :** PG Microbiology lab

**Participants :** II B.Sc., MB (63 students)

**Activity Taught by :** Mrs.S.Subana , Asst. Professor, Dept of Microbiology, MCAS

### **OBJECTIVE:**

The aim of this workshop is to introduce students to advances in contemporary lectures and hands-on training. This workshop will provide hands-on exposure to methods for isolation and nucleic acid manipulation techniques for genomics. These techniques are inter-disciplinary in nature and are required in almost all areas of research.

### **AGENDA:**

- 01.05pm Welcome address by Mrs.S.Subana
- 01.15pm activities taught by staff
- 03.50pm vote of thanks by N.Radhakrishnan

## **TOPIC DEALT WITH:**

### **Materials and Reagents required**

1. Tris base
2. Proteinase K
3. Phenol\chloroform (1: 1)
4. 200 proof ethanol
5. RNAase
6. Ethanol
7. SDS(Sodium dodecyl sulfate)
8. EDTA(Ethylenediaminetetraacetic acid)
9. Tryptone
10. Yeast extract
11. NaCl

### **Equipment**

1. Tabletop centrifuge
2. 1.5 ml Eppendorf tube
3. Incubator

### **Procedure**

1. Transfer 1.5 ml of the overnight E. coli culture (grown in LB medium) to a 1.5 ml Eppendorf tube and centrifuge at max speed for 1min to pellet the cells.

2. Discard the supernatant. Note: Remove as much of the supernatant as you can without disturbing the cell pellet
3. Resuspend the cell pellet in 600  $\mu$ l lysis buffer and vortex to completely resuspend cell pellet.
4. Incubate 1 h at 37  $^{\circ}$ C.
5. Add an equal volume of phenol/chloroform and mix well by inverting the tube until the phases are completely mixed. Note: Do not vortex the tube—it can shear the DNA.
6. CAUTION: Phenol is a very strong acid that causes severe burns. Chloroform is a carcinogen. Wear gloves, goggles and lab coat, and keep tubes capped tightly. To be safe, work in the hood if possible.
7. Spin at max speed for 5 min at RT (all spins are performed at RT, unless indicated otherwise). There is a white layer (protein layer) in the aqueous: phenol/chloroform interface.
8. Carefully transfer the upper aqueous phase to a new tube by using 1 ml pipetman (to avoid sucking the interface, use 1 ml tip with wider mouth-cut 1 ml tip-mouth about ~2 mm shorter).
9. Steps 4-6 can be repeated until the white protein layer disappears.
10. To remove phenol, add an equal volume of chloroform to the aqueous layer. Again, mix well by inverting the tube.
11. Spin at max speed for 5 min.
12. Remove aqueous layer to new tube.
13. To precipitate the DNA, add 2.5 or 3 volume of cold 200 proof ethanol (store ethanol at -20  $^{\circ}$ C freezer) and mix gently (DNA precipitation can be visible). Note: DNA precipitation may simply diffuse, which is normal. Keep the tube at -20 degree for at least 30 min (the longer the better) and then spin it down (see Steps 15- 16). You should see DNA pellet. It looks transparent when it is wet and turns to white when it becomes dry.
14. Incubate the tube at -20  $^{\circ}$ C for 30 min or more.

15. Spin at max speed for 15 min at 4 °C.

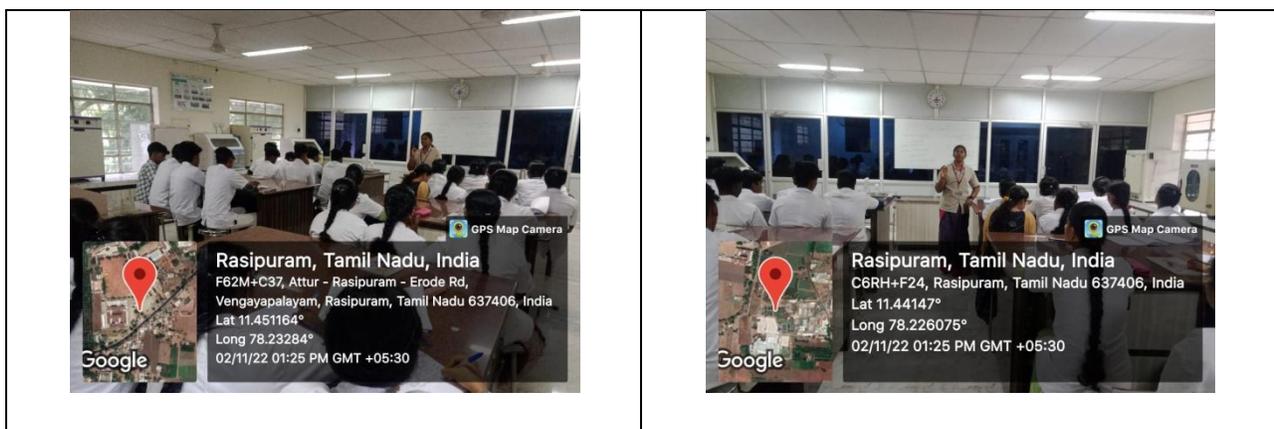
16. Discard the supernatant and rinse the DNA pellet with 1 ml 70% ethanol (stored at RT).

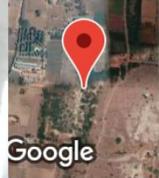
17. Spin at max speed for 2 min. Carefully discard the supernatant and air-dry the DNA pellet (tilt the tube a little bit on paper towel). To be faster, dry the tube at 37 °C incubator.

18. Resuspend DNA in TE buffer. Note: Large amounts of RNA will be present in the DNA sample. So, for subsequent reactions, for example, to digest the RNA, add 1-5 µl (1 mg ml<sup>-1</sup>) RNAase to the digestion solution to completely remove RNA. Or, add RNAase directly to lysis buffer with a final concentration of 1 mg ml<sup>-1</sup>.

19. Check isolated Genomic DNA on an agarose gel. Note: we expect to see bands with smear patterns from high to low MW range, although most of DNA fragments are accumulated at high MW on the gel. So, if you see most of DNA fragments are small, very likely your DNA got degraded.

## **PHOTOGRAPHS:**





**Poosaripalayam, Tamil Nadu, India**  
Poosaripalayam Rd, Poosaripalayam,  
Tamil Nadu 637408, India  
Lat 11.459393°  
Long 78.22928°  
02/11/22 02:06 PM GMT +05:30



**Rasipuram, Tamil Nadu, India**  
Muthayammal College of Arts and Science,  
Rasipuram, Tamil Nadu 637406, India  
Lat 11.454609°  
Long 78.231772°  
02/11/22 02:06 PM GMT +05:30



**Rasipuram, Tamil Nadu, India**  
F62M+C37, Attur - Rasipuram - Erode Rd,  
Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
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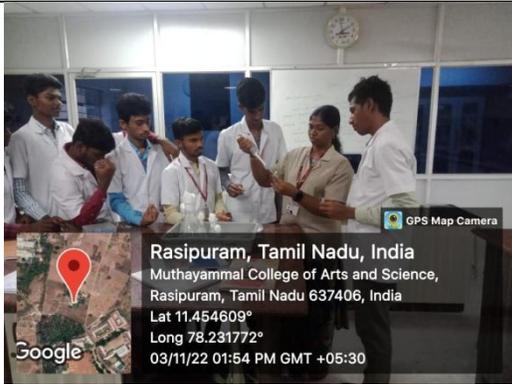
**Rasipuram, Tamil Nadu, India**  
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Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
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**Rasipuram, Tamil Nadu, India**  
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**Rasipuram, Tamil Nadu, India**  
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Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
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Long 78.23284°  
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**FEEDBACK:**

இன்று (02.11.2023) நடந்த  
"Workshop" மிகவும் உபயோகமாக இருந்தது.  
இன்று நாங்கள் "Isolation of Genomic  
DNA" எதையும் முறையை ஜனரிவாக  
கற்றுக்கொண்டோம். Centrifuge, Incubator,  
Water bath, micro pipette ஆகியவற்றை  
பயன் படுத்த கற்றுக்கொண்டோம்.  
சாங்கு இருந்த ஆசிரியர் மிகவும்  
நல்லாக புரியும்படி கற்றுக்கொடுத்தார்.  
இந்த "Workshop" எங்களுக்காக  
நடத்துவதற்கு தனது நேரம்.  
இந்த "Workshop" எங்களுக்கு  
மிகவும் பயன் உள்ளதாக இருந்தது.

By

11-B.Sc., Microbiology

கனியூ (02.11.2022) டயூக்கி  
'workshop' மிகவும் உபயோககரமாக  
இருந்தது. கனியூ டிராஜகன் "  
"Isolation of genomic DNA"  
தொழில் முறைகள் மிகவும்  
தொழிலாளர்க்கு கற்றுக்கொண்டோம்,  
centrifuge, incubator, water bath,  
micro pipette, ஆகியவற்றை  
மிகவும் தொழிலாளர்க்கு கற்றுக்  
-கொண்டோம். டிராஜகன் ராஜீவ் சூடு  
வேறுபாடும் இயற்கையான அளவு  
இருக்கும் ஆசிரியர்கள் நன்றாக  
கற்றுக் கொடுக்கிறார்கள், அதில் மிகவும்  
நாமங்கள் மிகவும் சிறப்பாக  
பயன்கொண்டோம், இந்த workshop  
நடத்துவதில் மிகவும் நன்றி,  
டிராஜகன் இதில் அதிகமான  
பயன்கொண்ட அடைகிறோம் மிகவும்  
நன்றி. by

II. B. Sc., Microbiology Students.

# MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM

Workshop On

## "TRINOCULAR MICROSCOPE"

ORGANIZED BY

DEPARTMENT OF MICROBIOLOGY

**Date:** 11.10.2022 & 15.10.2022

**Time:** 10.00 am to 12.30pm

**Venue :** PG Microbiology lab

**Participants :** I B.Sc., MB (90 Students) & I M.Sc., MB (20 students)

**Taught By:** Dr.M.Selvan, Head, Dept of Microbiology, MCAS

N.Radhakrishnan, Asst Professor, Dept of Microbiology, MCAS

### **OBJECTIVE:**

The aim of this workshop is to introduce students to advances in contemporary light microscopy through lectures and hands-on training from basic microscopy to super-resolution imaging with trinocular microscope.

Gain experience using different microscopes and develop an understanding of what can be achieved with each one.

Get the chance to make up some slides for imaging.

Image some interesting samples from the Clinical samples

Gain first hand experience of how microscopy is being used within the field of biology.

### **AGENDA:**

- 10.00am Welcome address by HOD
- 10.05am Principal's address

- ✦ 10.15am activities started
- ✦ 11.15pm Students perform practical with microscope
- ✦ 12.25pm vote of thanks by HOD (2<sup>ND</sup> DAY)

### **TOPIC DEALT WITH:**

Digital microscopes provided with the USB interface and possibilities of connection to the camera and PC have become widely popular in many spheres. Workshops' equipment may be versatile, but particularly digital microscope is an indispensable must-be device that may be applied for numerous tasks.

Modern microscope is of a relatively small size and very convenient to operate. the whole process may be demonstrated on the monitor, or on the computer screen to a larger number of people. Not only industrial, medical, biochemical or educational laboratories, but also various workshops use the USB digital microscope not only for research and service, but also for demonstrating and educational purposes.

**Microscopy is the study of devices (microscopes) that are used to view objects or certain areas that cannot be seen with a naked eye.**

- Microscopes work on the physical principle of magnification where the image of an object is magnified so that it can be visible.
- The substances that can only be seen with a microscope are called microscopic substances.
- Microscopes are imperative in areas like microbiology that deals with the structure and function of microscopic living beings.
- Microscopy is further divided into three branches; optical microscopy, electron microscopy, and X-ray microscopy.
- X-ray microscopy is a fairly new technology that is responsible for detailed imaging of subcellular organelles like the nucleus and chromosomes.
- Microscopy, importantly optical microscopy, began with the discovery of the first microscope by Anton Von Leeuwenhoek.

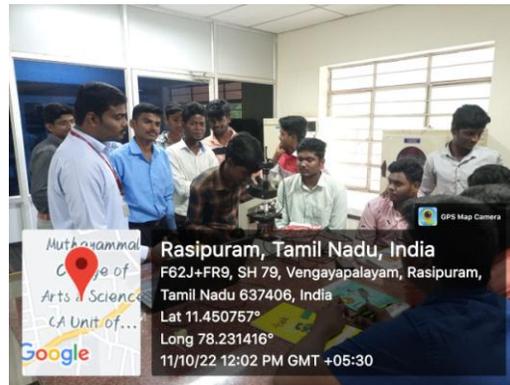
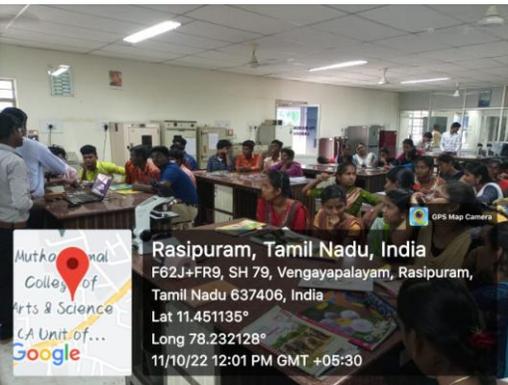
- The complexity of microscopy since then has increased rapidly with new and advanced microscopes with higher magnification and resolution.
- In an optical microscope, the rays of light are passed through a series of glass lenses to produce a magnified image on the observer's eyes. Compound microscopes are the most common type of microscope, mostly used for research and teaching purposes.
- In the case of an electron and X-ray microscope, an electron beam is created which produced a digital magnified image of an object.
- Electron microscopes have very high magnification and resolution which produces clear enlarged images of objects as small as an atom.
- Depending on the nature of the sample, different types of microscopes, including bright field microscope, fluorescence microscope, phase contrast, and darkfield microscopes, are also available.
- The magnification of these microscopes depends on the type of lens used in the system which produces images of different magnitude and resolution so that they can be viewed.
- Microscopy is important in different areas of science like histology, cytology, and bacteriology. Microscopic examination of the morphology and structure of cells has been used as an essential technique for the identification of microorganisms.
- A light microscope is a biology laboratory instrument or tool, that uses visible light to detect and magnify very small objects and enlarge them.
- They use lenses to focus light on the specimen, magnifying it thus producing an image. The specimen is normally placed close to the microscopic lens.
- Microscopic magnification varies greatly depending on the types and number of lenses that make up the microscope. Depending on the number of lenses, there are two types of microscopes i. e Simple light microscope (it has low magnification because it uses a single lens) and the Compound light microscope (it has a higher magnification compared to the simple microscope because it uses at least two sets of lenses, an objective lens, and an eyepiece). The lenses are aligned in that, they can be able to bend light for efficient magnification of the image.
- The functioning of the light microscope is based on its ability to focus a beam of light through a specimen, which is very small and transparent, to produce an image. The image is then passed through one or two lenses for magnification for viewing. The transparency of the

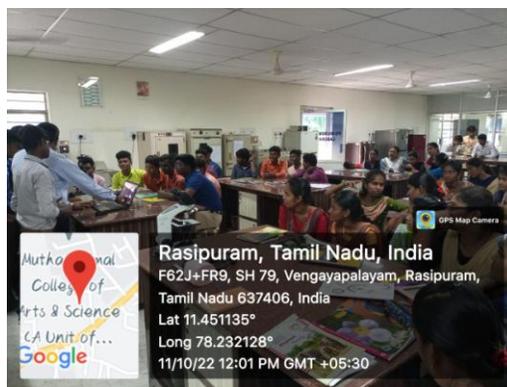
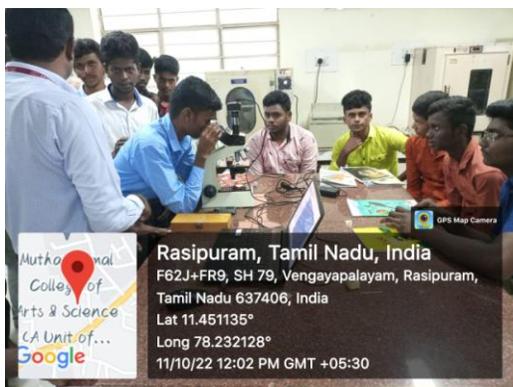
specimen allows easy and quick penetration of light. Specimens can vary from bacterial to cells and other microbial particles.

It is composed of:

- Two lenses which include the objective lens and the eyepiece or ocular lens.
- Objective lens is made up of six or more glasses, which make the image clear from the object
- The condenser is mounted below the stage which focuses a beam of light onto the specimen. It can be fixed or movable, to adjust the quality of light, but this entirely depends on the microscope.
- They are held together by a sturdy metallic curved back used as an arm and a stand at the bottom, known as the base, of the microscope. The arm and the base hold all the parts of the microscope.
- The stage where the specimen is placed, allowing movement of the specimen around for better viewing with the flexible knobs and it is where the light is focused on.
- Two focusing knobs i.e the fine adjustment knob and the coarse adjustment knob, found on the microscopes' arm, which can move the stage or the nosepiece to focus on the image. the sharpen the image clarity.
- It has a light illuminator or a mirror found at the base or on the microbes of the nosepiece.
- The nosepiece has about three to five objective lenses with different magnifying power. It can move round to any position depending on the objective lens to focus on the image.
- An aperture diaphragm also is known as the contrast, which controls the diameter of the beam of light that passes through the condenser, in that, when the condenser is almost closed, the light comes through to the center of the condenser creating high contrast. But when the condenser is widely open, the image is very bright with very low contrast.

## PHOTOGRAPHS:





## FEEDBACK:

I am learned to operate the new microscope with laptop.

It was very clear and be recorded.

I am happy to learn new thing.

That time was very useful.

Thank you.

I. Bsc. Microbiology (281101022).

Trinocular Microscope பற்றி நீங்கள் நடத்திய பாடம் எனக்கு மிகவும் பயனுள்ளதாக இருந்தது. நீங்கள் நடத்திய பாடம் திடீர்ப்பம் கில்லாமல் எதிரிவாகவும் கவனிக்க ஆர்வமாகவும் இருந்தது. எனக்கு நீங்கள் வகுப்பறையில் கவலை பயில மிகவும் படித்திருந்தது ☺. Gram staining நீங்கள் எதிரிவாகவும் நன்றாகவும் எடுத்துக் கூறினீர்கள். நான் மிகவும் ஆர்வமாக கவனித்தேன். Trinocular Microscope - ல் இருக்க Micro Organisms Microscope ல் மட்டும் பாக்கமுடியும். கில்லாமல் மடக்கணியியலும் பாக்கலாம். நீங்கள் சொன்னது எனக்கு ஆச்சரியமா இருந்தது.

Thank you  
dir

by  
Microbiology  
student ☺

I- BSc- Microbiology

28/10/22

Respected Sir;

It's really interesting to observe in trinocular microscope and we have visualized in computer it is really amazing Sir.

## Feed Back For Workshop.

- \* It is very instresting to listen the class.
- \* The staff will teach the lesson very clearly.
- \* It is very useful.
- \* Teaching method was very easy to understand.
- \* I will willing to listen the class.

## Feedback about Workshop:.

It is very useful. We have able to understand clearly the topic. The topic easy to understand. The teaching method is nice.

I never forgot the stahing method you taught. and Thank you for the department.

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM**  
**INTERDEPARTMENTAL ACTIVITY FOR BIOCHEMISTRY STUDENTS**

**"Antibiotic Sensitivity Test – Kirby Bauer Method"**

**ORGANIZED BY**

**DEPARTMENT OF MICROBIOLOGY**

**Date:** 06.02.2023

**Time:** 10.00 am to 01.00pm

**Venue :** PG Microbiology lab

**Participants :** III B.Sc., Biochemistry (16) & II M.Sc., Biochemistry (7) students

**OBJECTIVE:**

- This training aims to make conditions as realistic as possible
- Describe the basic classification/nomenclature system(s) of microorganisms
- List and compare common methods for isolation, identification and antimicrobial susceptibility testing of microorganisms
- State the basic mechanisms of antimicrobial resistance
- List those pathogenic microorganisms that currently present major treatment challenges due to antimicrobial resistance
- Describe strategies to identify problematic pathogens and propose actions to address those challenges to patient care
- To assess discuss develop and test ways or better ways of using hands-on active learning and in non-formal and informal contexts

The biggest benefit of hands-on training is the opportunity for repeated practice. It doesn't matter how much natural talent a worker has, he can still improve in a skill by practicing. Training programs are more beneficial when they provide many opportunities for practicing a skill.

## **AGENDA:**

- 09.55am – Welcome address by Dr.M.Selvan, HOD
- 10.05am – Activity started (Taught By: N.Radhakrishnan)
- 01.00pm – Vote of Thanks by Dr.M.Selvan, HOD

## **TOPIC DEALT WITH:**

The introduction of various antimicrobials for treating variety of infections showed the necessity of performing antimicrobial susceptibility testing as a routine procedure in all microbiology laboratories.

In laboratories it can be made available by using antibiotic disk which will diffuse slowly into the medium where the suspected organism is grown. The basic principle of the antibiotic susceptibility testing has been used in microbiology laboratories over 80 years.

Various chemical agents such as antiseptics, disinfectants, and antibiotics are employed to combat with the microbial growth. Among these, antibiotics are generally defined as the substances produced by the microorganism such as Penicillium, which has the ability to kill or inhibit the growth of other microorganisms, mainly bacteria. Antimicrobial susceptibility tests (ASTs) basically measures the ability of an antibiotic or other antimicrobial agent to inhibit the invitro microbial growth.

There are many different procedures that microbiologists use to study the effects of various antimicrobial agents in treating an infection caused by different microorganisms.

Mueller Hinton Agar is considered as best for the routine susceptibility testing since it is has batch-to-batch reproducibility, low concentration of inhibitors of sulphonamide, trimethoprim and tetracyclines and produce satisfactory results for most of the non-fastidious pathogens.

Fastidious organisms which require specific growth supplements need different media to grow for studying the susceptibility patterns.

The Kirby Bauer test is a qualitative assay whereby disks of filter paper are impregnated with a single concentration of different antibiotics or any chemicals that will diffuse from the disk into the

agar. The selected antibiotic disks are placed on the surface of an agar plate which has already been inoculated with test bacteria.

During the incubation period, the antibiotics/chemicals diffuse outward from the disks into the agar. This will create a concentration gradient in the agar which depends on the solubility of the chemical and its molecular size.

The absence of growth of the organism around the antibiotic disks indicates that, the respected organism is susceptible to that antibiotic and the presence of growth around the antibiotic disk indicates the organism is resistant to that particular antibiotic. This area of no growth around the disk is known as a zone of inhibition, which is uniformly circular with a confluent lawn of growth in the media.

The diameters of the zone of inhibition are measured (including disk) using a metric scale or a sliding caliper. The measured zone diameter can be compared with a standard chart for obtaining the susceptible and resistant values.

There are zone of intermediate resistance which means that the antibiotic may not be sufficient enough to eradicate the organism from the body.

### **Factors affecting Antibiotic Susceptibility Testing**

Many conditions can affect the accuracy of the AST results, which is described in detail below.

#### **1. pH**

pH of the medium is an important factor which influences the accuracy of the antibiotic susceptibility testing. If the pH of the medium is too low than the desired pH, certain drugs such as amino glycosides, quinolones and macrolides lose their potency, on the other hand, antibiotic classes such as tetracyclines appear to have excess activity a lower Ph and the vice versa happens in the case of the higher pH.

#### **2. Moisture**

The presence of moisture content on the medium can counter act with accuracy of the susceptibility testing. It is important to remove the excess moisture present in the agar surface, by keeping it in the laminar flow hood for few minutes.

### **3. Effects of medium components**

If the media selected for the antibiotic susceptibility contains excessive amounts of thymine or thymidine compounds, they will reversibly inhibit the action of certain antimicrobial agents such as trimethoprim groups. This reversible inhibition yields smaller or less distinct or even no zones and will be misinterpreted as resistant antibiotics. MHA is low in thymine and thymidine content and it can be used successfully to study the susceptibility of antibiotics. Also the medium containing excessive cation reduces the zone size, while low cation content results in unacceptably large inhibition zones.

### **4. Amount of organism**

The amount of the organism used for the susceptibility testing is standardized using a turbidity standard. This is obtained by a visual approximation using McFarland standard of 0.5 or else it can be determined by using a spectrophotometer with Optical density of 1 at 600 nm wavelength. In addition to this, the antibiotic concentration for the susceptibility testing is pre-determined and is commercially available.

### **Materials Required**

- Petriplate containing microbial culture (For example, Escherichia coli)
- Inoculation loop
- Bunsen burner
- Saline solution
- McFarland solution
- MHA plate
- Cotton swab
- Antibiotic disks
- Tooth pick
- Incubator
- Ruler

## **Procedure**

1. Select a pure culture plate of one of the organisms to be tested.
2. Aseptically emulsify a colony from the plate in the sterile saline solution. Mix it thoroughly to ensure that no solid material from the colony is visible in the saline solution.
3. Repeat until the turbidity of the saline solution visually match that of the standard turbidity.
4. Take a sterile swab and dip it into the broth culture of organism.
5. Gently squeeze the swab against the inside of the tube in order to remove excess fluid in the swab.
6. Take a sterile Mueller-Hinton agar (MHA) plate or a nutrient agar (NA) plate.
7. Use the swab with the test organism to streak a MHA plate or a NA plate for a lawn of growth.
8. After the streaking is complete, allow the plate to dry for 5 minutes.
9. Antibiotic discs can be placed on the surface of the agar using sterilized forceps.
10. Gently press the discs onto the surface of the agar using flame sterilized forceps or inoculation loop.
11. Carefully invert the inoculated plates and incubate for 24 hours at 37° C.
12. After incubation, use a metric ruler to measure the diameter of the zone of inhibition for each antibiotic used.
13. Compare the measurement obtained from the individual antibiotics with the standard table to determine the sensitivity zone.
14. Compare the measurement obtained from the individual antibiotics to the standard table to determine whether the tested bacterial species is sensitive or resistant to the tested antibiotic.

## **References**

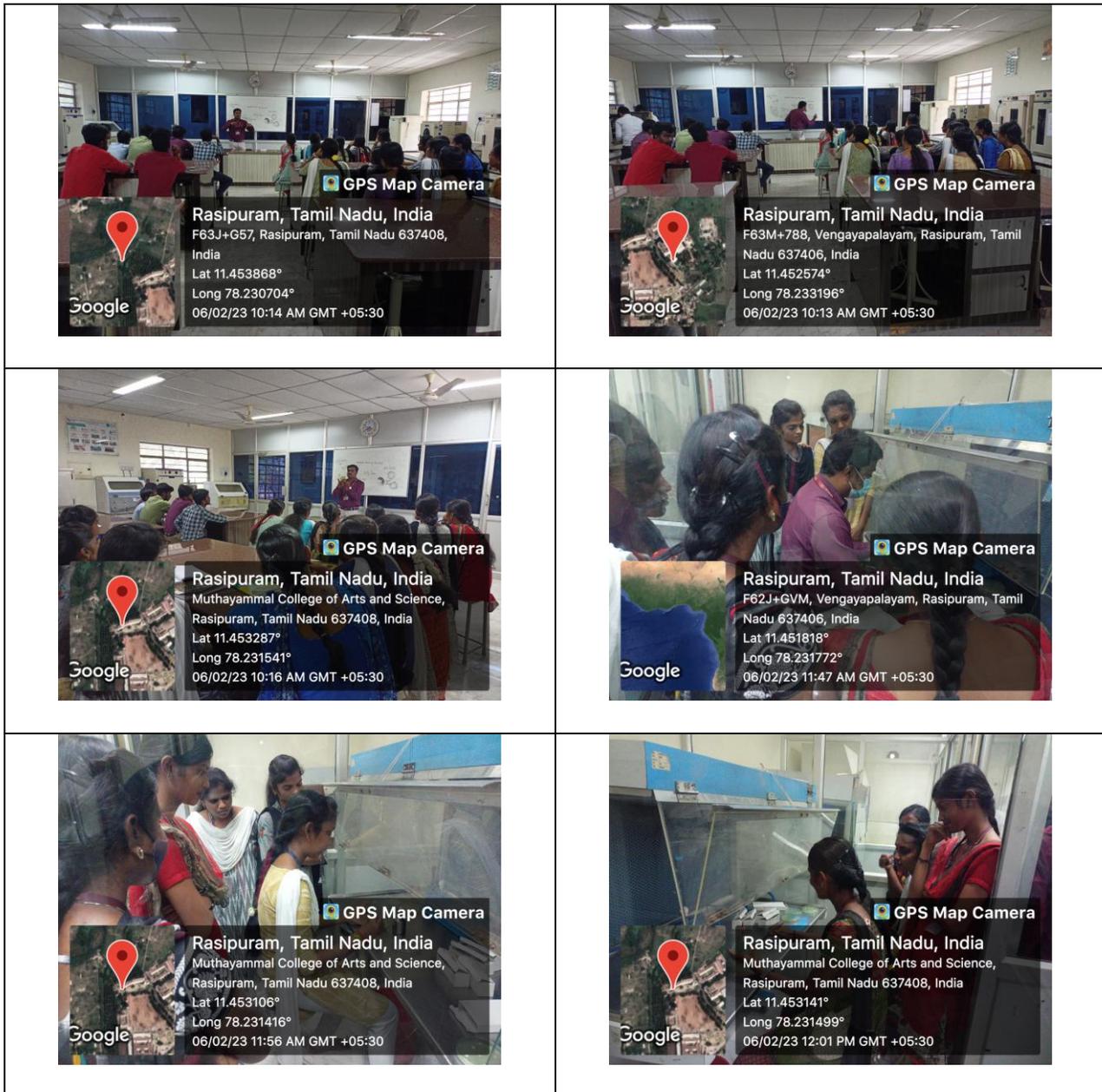
### **Text Books**

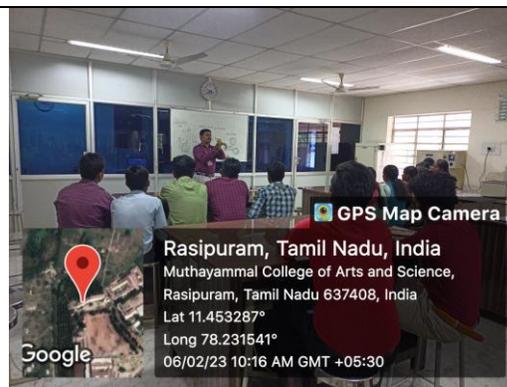
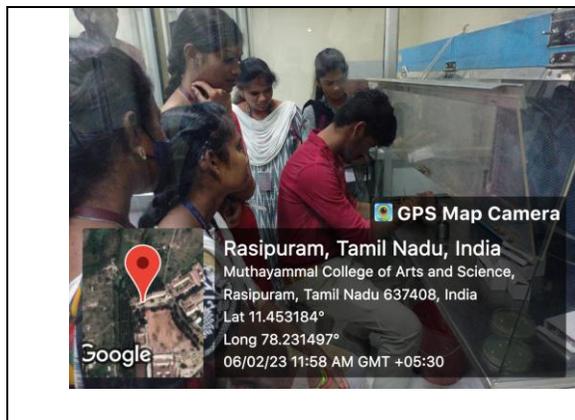
1. Cappuccino G .James, Sherman Natalie, Microbiology A laboratory manual, seventh edition, Pearson Education
2. Brown E. Alfred, Benson's Microbiological Applications, ninth edition, McGraw Hill Publication
3. Pelczar J. Michael, Chan E.C.S, Krieg R. Noel, Microbiology, fifth Edition, Tata McGraw-Hill Publishing Company Limited
4. Prescott M. Lansing, Harley P. John, Klein A. Donald, Microbiology, sixth edition, McGraw-Hill Higher Education

## Webliography

1. [www.microrao.com/micronotes/antibiotic.pdf](http://www.microrao.com/micronotes/antibiotic.pdf)
2. [amrls.cvm.msu.edu/microbiology/detecting-antimicrobial-resistance/test-methods/examples-of-antibiotic-sensitivity-testing-methods](http://amrls.cvm.msu.edu/microbiology/detecting-antimicrobial-resistance/test-methods/examples-of-antibiotic-sensitivity-testing-methods)
3. [cid.oxfordjournals.org/content/49/11/1749.full](http://cid.oxfordjournals.org/content/49/11/1749.full)

## PHOTOGRAPHS:





### **FEEDBACK:**

The students of Biochemistry learned about the technique to determine the activity of antibiotic against microorganisms, they were very eager to learn the technique and they use this method in their project work

**MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, RASIPURAM**  
**INTERDEPARTMENTAL ACTIVITY FOR BIOCHEMISTRY STUDENTS**

**"Antibiotic Sensitivity Test – Kirby Bauer Method"**

**ORGANIZED BY**

**DEPARTMENT OF MICROBIOLOGY**

**Date:** 06.03.2023

**Time:** 10.00 am to 01.00pm

**Venue :** PG Microbiology lab

**Participants :** II M.Sc., Chemistry students (35 Students)

**OBJECTIVE:**

- This training aims to make conditions as realistic as possible
- Describe the basic classification/nomenclature system(s) of microorganisms
- List and compare common methods for isolation, identification and antimicrobial susceptibility testing of microorganisms
- State the basic mechanisms of antimicrobial resistance
- List those pathogenic microorganisms that currently present major treatment challenges due to antimicrobial resistance
- Describe strategies to identify problematic pathogens and propose actions to address those challenges to patient care
- To assess discuss develop and test ways or better ways of using hands-on active learning and in non-formal and informal contexts

The biggest benefit of hands-on training is the opportunity for repeated practice. It doesn't matter how much natural talent a worker has, he can still improve in a skill by practicing. Training programs are more beneficial when they provide many opportunities for practicing a skill.

## **AGENDA:**

- 09.55am – Welcome address by Dr.M.Selvan, HOD
- 10.05am – Activity started
- 01.00pm – Vote of Thanks by Dr.M.Selvan, HOD

## **TOPIC DEALT WITH:**

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In laboratories it can be made available by using antibiotic disk which will diffuse slowly into the medium where the suspected organism is grown. The basic principle of the antibiotic susceptibility testing has been used in microbiology laboratories over 80 years.

Various chemical agents such as antiseptics, disinfectants, and antibiotics are employed to combat with the microbial growth. Among these, antibiotics are generally defined as the substances produced by the microorganism such as Penicillium, which has the ability to kill or inhibit the growth of other microorganisms, mainly bacteria. Antimicrobial susceptibility tests (ASTs) basically measures the ability of an antibiotic or other antimicrobial agent to inhibit the invitro microbial growth.

There are many different procedures that microbiologists use to study the effects of various antimicrobial agents in treating an infection caused by different microorganisms.

Mueller Hinton Agar is considered as best for the routine susceptibility testing since it is has batch-to-batch reproducibility, low concentration of inhibitors of sulphonamide, trimethoprim and tetracyclines and produce satisfactory results for most of the non-fastidious pathogens.

Fastidious organisms which require specific growth supplements need different media to grow for studying the susceptibility patterns.

The Kirby Bauer test is a qualitative assay whereby disks of filter paper are impregnated with a single concentration of different antibiotics or any chemicals that will diffuse from the disk into the agar. The selected antibiotic disks are placed on the surface of an agar plate which has already been inoculated with test bacteria.

During the incubation period, the antibiotics/chemicals diffuse outward from the disks into the agar. This will create a concentration gradient in the agar which depends on the solubility of the chemical and its molecular size.

The absence of growth of the organism around the antibiotic disks indicates that, the respected organism is susceptible to that antibiotic and the presence of growth around the antibiotic disk indicates the organism is resistant to that particular antibiotic. This area of no growth around the disk is known as a zone of inhibition, which is uniformly circular with a confluent lawn of growth in the media.

The diameters of the zone of inhibition are measured (including disk) using a metric scale or a sliding caliper. The measured zone diameter can be compared with a standard chart for obtaining the susceptible and resistant values.

There are zone of intermediate resistance which means that the antibiotic may not be sufficient enough to eradicate the organism from the body.

## **Factors affecting Antibiotic Susceptibility Testing**

Many conditions can affect the accuracy of the AST results, which is described in detail below.

### **1. pH**

pH of the medium is an important factor which influences the accuracy of the antibiotic susceptibility testing. If the pH of the medium is too low than the desired pH, certain drugs such as amino glycosides, quinolones and macrolides lose their potency, on the other hand, antibiotic classes such as tetracyclines appear to have excess activity a lower Ph and the vice versa happens in the case of the higher pH.

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## **Materials Required**

Petriplate containing microbial culture (For example, Escherichia coli)

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Bunsen burner

Saline solution

McFarland solution

MHA plate

Cotton swab

Antibiotic disks

Tooth pick

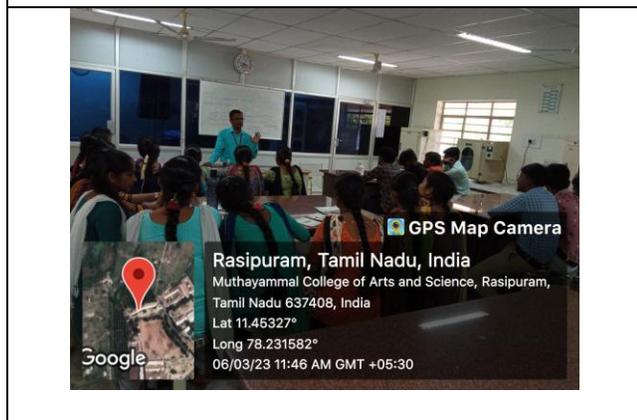
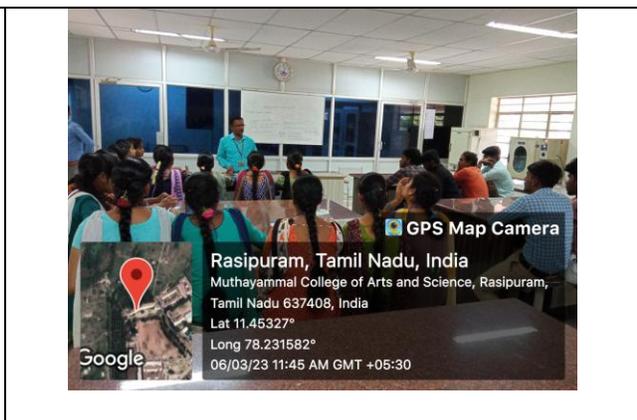
Incubator

Ruler

## Procedure

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**PHOTOGRAPHS:**



**PARTICIPANTS:**



MUTHAYAMMAL  
COLLEGE OF ARTS  
& SCIENCE  
A UNIT OF NAMETRA

MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE

II M.Sc., CHEMISTRY (2021-22)

NOMINAL ROLL

S.N	Roll No	STUDENTS NAME	REMARKS
1	21PCH001	ABI KANNA M	N. Abinaya
2	21PCH002	BALAJI K	K. Balaji
3	21PCH003	DIWAGAR N	N. Diwagar
4	21PCH004	ELANGO VAN P	P. Elango Van
5	21PCH005	INDUMATHI K	K. Indumathi
6	21PCH006	JEEVANANTHAN S	S. Jeevananthan
7	21PCH007	JEEVITHA S	S. Jeevitha
8	21PCH008	KANIKA T	T. Kanika
9	21PCH009	KARTHIKA J	J. Karthika
10	21PCH010	KISHOR S	S. Kishor
11	21PCH011	KOMATHI T	T. Komathi
12	21PCH012	KRISHNAKUMAR M S	M.S. Krishna Kumar
13	21PCH013	MADHUMITHA G	G. Madhumitha
14	21PCH014	MAHESHRAJ S	S. Maheshraj
15	21PCH015	MEIYARASAN D	D. Meiyarasan
16	21PCH016	MUTHUKRISHNAN D	D. Muthukrishnan
17	21PCH017	MYTHILI M	M. Mythili
18	21PCH018	PAVITHIRA A	A. Pavithira
19	21PCH019	PAVITHIRA G	G. Pavithira
20	21PCH020	PAVITHRA R	R. Pavithra
21	21PCH021	PRABHAKARBISWAS P	P. Prabhakar Biswas
22	21PCH022	PREETHI C	C. Preethi
23	21PCH023	PRIYADHARSHINI R	R. Priyadharshini
24	21PCH024	PRIYADHARSHINI R	R. Priyadharshini
25	21PCH025	PRIYADHARSHINI S	S. Priyadharshini
26	21PCH026	RAGAVAN D	D. Ragavan
27	21PCH027	RASIKA S	S. Rasika
28	21PCH028	RETHIGA S	S. Rethiga
29	21PCH029	RUBIKA M	M. Rubika
30	21PCH030	SANTHOSHKUMAR T	T. Santhosh Kumar
31	21PCH031	SARATHBABU M	M. Sarath Babu
32	21PCH032	SHANMUGAPRIYA K	K. Shanmugapriya
33	21PCH033	SOUMYA P	P. Soumya
34	21PCH034	SRIDHAR M R	M.R. Sridhar
35	21PCH035	SURESH P	P. Suresh

→ Interdepartment activity - Antibiotic sensitivity test on 6/3/2023

9/3/23

Dr. M. SELVAN, M.Sc., M.Phil., Ph.D.,  
Assistant Professor and Head  
Department of Microbiology  
Muthayammal College of Arts & Science  
Rasipuram-637 408, Namakkal (Dt.)  
Tamilnadu.

**FEEDBACK:**

The students of Chemistry learned about the technique to determine the activity of antibiotic against microorganisms, they were very eager to learn the technique and they use this method in their project work

## Department/Cell Name: Department of Microbiology

### Programme Name: MCAS Hackathon 2023

1. **Objective:** To motivate the students to present their societal problem solving ideas in the competition of MCAS Hackathon 2023.

2. **Agenda (Date & Time, Venue)**

**Date :** 16/02/2023 **Time:** 10.00 AM **Venue:** R&D cell

3. **Subject/topic dealt with (minimum 5-10 lines)**

- ✓ The students were motivated to collect the societal problem and find the ideas for solution.
- ✓ The students of Microbiology, TFD and HMCS were prepared the models, chart and PPT and presented in front of the expert panel members.
- ✓ The presentation was evaluated by the panel members
- ✓ After their presentation queries were asked by the panel.
- ✓ The students were answered the queries.

4. **To Photographs**



5. **Feedback** –It is good

6. (i) **Number of Staff Participants** :3 Panel members

(ii) **Number of Students Participants:** 30

(iii) **Number of External Participants (Staff/Students) staff:** Nil

(iv) **Number of Beneficiaries (If any):** It is useful for IIC, department and college

**Muthayammal College of Arts and Science, Rasipuram**

**DEPARTMENT OF PHYSICS & R&D CELL**

**ORGANIZED BY**

**ONE DAY WORKSHOP ON ORIGIN:” SOFTWARE FOR ANALYSIS OF RESEARCH DATA "**

**1. Objective**

- Participated students get the information about the research
- They give the orientation of origin software for analysis of XRD,FTIR and UV-Vis spectrophotometers
- They also got the information about the electrospinning unit

**2. Agenda**

Topic: **ONE DAY WORKSHOP ON ORIGIN: “SOFTWARE FOR ANALYSIS OF RESEARCH DATA”**

- Date: 01.03.2023
- Time: 9.30 am to 3.30 pm
- Venue: D- block AV hall

**3. Subject/topic deal with (minimum 20-30 lines)**

- Students got the hands-on training and they knew to handle the FTIR instruments for identifying the functional groups of the organic compounds.
- Students gained the knowledge about the fabrication of polymeric nanofibers using dual electrospinning unit
- Second session of this workshop taught to use origin software for plotting the FTIR spectrum as well as XRD pattern

**4. Photos**



## 5. Feed Back

Students felt happy for knowing handling of research and analytical instruments and data interpretation using origin software

6. (i) Number of Staff Participant –1

(ii) Number of Students Participants – 34

## SIX POINT STRUCTURE ABOUT WORKSHOP

### DEPARTMENT OF STATISTICS

#### OBJECTIVES:

To learn Advanced Statistical functions in MS EXCEL

#### AGENDA:

**Date & Time** : 13.05.2022 & 10.00 A.M to 4.00 P.M

**Venue** : A-Block, A1-Lab.

**SUBJECT / TOPIC:** One Day State Level Workshop on Advanced MS EXCEL for Statistics

#### PHOTOGRAPHS:



#### FEEDBACK:

We learned Advanced Statistical function in MS EXCEL.

**TOPIC:**

The course is about using the advanced statistical functions in EXCEL for data analysis and analytics projects. You will learn how to effectively use **Advanced Excel Statistical Functions** about the Correlation, Regression, Normal distribution, Student-t distribution, chi square distribution, F distribution, etc. You will learn how to calculate the margin of errors and use them to create confidence intervals. In addition, you will learn how to create Statistical tables.

**NUMBER OF STAFF PARTICIPANTS: 11****NUMBER OF STUDENTS PARTICIPANTS: 50**

## SIX POINT STRUCTURE ABOUT WORKSHOP

### DEPARTMENT OF STATISTICS

#### OBJECTIVES:

To learn SPSS for Biostatistics

#### AGENDA:

**Date & Time** : 21.03.2023 & 10.00 A.M to 3.50 P.M

**Venue** : C-Block, AV Hall

**SUBJECT / TOPIC:** Workshop on SPSS for Biostatistics

#### PHOTOGRAPHS:





### **FEEDBACK:**

Totally enjoyed and learned a lot in a comfortable environment. The style and the knowledge of the presenter were totally amazing.

### **TOPIC:**

It is a suite of software programs that analyzes scientific data related to the social sciences. SPSS offers a fast-visual modeling environment that ranges from the smallest to the most complex models. The data obtained from SPSS is used for surveys, data mining, market research. The course is about using the SPSS for Biostatistics for data analysis and analytics projects. You will learn how to effectively use SPSS for Bio Statistics about the , Descriptive Statistics, Correlation, Regression, Student-t Test, chi square test, F test, etc. You will learn how to calculate the margin of errors and use them to create confidence intervals. In addition, you will learn how to create Statistical tables.

**NUMBER OF STAFF PARTICIPANTS: 10**

**NUMBER OF STUDENTS PARTICIPANTS: 80**

## SIX POINT STRUCTURE ABOUT WORKSHOP

### DEPARTMENT OF STATISTICS

#### OBJECTIVES:

To learn SPSS for Statistical Analysis

#### AGENDA:

**Date & Time** : 03.03.2023 & 10.00 A.M to 3.15 P.M

**Venue** : D-Block, AV Hall

**SUBJECT / TOPIC:** Workshop on SPSS for Statistical Analysis

#### PHOTOGRAPHS:



#### FEEDBACK:

Totally enjoyed and learned a lot in a comfortable environment.

**TOPIC:**

The course is about using the SPSS for Statistical Analysis for data analysis and analytics projects. You will learn how to effectively use SPSS for Bio Statistics about the , Descriptive Statistics, Correlation, Regression, Student-t Test, chi square test, F test, etc. You will learn how to calculate the margin of errors and use them to create confidence intervals. In addition, you will learn how to create Statistical tables.

**NUMBER OF STAFF PARTICIPANTS: 10****NUMBER OF STUDENTS PARTICIPANTS: 43**

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## DEPARTMENT OF STATISTICS

### REPORT FOR TWO-DAY VIRTUAL WORKSHOP ON EXCEL IN STATISTICS

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#### 1. Objective:

- This course aims to provide skills and knowledge which will allow the attendee to Learn MS Excel tools, Techniques and create lookup functions, set Excel working options, enhance charts, protect worksheet data, perform advanced data operations using summarising, PivotTables, data consolidations, goal seeking, and Solver, and create and use macros.
- Microsoft Excel is a spreadsheet developed by Microsoft and it can be using in different Operating systems like Microsoft Windows, iOS, Android and etc... Excel tool is used for calculation, graphing tools, pivot tables, and a macro programming and data visualization. Microsoft excel is a familiar and most recommended tool for all industries from technical to management level.
- Microsoft Excel helps companies maximise the value of their data, helping to control costs more effectively and obtain business information.

#### 2. Agenda:

Venue	: Virtual Platform @ Google Meet.
Date & Time	: 05.07.2023 and 06.07.2023 and 6.00 PM To 7.30 PM
Organized By	: Department of Statistics

3. Programme Title : “Two-Day Virtual Workshop on Excel In Statistics”

#### 4. Details of the Programme:

If you do well in this unit, you should be able to:

- Indicate the names and functions of the Excel interface components.
- Enter and edit data.
- Format data and cells.
- Construct formulas, including the use of built-in functions, and relative and absolute references.
- Create and modify charts.
- Preview and print worksheets.
- Use the Excel online Help feature.

#### 5. Photos:

- Publicity by Social Media

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**  
(A UNIT OF VANETRA GROUP)

Affiliated to Periyar University, Salem  
Accredited by NAAC with 'A' Grade  
Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 -2021)

RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

Department of Statistics  
*Organizes* Google Meet

**Two-days Virtual Workshop on Excel in Statistics**

05<sup>th</sup> & 06<sup>th</sup> JULY 2023 | 6.00 PM - 7.30 PM

Registration Fee - Rs.200/-

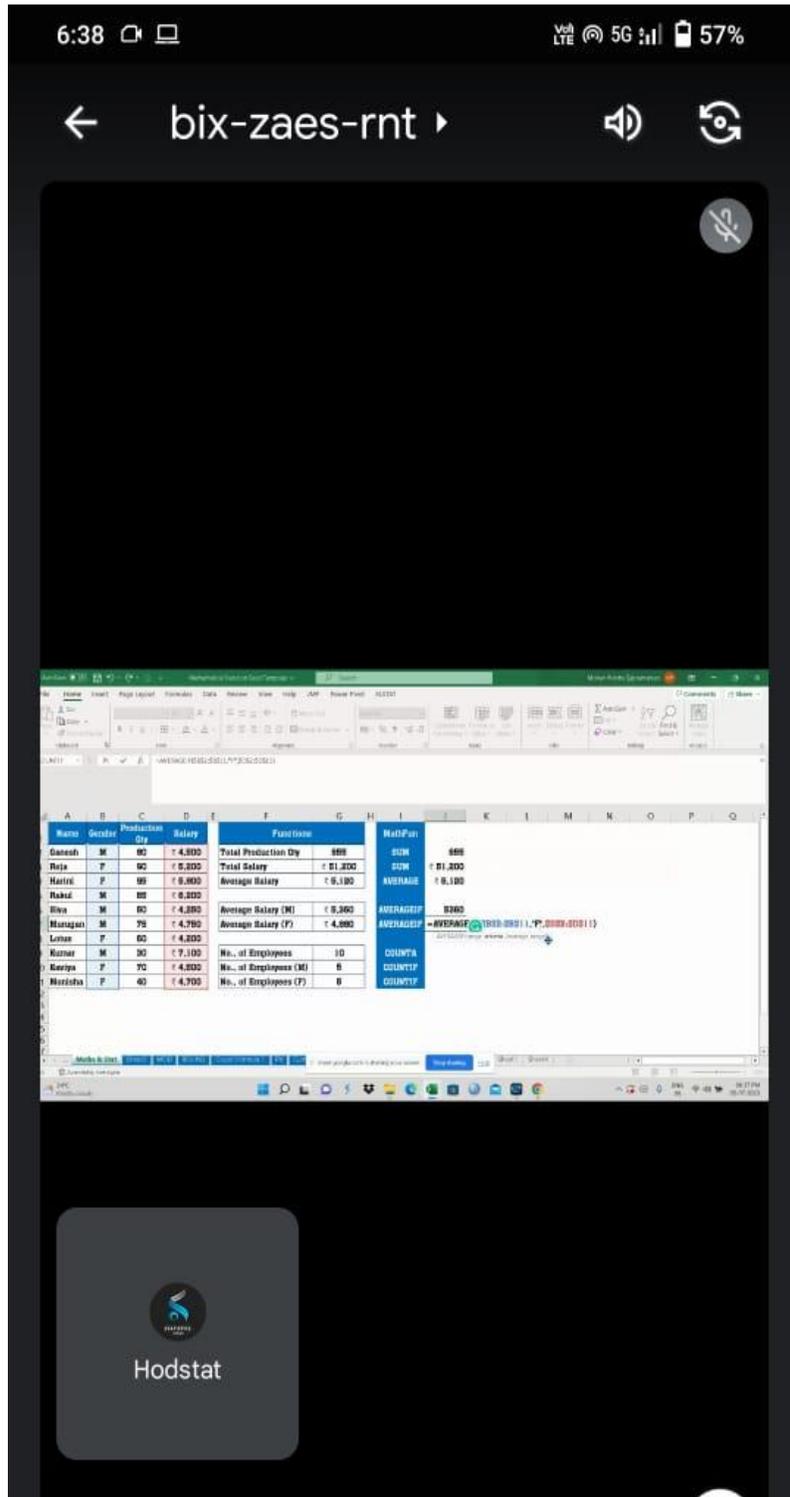
E-Certificate will be provided

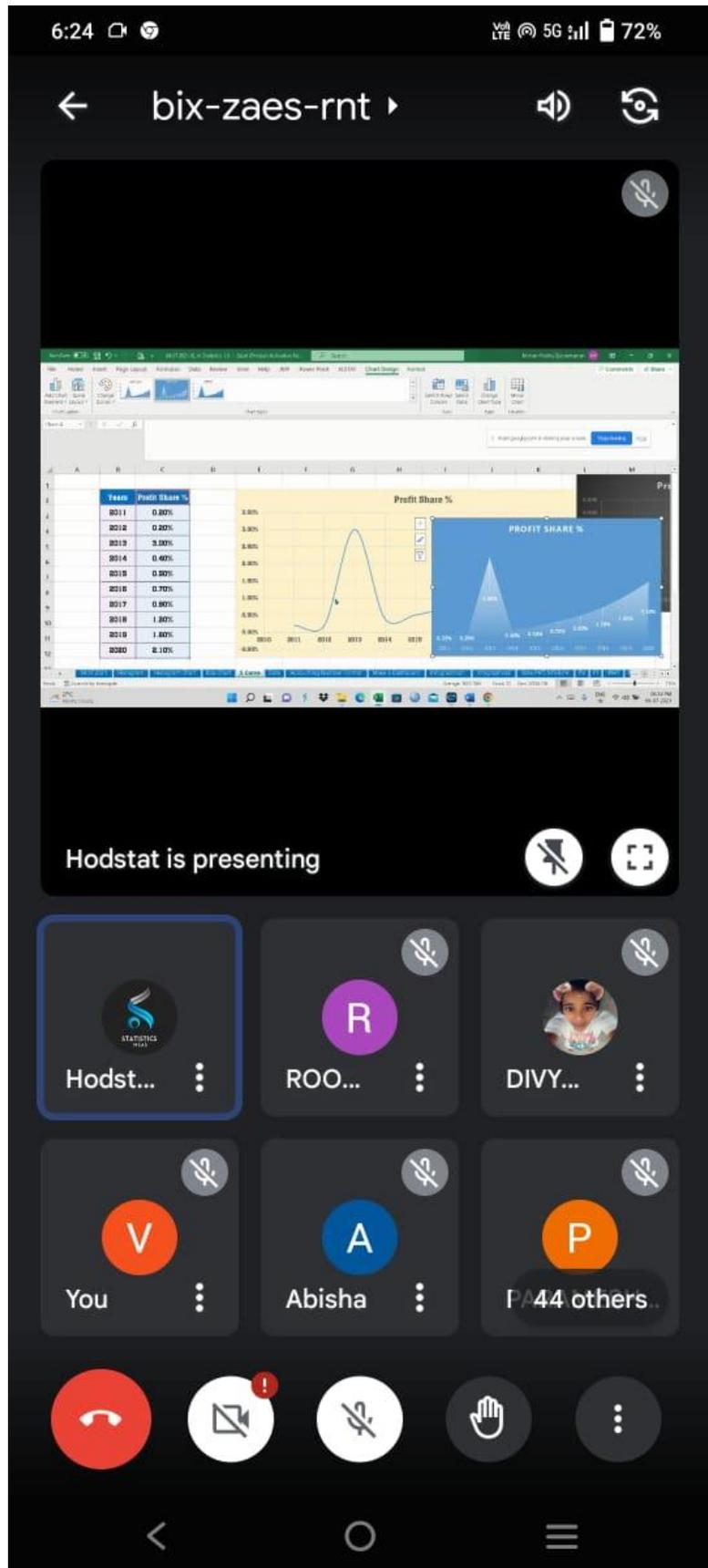
Scan here for Registration

Resource Person  
Dr.S.Mohan Prabhu  
Head, Department of Statistics  
Muthayammal College of Arts and Science (Autonomous), Rasipuram  
Namakkal, Tamil Nadu - 637 408

Follow us : @vanetra\_mi | Vanetra Muthayammal Institutions | @VanetraMuthaya2 | www.vanetrargroup.in

- Screenshots





## 6. No. of Participation: 76

A1	A	B	C	D	E	F	G	H	I	J	K
	Timestamp	Name of the Faculty/Student	Designation/Year of Student & Branch	Department	Name of the Institution	E-mail Id	WhatsApp No.	Registration Fee Rs	200-	Upload the proof statement for Registration Fee	
52	7/3/2023 17:25:20	Monica B	III B.Sc	Statistics	G.VN college, kovilpatti	subramaniamonica@gmail.com	8870097989	Paid		<a href="https://drive.google.com/open?id=1Ac2U7r9E2X3PvFh42AK3A">https://drive.google.com/open?id=1Ac2U7r9E2X3PvFh42AK3A</a>	
53	7/3/2023 17:26:40	Subbulakshmi	II M.Sc	Statistics	M.S University, Tirunelveli	subbu42002@gmail.com	8778183147	Paid		<a href="https://drive.google.com/open?id=1TtU6JdU2c2N3Cz3C4s4CQq4t">https://drive.google.com/open?id=1TtU6JdU2c2N3Cz3C4s4CQq4t</a>	
54	7/3/2023 18:27:47	s.Mahalakshmi	2nd B.sc	statistics	G.venkataswamy naidu college	mahananim4@gmail.com	9445607929	Paid		<a href="https://drive.google.com/open?id=1TtU6JdU2c2N3Cz3C4s4CQq4t">https://drive.google.com/open?id=1TtU6JdU2c2N3Cz3C4s4CQq4t</a>	
55	7/3/2023 19:34:58	S.Anbarasi	3rd year B.sc	Statistics	G.venkataswamy naidu college	Kuttyanbar526@gmail.com	6379662242	Paid		<a href="https://drive.google.com/open?id=1U_6F_S62yee628trv48og">https://drive.google.com/open?id=1U_6F_S62yee628trv48og</a>	
56	7/3/2023 20:07:57	Awanthi C	3rd year B.Sc Statistics	Statistics	G.Venkataswamy Naidu College Kovilpatti	awanthipand003@gmail.com	9789356116	Paid		<a href="https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I">https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I</a>	
57	7/3/2023 20:20:42	Roshika	2nd BS.c. STATISTICS	STATISTICS	Muthayammal College of Arts And Science	22ros10@gmailayammal	8538495522	Paid		<a href="https://drive.google.com/open?id=1BAMXRNUGS3Y22111TmDh">https://drive.google.com/open?id=1BAMXRNUGS3Y22111TmDh</a>	
58	7/3/2023 20:49:43	Neeethika B	2nd B.Sc,Statistics	B.Sc,Statistics	Muthayammal college of arts and science	neeethikaerm2005@gmail.com	6374962565	Paid		<a href="https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I">https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I</a>	
59	7/3/2023 21:15:26	A. Manjula Devi	III B. Sc	Statistics	G. Venkataswamy Naidu college	manjuladevianamunem@gmail.com	8754114519	Paid		<a href="https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I">https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I</a>	
60	7/3/2023 21:34:05	Prakash S	2022_2025 BSc	STATISTICS	GVN COLLEGE	praju6564@gmail.com	6248732407	Paid		<a href="https://drive.google.com/open?id=1B5GhE7U7WqJ0B_V02u8m">https://drive.google.com/open?id=1B5GhE7U7WqJ0B_V02u8m</a>	
61	7/3/2023 22:26:12	A. Aghresh Yenciya	3 year	Statistics	G. Venkataswamy Naidu College	agreshagashoy@gmail.com	9787029313	Paid		<a href="https://drive.google.com/open?id=1G0wqZ6CGy9NAlZ07v7v">https://drive.google.com/open?id=1G0wqZ6CGy9NAlZ07v7v</a>	
62	7/3/2023 11:46:46	C. KUMARRESAN	Assistant Professor	Tamil	Muthayammal College of Arts & Science	tackn@muthayammal.in	8160705263	Paid		<a href="https://drive.google.com/open?id=1H4y52Vv1HLC3MS-y2D042">https://drive.google.com/open?id=1H4y52Vv1HLC3MS-y2D042</a>	
63	7/3/2023 17:24:50	Mrs. M. SARADHA	Assistant Professor	Statistics	Padmavani Arts and Science College for Women, Chennai	esarasar1991@gmail.com	7810017735	Paid		<a href="https://drive.google.com/open?id=11M0Vyc70r6mmpg43CQ2">https://drive.google.com/open?id=11M0Vyc70r6mmpg43CQ2</a>	
64	7/3/2023 19:16:07	M. VENKATESAN	III-C	BCA	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	muthayammal21uc120@muthayamma	805904541	Paid		<a href="https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I">https://drive.google.com/open?id=1H5Ezml69huN2LHwagp4c391I</a>	
65	7/3/2023 19:33:54	V.SASI	III-C	BCA	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	muthayammal21uc120@muthayamma	9600701626	Paid		<a href="https://drive.google.com/open?id=11w0M0C0pRNRH4tMzaf">https://drive.google.com/open?id=11w0M0C0pRNRH4tMzaf</a>	
66	7/3/2023 20:11:35	R. SELVASURYA	2022_2025	B.sc statistics	Muthayammal college of arts and science	rasiprasarivasurya890@gmail.com	9344082052	Paid		<a href="https://drive.google.com/open?id=11w0M0C0pRNRH4tMzaf">https://drive.google.com/open?id=11w0M0C0pRNRH4tMzaf</a>	
67	7/3/2023 9:11:39	P. PARTHASARATHY	ASSISTANT PROFESSOR	COMMERCE	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	23icopy@muthayammal	986592471	Paid		<a href="https://drive.google.com/open?id=1173hUjyzyzH4Pajg48DyE">https://drive.google.com/open?id=1173hUjyzyzH4Pajg48DyE</a>	
68	7/3/2023 10:46:39	S.Manimakalai	Assistant professor	Statistics	Muthayammal college of art and science	rissipuran.stim@muthayammal.in	9344369952	Paid		<a href="https://drive.google.com/open?id=1B5GhE7U7WqJ0B_V02u8m">https://drive.google.com/open?id=1B5GhE7U7WqJ0B_V02u8m</a>	
69	7/3/2023 12:50:07	M.sakthivel	III-BCA-'B'	Bca	Muthayammal college of arts and science	sakthiveach03@gmail.com	9381075905	Paid		<a href="https://drive.google.com/open?id=1Pc3JH8V6v5yqA1YAO7H57">https://drive.google.com/open?id=1Pc3JH8V6v5yqA1YAO7H57</a>	
70	7/3/2023 12:53:19	S.Mahith	III-BCA-'B'	Bca	Muthayammal college of arts and science	muthiboot@gmail.com	9345297062	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
71	7/3/2023 12:56:11	M.Rajul	III-BCA-'B'	Bca	Muthayammal college of arts and science	rajul064@gmail.com	8056801766	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
72	7/3/2023 12:58:45	K.Matheswaran	III-BCA-'B'	Bca	Muthayammal college of arts and science	matheskaruppayya@gmail.com	6203833947	Paid		<a href="https://drive.google.com/open?id=13E1D4y6G3g3TE4dyNUE">https://drive.google.com/open?id=13E1D4y6G3g3TE4dyNUE</a>	
73	7/3/2023 13:27:15	S. LOKESH KUMAR	III-C	BCA	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	21uc4959@muthayamma	9600214707	Paid		<a href="https://drive.google.com/open?id=14H4h3v35DqU4l4R130C9R4F">https://drive.google.com/open?id=14H4h3v35DqU4l4R130C9R4F</a>	
74	7/3/2023 13:46:53	S.Muthu Kumar	III-BCA-'B'	Bca	Muthayammal college of arts and science	Muthukumarsettgattave@gmail.com	6374870117	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
75	7/3/2023 15:24:03	V. NAGARAJAN	STUDENT 3RD YEAR B. COM(CA)	B. COM (CA)	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	nagarajan150404@gmail.com	7010826227	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
76	7/3/2023 16:21:30	Dr. Nithya Narayanan	Assistant Professor and HOD	Chemistry	Muthayammal College of Arts and Science (Autonomous)	chenna@muthayammal.in	984629543	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
77	7/3/2023 18:29:15	JITHENTHRAN. G	3.B.Sc.	Zoology	Muthayammal college of arts and science	jijjenthiran@gmail.com	9381600163	Paid		<a href="https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0">https://drive.google.com/open?id=118kV5S7Hh1q4M4RjEwV0</a>	
78											
79											
80											

## 7. Program Feedback:

- We received good feedback from 76 participants.

## **SIX-POINT STRUCTURE FOR DATA COLLECTION**

### **DEPARTMENT OF STATISTICS**

#### **OBJECTIVES:**

To identify the basic problem from the public.

#### **AGENDA:**

**Date & Time** : 12.01.2023 Thursday & 10.00 A.M to 3.30 P.M

**Venue** : Kakaveri Panchayat, Rasipuram.

**Topic** : Survey for conducted basic needs for the public.

**PHOTOGRAPHS:**





DEPARTMENT OF STATISTICS  
 SURVEY: FIELDWORK  
 12.01.2023 THURSDAY KAKAVERI - RASIPURAM.  
 ATTENDANCE DETAILS

S. NO.	ROLL NO.	NAME OF THE STUDENT	GENDER	SIGNATURE WITH DATE	REMARKS
1	20UST001	AARTHI B	F	B. Arathi 12/01/23	
2	20UST002	AJITHKUMAR R K	M	R. Ajith Kumar 12/01/23	
3	20UST003	BRUNDHA P	F	P. Brundha 12/01/23	
4	20UST005	IMAYASHRI K	F	K. Imayashri 12/01/23	
5	20UST006	KAVIN M	M	M. Kavin 12/01/23	
6	20UST007	MUTHUKUMARAN S	M	S. Muthukumar 12/01/23	
7	20UST009	PUJELA EFFCIPA W	F	W. Pujela 12/01/23	
8	20UST010	RAJA GOWTHAM M	M	AAA	Not Inform
9	20UST011	ROOPIKA T	F	T. Roopi 12/01/23	
10	20UST012	SASIKUMAR S	M	S. Sasikumar 12/01/23	
11	20UST013	SANJAY M	M	AAA	Not Inform
12	20UST014	SINDHUJA S	F	S. Sindhuja 12/01/23	
13	20UST015	KARTHIK R	M	R. Kartik 12/01/23	
14	21UST001	ARUNDHATHI K	F	K. Arundhati 12/01/23	
15	21UST002	DHEENA M	F	M. Dheena 12/01/23	
16	21UST003	GOPIBALAKRISHNAN P	M	P. Gopibalakrishnan 12/01/23	

S. NO.	ROLL NO.	NAME OF THE STUDENT	GENDER	SIGNATURE WITH DATE	REMARKS
17	21UST004	HARITHA K	F	K. Haritha 12/01/23	
18	21UST005	JEEVA A K	F	A. K. Jeeva 12/01/23	
19	21UST008	MYTHILI R	F	R. Mythili 12/01/23	
20	21UST009	RAGAVI R	F	R. Ragavi 12/01/23	
21	21UST010	RAMYA R	F	R. Ramya 12/01/23	
22	21UST011	SANDHIYA A	F	A. Sandhya 12/01/23	
23	21UST012	SHERLIN J	F	J. Sherlin 12/01/23	
24	21UST013	SIVARAJ K	M	K. Sivaraaj 12/01/23	
25	21UST014	VARUNYA J	F	J. Varunya 12/01/23	
26	22UST001	ABISHA J	F	J. Abisha 12/01/23	
27	22UST002	ADHITHYA V	M	V. Adhithya 12/01/23	
28	22UST003	ANEESH G	M	G. Anesh 12/01/23	
29	22UST004	GOKUL S	M	S. Gokul 12/01/23	
30	22UST005	GOWTHAM D	M	D. Gowtham 12/01/23	
31	22UST006	MAHENDRAN R	M	R. Mahendran 12/01/23	
32	22UST007	NIVETHA M	F	M. Nivetha 12/01/23	
33	22UST008	NIVETHITHA B	F	B. Nivethitha 12/01/23	
34	22UST009	PAYINTHAMILSELVAN G	M	G. Payinthamilselvan 12/01/23	
35	22UST010	ROOBICA V	F	V. Roobika 12/01/23	
36	22UST011	SELVASURYA R	F	R. Selvasurya 12/01/23	
37	22UST012	SUBHARANJANI V	F	V. Subharanjani 12/01/23	

S. NO.	ROLL NO.	NAME OF THE STUDENT	GENDER	SIGNATURE WITH DATE	REMARKS
38	22UST013	SUDHA P	F	P. Sudha 12/01/2023	
39	22UST014	VASANTHAKUMAR M	M	M. V. 12/01/2023	
40	22UST015	VINOTH P	M	P. Vinoth 12/01/2023	
41	22UST016	PARAMESHWARI D	F	D. Parameshwari 12.01.2023	
42	22UST017	MADHESWARAN R	M	R. Madheshwaran 12/01/23	
43	22UST018	DEEPAK S	M	S. Deepak 12/01/23	
44	Staff 1	Mrs. S. MANIMEKALAI	F	S. Manimekalai 12/01/23	
45	Staff 2	Ms. A. SATHYA	F	A. Satya 12/01/23	
46	Staff 3	Ms. P. PAINTAMILSELVI	F	P. Paintamilselvi 12/01/23	
47	Staff 4	Ms. A. POONGOTHAI	F	A. Poongothai 12/01/23	
48	Staff 5	Mrs. P. KEERTHANA	F	P. Keerthana 12/01/2023	
49	Staff 6	Dr. S MOHAN PRABHU	M	S. Mohan Prabhhu 12/01/23	
50					

HOD 12.01.2023

PRINCIPAL

Dr. S. MOHAN PRABHU  
 Associate Professor & Head,  
 Department of Statistics,  
 Muthayammal College of Arts & Science,  
 Rasipuram-637 408, Namakkal Dt.



  
**முத்தாயம்மாள் கலை மற்றும் அறிவியல் கல்லூரி**  
**புள்ளியியல் துறை**  
**காக்காவேரி மக்களின் தேவையான வசதிகள் தொடர்பான விவரங்கள் சேகரித்தல்**  
**தேதி: 12.01.2023 நாள்: வியாழன்**  
**இடம்: காக்காவேரி - பஞ்சாயத்து**  
**மாணாக்கர் (சேகரிப்பாளர்) பெயர் : மு. தீர்த்தி**  
**வகுப்பு மற்றும் பிரிவு : M.A. Statistics**  
**ஆசிரியர் பெயர் : M.S. Mohan Babu**

- பெயர் : ச. ரொஜா : 15
- பாலினம் : ஆண்/பெண்
- வயது: a. 15-25 b. 26-40 c. 40-55 d. 56-70
- தொழில்: a. தறி(நெசவு) b. விவசாயம் c. தனியார் d. அரசு
- கல்வி தகுதி: a. >10 b. 10 c. 12 d. இளநிலை e. முதுநிலை f. மற்றவை
- குடிநீர் வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- குடிநீர் இணைப்பு பெறப்பட்டுள்ளதா? a. ஆம் b. இல்லை
- மின்சார வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- மின்சார இணைப்பு பெறப்பட்டுள்ளதா? a. ஆம் b. இல்லை
- சுழிப்பிட வசதி: a. வீட்டில் b. பொது c. ஏதும் இல்லை

Page 1 of 2

- சாலை வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- பள்ளி வசதி: a. அங்கன்வாடி b. ஆரம்பப்பள்ளி c. உயர்நிலை பள்ளி d. மேல்நிலை பள்ளி
- மேல்நிலை நீர்த்தேக்க தொட்டி உள்ளதா? a. ஆம் b. இல்லை
- மேல்நிலை நீர்த்தேக்க தொட்டி முறையாக பராமரிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- நியாயவிலை கடை உள்ளதா? a. ஆம் b. இல்லை
- நியாயவிலை கடை விற்பனையாளர் செயல்பாடுகள் எவ்வாறு உள்ளது? a. நன்று b. இல்லை
- குப்பைத்தொட்டி உள்ளதா? a. ஆம் b. இல்லை
- குப்பைத்தொட்டி முறையாக பராமரிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- மழைநீர் சேமிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- ஊராட்சி மன்ற தலைவர், உபதலைவர், உறுப்பினர் களின் செயல்பாடுகள் எவ்வாறு உள்ளது? a. மிகநன்று b. நன்று c. பரவாயில்லை d. பதில் இல்லை

**M. தீர்த்தி**  
**சேகரிப்பாளர் ஒப்பம்**  
**ஆசிரியர் ஒப்பம்**  
**துறைத்தலைவர் ஒப்பம்**

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**முத்தாயம்மாள் கலை மற்றும் அறிவியல் கல்லூரி**  
**புள்ளியியல் துறை**  
**காக்காவேரி மக்களின் தேவையான வசதிகள் தொடர்பான விவரங்கள் சேகரித்தல்**  
**தேதி: 12.01.2023 நாள்: வியாழன்**  
**இடம்: காக்காவேரி - பஞ்சாயத்து**  
**மாணாக்கர் (சேகரிப்பாளர்) பெயர் : மெய்யாசிவன் விஜய்**  
**வகுப்பு மற்றும் பிரிவு : M.A. Statistics புள்ளியியல் துறை**  
**ஆசிரியர் பெயர் : ச. தய்யா சித்ரா**

- பெயர் : சி. சி. சி.
- பாலினம் : ஆண்/பெண்
- வயது: a. 15-25 b. 26-40 c. 40-55 d. 56-70
- தொழில்: a. தறி(நெசவு) b. விவசாயம் c. தனியார் d. அரசு
- கல்வி தகுதி: a. 5-10 b. 10 c. 12 d. இளநிலை e. முதுநிலை f. மற்றவை
- குடிநீர் வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- குடிநீர் இணைப்பு பெறப்பட்டுள்ளதா? a. ஆம் b. இல்லை
- மின்சார வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- மின்சார இணைப்பு பெறப்பட்டுள்ளதா? a. ஆம் b. இல்லை
- சுழிப்பிட வசதி: a. வீட்டில் b. பொது c. ஏதும் இல்லை

Page 1 of 2

- சாலை வசதி போதுமானதாக உள்ளதா? a. ஆம் b. இல்லை
- பள்ளி வசதி: a. அங்கன்வாடி b. ஆரம்பப்பள்ளி c. உயர்நிலை பள்ளி d. மேல்நிலை பள்ளி
- மேல்நிலை நீர்த்தேக்க தொட்டி உள்ளதா? a. ஆம் b. இல்லை
- மேல்நிலை நீர்த்தேக்க தொட்டி முறையாக பராமரிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- நியாயவிலை கடை உள்ளதா? a. ஆம் b. இல்லை
- நியாயவிலை கடை விற்பனையாளர் செயல்பாடுகள் எவ்வாறு உள்ளது? a. நன்று b. இல்லை c. பரவாயில்லை
- குப்பைத்தொட்டி உள்ளதா? a. ஆம் b. இல்லை
- குப்பைத்தொட்டி முறையாக பராமரிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- மழைநீர் சேமிக்கப்படுகிறதா? a. ஆம் b. இல்லை
- ஊராட்சி மன்ற தலைவர், உபதலைவர், உறுப்பினர் களின் செயல்பாடுகள் எவ்வாறு உள்ளது? a. மிகநன்று b. நன்று c. பரவாயில்லை d. பதில் இல்லை

**M. தய்யா சித்ரா**  
**சேகரிப்பாளர் ஒப்பம்**  
**ஆசிரியர் ஒப்பம்**  
**துறைத்தலைவர் ஒப்பம்**

Page 2 of 2

**FEEDBACK:**

It was a nice moment that students to know about how to collect data and interpret the data.

**TOPIC:**

Muthayammal College of Arts & Science, Department of Statistics data collection for the benefit of the public in Kakaveri village, Rasipuram at Namakkal district. The focus of data collection is the basic needs of the public of Kakaveri village and changing patterns and its implication for future development. The study also evaluates the efficacy of panchayat interventions in rural areas and key drivers of village people's basic needs. The data collection will also provide a clear picture of the basic needs of the people of Kakaveri.

We collected certain details of 245 people in Kakaveri village who participated in this data collection and gave their basic needs of daily life. Students (43) who belong to the department of statistics including the faculties (06) played a major part to this survey to make this survey a great success with their dedication and guided the people in a right way. Finally, the report has been submitted to the village panchayat.

**NUMBER OF STAFF PARTICIPANTS: 6****NUMBER OF STUDENTS PARTICIPANTS: 43**

## SIX POINT STRUCTURE ABOUT DATA DAY CELEBRATION-2022

### DEPARTMENT OF STATISTICS

#### OBJECTIVES:

To celebrate Data Day 2022.

#### AGENDA:

**Date & Time** : 20.10.2022 & 10.00 A.M to 3.50 P.M

**Venue** : B-Block, Mini seminar hall.

**SUBJECT / TOPIC:** Data Day Celebration- 2022.

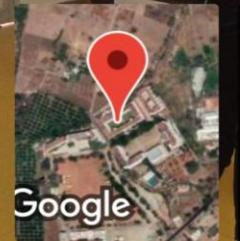
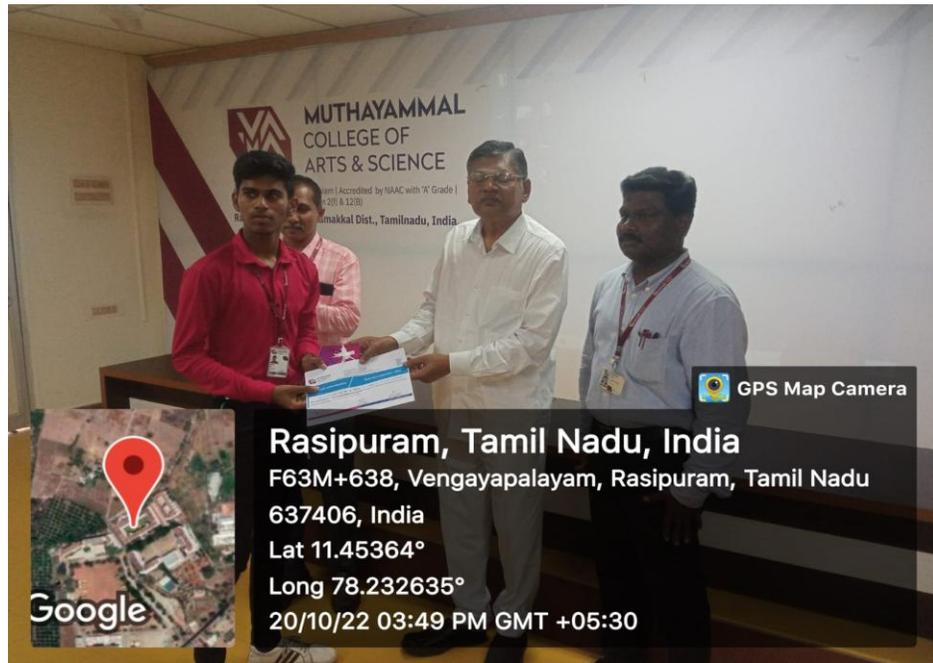
#### PHOTOGRAPHS:





**Rasipuram, Tamil Nadu, India**  
F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
Lat 11.453011°  
Long 78.232914°  
20/10/22 12:14 PM GMT +05:30

GPS Map Camera



**Rasipuram, Tamil Nadu, India**  
F63M+638, Vengayapalayam, Rasipuram, Tamil Nadu 637406, India  
Lat 11.45364°  
Long 78.232635°  
20/10/22 03:49 PM GMT +05:30

GPS Map Camera

**FEEDBACK:**

It was the nice day to know about the importance of statistics to other departments.

**TOPIC:**

World Statistics Day is an international day to celebrate statistics. Created by the United Nations Statistical Commission, it was first celebrated on 20 October 2010. The day is celebrated every five years. In that day we spread about the importance of Statistics through competitions like Quiz, Face painting, Art from Waste, Cooking without fire, Photography.

**NUMBER OF STAFF PARTICIPANTS: 11**

**NUMBER OF STUDENTS PARTICIPANTS: 43**

## SIX POINT STRUCTURE ABOUT VIRTUAL WORKSHOP

### DEPARTMENT OF STATISTICS

#### OBJECTIVES:

To learn about Data Science with R- Programming.

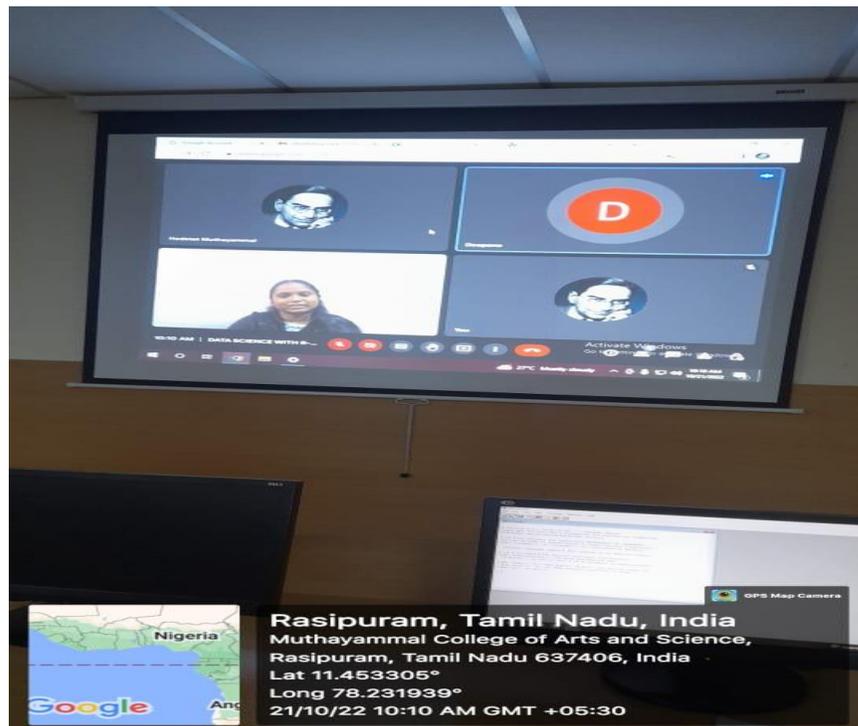
#### AGENDA:

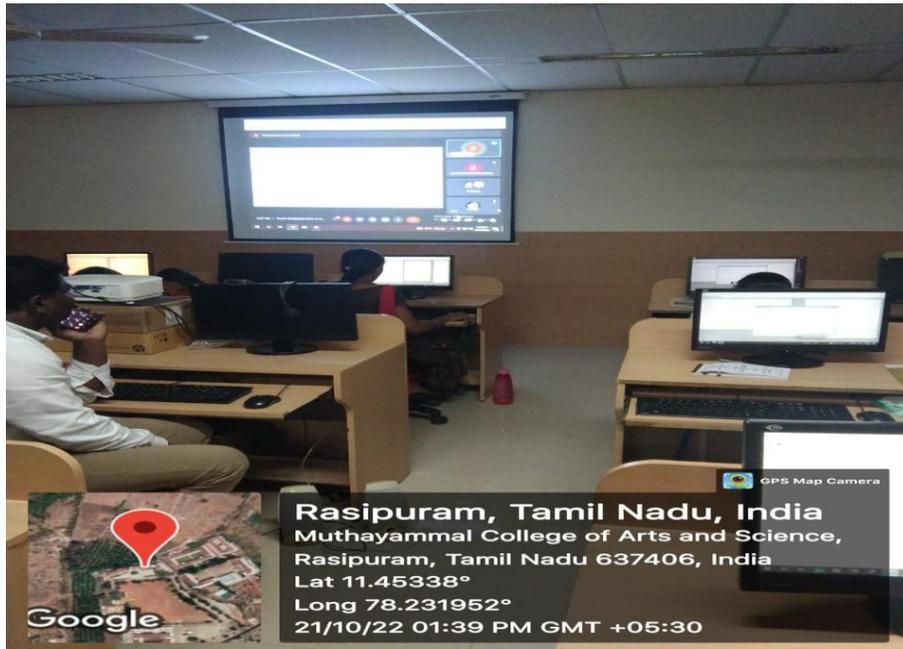
**Date & Time** : 21.10.2022 & 10.00 A.M to 3.50 P.M

**Venue** : A-Block, A1-Lab.

**SUBJECT / TOPIC:** Data Science with R-Programming.

#### PHOTOGRAPHS:





**FEEDBACK:**

We learned Data Science with R-Programming and it is very useful to us.

**TOPIC:**

R is an open-source programming language that is widely used as a statistical software and data analysis tool. R is an important tool for Data Science. It is highly popular and is the first choice of many statisticians and data scientists.

Data Science has emerged as the most popular field of the 21st century. It is because there is a pressing need to analyze and construct insights from the data. Industries transform raw data into furnished data products. In order to do so, it requires several important tools to churn the raw data. R is one of the programming languages that provide an intensive environment for you to research, process, transform, and visualize information.

**NUMBER OF STAFF PARTICIPANTS: 11****NUMBER OF STUDENTS PARTICIPANTS: 43**

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, RASIPURAM**  
**(A UNIT OF VANETRA GROUP)**  
**DEPARTMENT OF TEXTILE AND FASHION DESIGNING**  
**TUKA-CAD WORKSHOP PROGRAMME**

**1. Objectives:**

- Garment CAD designing is a knowledge-intensive and creative skills to develop garment patterns, grading, marker, planning and color combinations.
- The student designers are expected to design clothes that are functional as well as aesthetical.

**2. Agenda:**

Date: 18.10.2022 to 20.10.2022

Time: 9.30 AM TO 4.00 PM

**Guest details: -**

Mr. S. SATHIYARAJ

Tuck Center, Erode

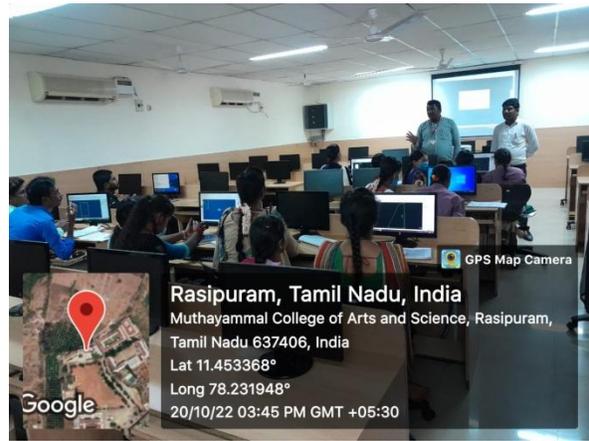
Erode.

**3. Subject/ Topic:**

- Tuck – CAD Workshop

**4. Photos:**





## 5. Feedback:

- Students are gained advance garment construction techniques by using garment CAD (TUKA).
- Elevated their creative to design of fashionable garments.
- Obtained various tools and techniques for design fashionable garments.

## 6. (i) Number of Staff Participants

MCAS -TFD Department Staffs	02
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## (ii) Number of Students Participants

- 21 Students were participated.

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, RASIPURAM**  
**(A UNIT OF VANETRA GROUP)**  
**DEPARTMENT OF TEXTILE AND FASHION DESIGNING**  
**MEN'S APPAREL WORKSHOP**

**1. Objectives:**

- To learn about practical knowledge of **Men's Apparel** practical.
- To learn about pattern drafting & stitching skills.

**2. Agenda:**

Date: 31.10.2022

Time: 9.30AM TO 4.00 PM

**Guest details: -**

Mr. RAMESH, Tailor,

Attayampatti

**3. Subject/ Topic:**

- Men's Apparel Workshop

**4. Photos:**





## 5. Feedback:

- Students are gained knowledge about body measurements.
- Experienced in men's pant drafting. .
- Learned the skills of men's garment construction.

## 6. (i) Number of Staff Participants

MCAS -TFD Department Staffs	01
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## (ii) Number of Students Participants

- 21 Students were participated

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, RASIPURAM**  
**(A UNIT OF VANETRA GROUP)**  
**DEPARTMENT OF TEXTILE AND FASHION DESIGNING**  
**TWO DAYS HANDS-ON TRAINING ON “FASHION EMBROIDERY ART**  
**DESIGNING”**

**1. Objectives:**

- The sessions would help the participants in hoop art design development design presentations & evaluation.
- Choosing threads of colours to their choice and suitable stitches for the design they prefer.

**2. Agenda:**

Date: 30.01.2023 to 31.01.2023

Time: 10.00 AM TO 4.00 PM

**Guest details: -**

**Organizer**

**Dr. K. Sakthivel**

Assistant Professor & Head,  
Department of Textile and fashion designing  
Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Co-Organizer**

**Ms. S. Gunavathi**

Assistant Professor,  
Department of Textile and fashion designing  
Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Mrs. S. Priya**

Assistant Professor,  
Department of Textile and fashion designing  
Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Ms. M. Ramya**

Assistant Professor,  
Department of Textile and fashion designing  
Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Mrs. P. Sasikala**

Assistant Professor,  
Department of Textile and fashion designing  
Muthayammal College of Arts and Science (Autonomous), Rasipuram

### 3. Subject/ Topic:

- Two Days Hands-on Training on “Fashion Embroidery Art Designing”.

### 4. Photos:

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**  
(Autonomous)  
Affiliated to Periyar University, Salem  
Accredited by NAAC with 'A' Grade  
Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 - 2021)

RASIPURAM, NAMAKKAL Dt - 637 408, TAMIL NADU, INDIA

Department of Textile and Fashion Designing

Organizes

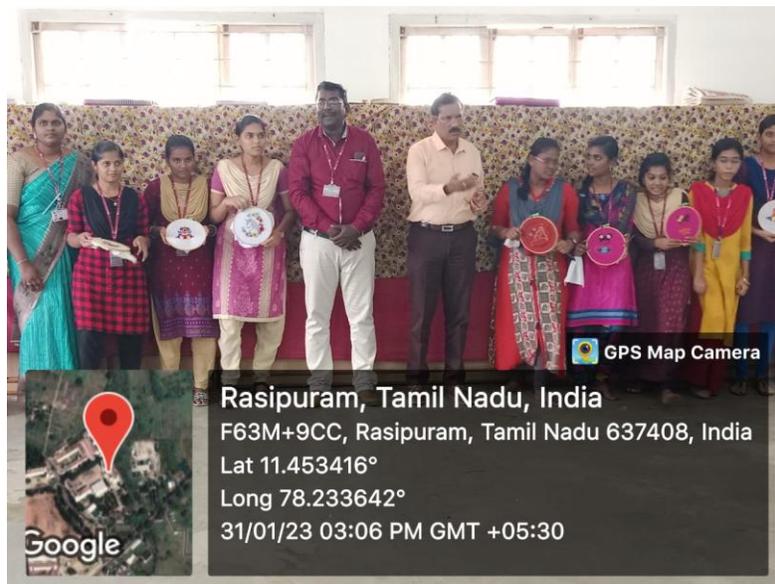
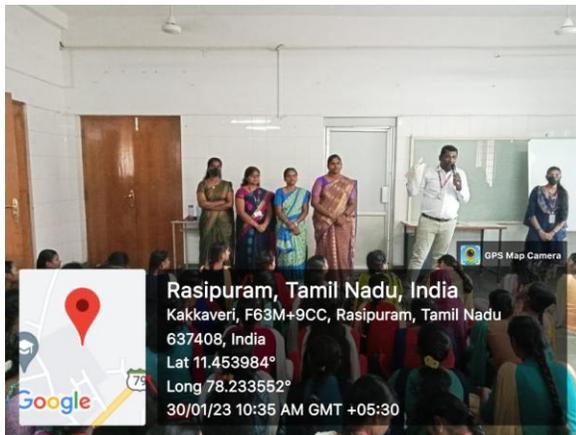
**Two Days Hands-on Training**  
ON  
**Fashion Embroidery Art Designing**

Hands-on Trainer  
**S.Gunavathi**  
Assistant Professor of TFD  
Hoop Art Designer  
Muthayammal College of Arts and Science

For Registration Contact  
**M.Ramya**  
Assistant Professor of TFD  
Muthayammal College of Arts and Science  
Ph : 63746 81198

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www.vanetrargroup.in

30<sup>th</sup> & 31<sup>st</sup> JAN 2023  
10.00 AM



**5. Feedback:**

- The session would certainly result in grooming creative and innovative Hoop art designers.

**6. (i) Number of Staff Participants**

MCAS -TFD Department Staffs	05
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**(ii) Number of Students Participants**

- 220 Students were participated.



**Muthayammal College of Arts & Science (Autonomous)**  
(A Unit of VANETRA Group)



Rasipuram- 637 408, Namakkal Dt. Tamil Nadu, India

Accredited by NAAC with 'A' Grade, New Delhi, Recognized by UGC Under Section 2(f) & 12(B),

Approved by AICTE & Affiliated to Periyar University, Salem - 11

**National Level Seminar on "Forest Restoration For A Sustainable Future"**

Organized by

**Department of Zoology**

20<sup>th</sup> & 21<sup>st</sup> March 2023

**1. Objective:**

National level seminar on "Forest Restoration For A Sustainable Future" had the main objective to create a awareness of forest restoration for an upcoming days.

**2. Agenda:**

 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (Autonomous) A Unit of VANETRA Group Rasipuram - 637 408 Namakkal		
<b>Department of Zoology</b> Organizes " National Level Seminar on "Forest Restoration for A Sustainable Future"		
<b>20.03.2023 &amp; 21.03.2023</b>	<b>Monday &amp; Tuesday</b>	<b>10.00 Am to 04.00 Pm</b>
20.03.2023 Monday		
B-Block Conference Hall		
10.00 AM	Welcome Address	: Ms. G.Eswaralakshmi, III- B.Sc., Zoology MCAS
10.15 AM	Introductory Remarks	: Dr. D. Suganya, Head - Department of Zoology, MCAS
10.30 AM	Felicitations	: Dr. A Stella Baby Vice - Principal MCAS
		: Dr.M.N.Periasamy Dean - Administration VANETRA Muthayammal Institutions
10.50 AM	Special Address	: Dr.S.P.Vijeikumar Principal MCAS
11.00 AM	Presidential Address	: Dr.R.Selvakumaran Director - Academics VANETRA Muthayammal Institutions
11.10 PM	Introducing Chief Guest	: Dr.D. Amaresan, Asst. Prof / Department of Zoology MCAS
11.15 AM	Keynote Address on "Protecting the Forest Biodiversity in Western Ghats"	: Dr.R.Ramasubbu Assistant Professor, Evolution and Conservation Lab, Department of Biology, The Gandhigram Rural Institute (Deemed to be University), Dindigul
01.00 PM		: Lunch

01.40 PM Introducing Chief Guest	:	<b>Dr. V. Vinita Vinjoy Jerusha,</b> Asst. Prof / Department of Zoology, MCAS.
01.45 PM Keynote Address "Role of Birds in Forest Restoration"	:	<b>Dr.V. Kirubhanandhini</b> Senior Research Biologist, Salim Ali Centre for Ornithology and Natural History, Tamilnadu state Planning Commission, Coimbatore.
3.30 PM Vote of Thanks	:	<b>Ms. K.K. Senbagappriya,</b> II- B.Sc., Zoology, MCAS
<b>21.03.2023</b>	<b>Tuesday</b>	<b>07.00 Am</b>
<b>World Forest Day Celebration</b>		
Field Workshop - Kolli Hills "Role of Birds in Forest Restoration"	:	<b>Dr.V. Kirubhanandhini</b> Senior Research Biologist, Salim Ali Centre for Ornithology and Natural History, Tamilnadu state Planning Commission, Coimbatore

### 3. Programme Title: Seminar cum Field Workshop

#### 4. Details of the programme:

Department of Zoology conducted a National level seminar on "Forest Restoration For A Sustainable Future" from 20.03.2023 to 21.03.2023 (Two days). We invited two resources persons from reputed institutes coming under Ministry of Education (Med) & Ministry of Environment, Forest & Climate Change (MoEFCC). The first day of seminar started on 20.03.2023. we inaugurated the seminar at 10.00 am sharply along with Dr.R.Selvakumaran, Director sir, Dr.A.Stella Baby, Vice principal mam and our resource persons are Dr.R.Ramasubbu, Assistant Professor, Taxonomy and conservation lab, Department of Biology, The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul and Dr. V. Kirubhanandhini, Senior research biologist, Salim Ali Research Institute of Ornithology and Natural History, Coimbatore.

First technical session was "Protecting the Forest Biodiversity in Western Ghats" covered by Dr.R.Ramasubbu and next session was covered by Dr. V. Kirubhanandhini topic is "Role of Birds in Forest Restoration". Students are gained knowledge about on forest restoration, conservation of animals and resource persons are explained about forests health and livelihood. Forest is very essential part of the life on Earth. They always fulfill the demands of the human beings by providing shadow, shelter, refreshment including clean air and water. In the modern

world of growing global population increases the demands of forest products so the forests are at big risks of deforestation and degradation.

According to the resources it has been noted that there is an annual loss of around 13 million hectares or 32 million acres of the forests by the people. Loss of the forests enhances the loss of inhabitant animal species to the forest. Deforestation imbalances the balance of natural climate which lead to the global warming by increasing the CO<sub>2</sub> and decreasing the O<sub>2</sub> percentage all across the world. Almost 30% of the total land worldwide is occupied by the forests containing over 60,000 tree species which are ultimately the great resources of the food, fuel, fodder, essential oils, resins, latex, gums, medicines, fiber, water, woods for the population of around 1.6 billion poorest people of the world. Students were gain the knowledge and interact with resource person eagerly. The Valediction starts at 3.30 pm and we thank our management, Director sir, Principal Sir, Vice principal mam, Dean Academics and all other supportive teaching and non teaching faculty members.

Second day of seminar is field workshop related to International day of forest celebrated at kollihills. Two faculty members and 46 students were participated in the field workshop. We create awareness about nature of forest, deforestation, reforestation, why group of tress occupy a particular biota, the important role of birds to create the forest, etc., our faculty members are explained to the students.

## 5. Photos:





## 6. Feedback:

- ✓ Students understand importance of Forest, wild animals and their natural habitats
- ✓ Students were honorably thanks to Dr.R.Ramasubbu, and Dr. V. Kirubhanandhini, for their wonderful explanation.
- ✓ Students gained the knowledge on natural resources, wildlife habitats and their conservation through field visit.
- ✓ This field visit were very much helpful to enrich their knowledge in the field of Zoology.



**HEAD**  
Department of Zoology  
Muthayammal College of Arts & Science  
Rasipuram - 637 408, Namakkal (Dt.),  
Tamilnadu, India.

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE – RASIPURAM****WORKSHOP ON MEDICAL CODING**

Department Name : DEPARTMENT OF BIOCHEMISTRY

**1. Objective:** One day workshop on “Medical Coding” was conducted by Department of Biochemistry.

**2. Agenda**

Date : 20.01.2023

Time : 10.00 am to 4.00pm

Venue : B-Block B04 Lab, MCAS

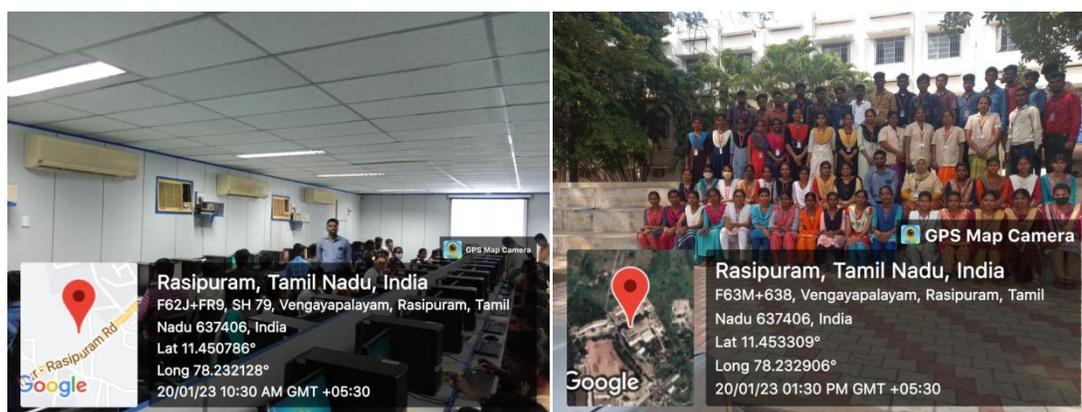
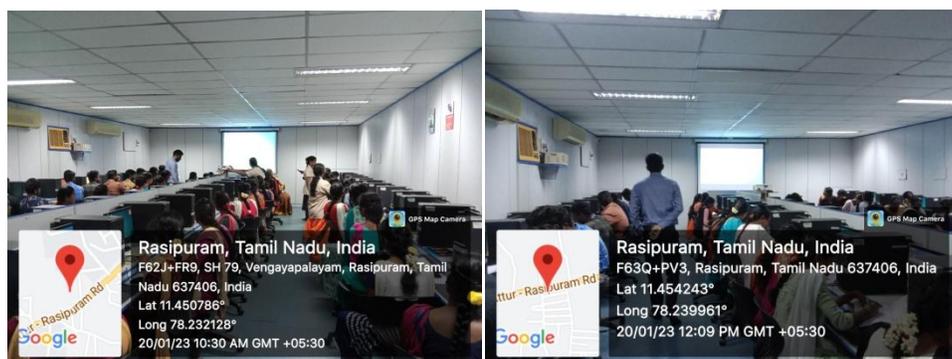
Guest : Mr. VIJAY RAJENDRAN, Medical Coder  
BioXplora, Coimbatore.

**3. Subject/topic:**

Medical coding is a process where an expert coder will form a 'superbill' and go through all the clinical documentation. The payments or reimbursement that a hospital receives solely rely on selecting accurate codes for the services rendered to the patients. Every year, medical codes are revised and updated. Many of the old codes are removed, and new ones are added.

This one day workshop was mainly conducted to encourage the students to know about the critical facets of the healthcare industry today. Mr. Vijay Rajendran, Medical Coder, BioXplora, Coimbatore was the resource person of the workshop. He delivered a lecture in the morning session about the importance medical coding and the medical terms mostly used. In the afternoon session, hands on training using the computers were given to the students.

#### 4. Photographs:



#### 5. Participants

- (i) Number of Staff Participants : 7
- (ii) Number of Students Participants: 59
- (iii) Number of External Participants (Staff/Students): Nil
- (iv) Number of Beneficiaries (If any): 66

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE – RASIPURAM****TWO DAYS WORKSHOP ON  
“ELECTROPHORETIC TECHNIQUES IN MOLECULAR STUDIES”**

Department Name : DEPARTMENT OF BIOCHEMISTRY

**1. Objective:** Two days workshop on “**Electrophoretic Techniques in Molecular Studies**” was conducted by Department of Biochemistry. The primary objective of workshop was to impart both theoretical and practical knowledge on basic electrophoretic techniques.

**2. Agenda**

Date : 08.02.2023 – 09.02.2023

Time : 10.00 am to 4.00pm

Venue : PG BIOCHEMISTRY LAB MCAS

Guest : Mrs Shanthi Thirumaran, Manager

Progene, Chennai.

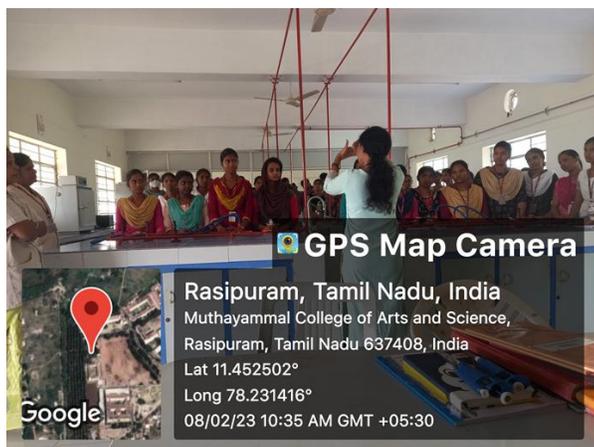
**3. Subject/topic:**

The two days workshop included the lectures and hands-on practical sessions delivered by subject expert working in the electrophoresis. In order to prepare the participants for the hands on practical sessions, the resource persons gave a series of introductory lectures on molecular biology and electrophoresis. The topics covered in the lecture sessions were relevant to the needs of the participants and covered the basic principle and procedures required for Molecular Biology and electrophoresis.

On the first day the resource person delivered and trained the students on DNA based detection methods ie DNA extraction and agarose gel electrophoresis. All participants were able to run agarose gel electrophoresis at the end of the day.

On second day resource person delivered and trained the students on SDS-PAGE. All participants were able to run SDS-PAGE at the end of the day. The feedback from the students were collected.

#### 4. Photographs:



## **5. Participants**

- (i) Number of Staff Participants : 7
- (ii) Number of Students Participants: 59
- (iii) Number of External Participants (Staff/Students): Nil
- (iv) Number of Beneficiaries (If any): 66

**Interdepartmental Activity: Hands-on Training on Animal Tissue culture**

**1. Objective:**

To Know about Virus Inoculation techniques to the II B.Sc., Microbiology students.

**2. Agenda:**

**Venue: B Block- Biotech Lab**

1.20 p.m. Welcome Address: Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology

1.30 p.m. Virus inoculation Lecture and Hands on training by Mrs. K.Chitra, Ass Prof. Dept. of Biotechnology

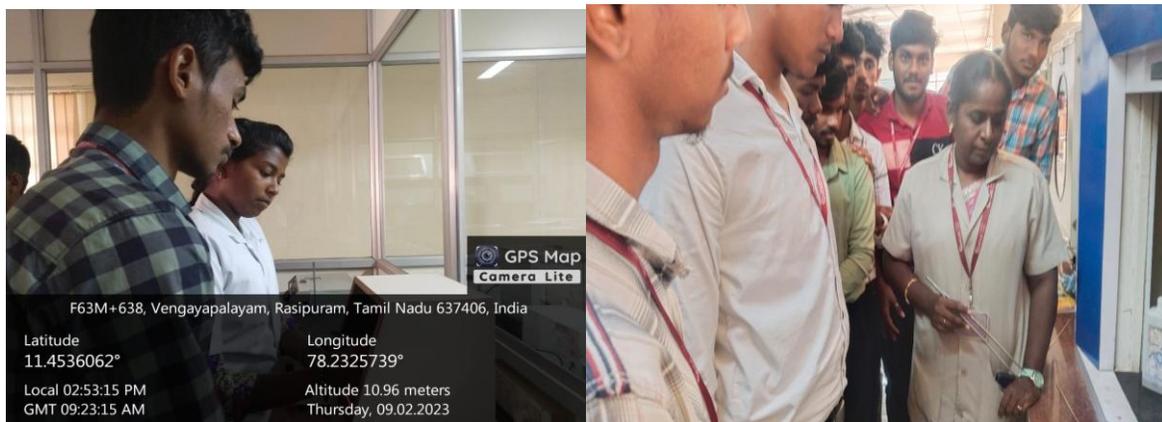
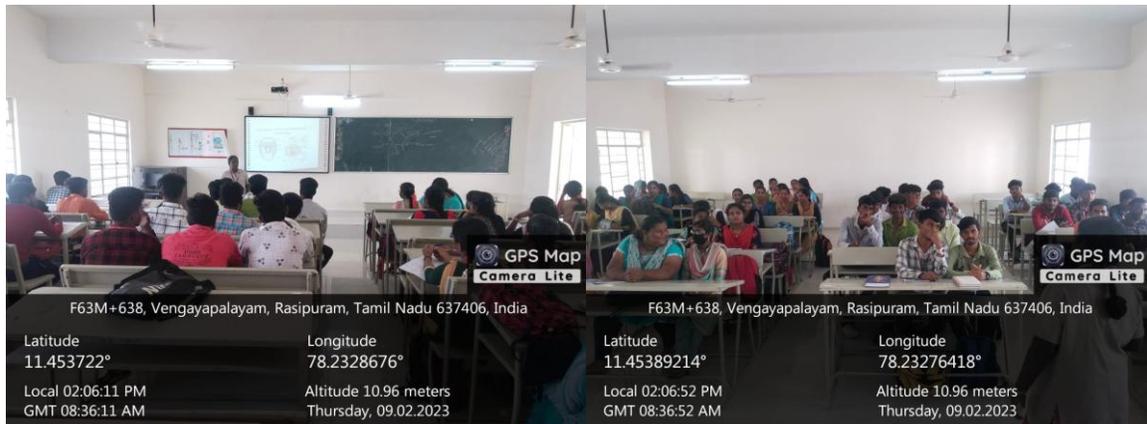
3. 40 p.m. Feedback

**3. Programme Title: Interdepartmental Activity: “Virus Inoculation in Embryonated Egg”**

**4. Details of the programme:**

For the promotion of interdisciplinary activities, the Department of Biotechnology organized an Interdepartmental Activity “**Hands-on training on Virus Inoculation**” on 09.02.2023. In this workshop II B.Sc., Microbiology (60 Nos) Students of our College participated. Mrs. K. Chitra, Asst Prof. Dept of Biotechnology acted as the resource person. She explained well in different virus inoculation methods, she gave how to inject the virus in the Egg and how to cultivate the virus. The above methods also handled by group of students understand different types of virus inoculation. After the session students shared their feedback.

## 5. Photos:



## 6. Program Feedback:

- ❖ The participants told that the Virus inoculation Technique was very useful to Know about Embryonated chicken egg parts and important.
- ❖ Students Interested to do this technique.

## **Muthayammal College of Arts and Science (Autonomous)**

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Approved by AICTE & Affiliated to Periyar University, Salem - 11.

### **Interdepartmental Activity: Hands-on Training on Antimicrobial Activity**

#### **1. Objective:**

To handle different methods in antimicrobial techniques to the III B.Sc., Chemistry students.

#### **2. Agenda:**

##### **Venue: B Block- Biotech Lab**

1.20 p.m. Welcome Address: Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology

1.30 p.m. Hands-on Antimicrobial Activity: Dr. K. Revathi, Asst. Prof. Dept. of Biotechnology

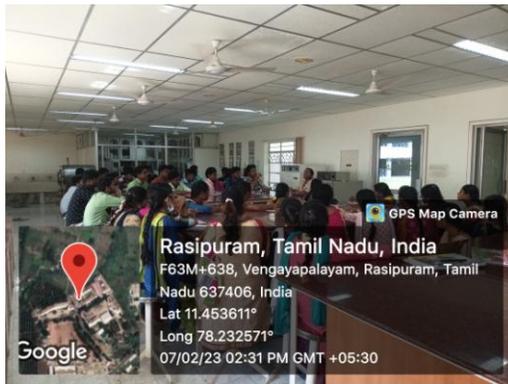
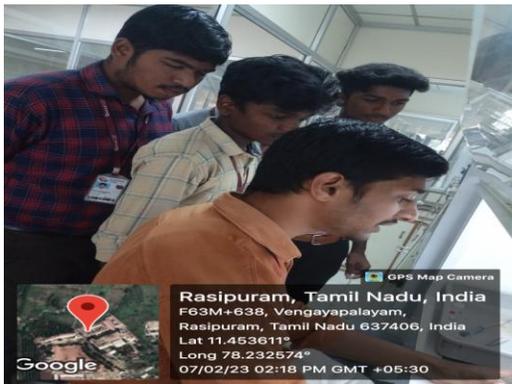
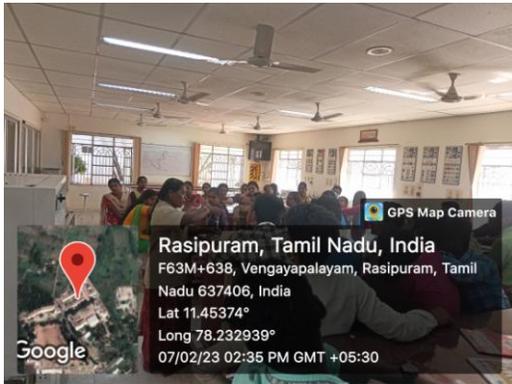
2.40 a.m. Feedback

#### **3. Programme Title: Interdepartmental Activity: “Hands-on training on antimicrobial activity”**

#### **4. Details of the programme:**

For the promotion of interdisciplinary activities, the Department of Biotechnology organized an Interdepartmental Activity “**Hands-on training on antimicrobial activity**” on 08.02.2023. In this workshop III B.Sc., Chemistry (36 Nos) Students of our College participated. Dr. K. Revathi, Asst Prof. Dept of Biotechnology acted as the resource person. She explained well in antimicrobial methods, she gave how to prepare crude plant extract from raw material then swab the pathogenic (Model) to petriplate and place the sterile sampled disc were placed. The above methods also handled by individual students. After the session students shared their feedback.

## Photo:



## 5. Program Feedback:

- ❖ The participants told that the Hands-on antimicrobial Technique was very useful to gather knowledge other than their subject
- ❖ Students appreciated the arrangement of the program

**Interdepartmental Activity: Hands-on Training for Fluorescent microscopic Technique**

**1. Objective:**

To give hands-on training for Fluorescent microscopic Techniques to the I B.Sc., Zoology students to enhance practical skills

**2. Agenda:**

**Venue: B Block- Biotech Lab**

10.15 a.m. Welcome Address: Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology

10.20 a.m. Hands-on Fluorescent microscopic Technique

: Dr. D. Kavitha, Asst. Prof. Dept. of Biotechnology

11. 20 a.m. Feedback

**3. Programme Title: Interdepartmental Activity: “Hands-on training for Fluorescent microscope Technique”**

**4. Details of the programme:**

For the promotion of interdisciplinary activities, the Department of Biotechnology organized an Interdepartmental Activity “Hands-on training for Fluorescent microscopic Technique ” on 03.02.2023. In this workshop I B.Sc., Zoology (16 Nos) Students of our College participated. Dr. D. Kavitha, Asst Prof. Dept of Biotechnology acted as the resource person. She explained the Fluorescent microscopic Technique slide preparation and reagent preparation for the observation of cells fluoresce under the Fluorescent microscope to the participants. After that, Fluorescent microscopic Technique Hands-on Training was given to all the participants. Participants develop their skills in fluorescent staining of cells and visualization of cells through the Fluorescent microscope. We collected program feedback from the Participants.

## 5. Photo:



## 6. Program Feedback:

- ❖ The participants told that the Hands-on Fluorescent microscopic Technique was very useful to expand their knowledge
- ❖ Students appreciated the arrangement of the program

**Interdepartmental Activity: Hands on Protein Separation Techniques Report**

**1. Objective:**

To give hands on Protein Separation Techniques to the UG Chemistry and UG Zoology students to enhance practical skills

**2. Agenda:**

**Venue: B Block Mini Seminar Hall & Biotech Lab**

09.50 a.m. Welcome Address :Dr. M. Sureshkumar, Head, Dept. of Biotechnology

10.00 a.m. Introductory Remarks: Dr. P. Sumathi, Head, Dept. of Chemistry

10.05 a.m. Hands on Protein Separation Techniques

: Dr. D. Kavitha, Asst. Prof. Dept. of Biotechnology

03. 50 p.m. Vote of Thanks

: Dr. P. Selvamaleeswaran, Asst. Prof. Dept. of Biotechnology

**3. Programme Title: Interdepartmental Activity: “Hands on Protein Separation Techniques”**

**4. Details of the programme:**

For the promotion of interdisciplinary activities, Department of Biotechnology was organized an Interdepartmental “Hands on Protein Separation Techniques” on 05.08.2022. In this workshop B.Sc., Chemistry (35 Nos) and B.Sc., Zoology Students (14 Nos) of our college were participated. Dr. D. Kavitha, Asst Prof. Dept of Biotechnology was acted as the resource person. She explained the protein structures, reagents preparation for the protein separation through power point presentation to the participants. After that, Protein Separation\_Techniques Hands on Training was given to all the participants. Hands on Protein Separation Techniques was enhanced the practical skills of the participants. In this programme our Dept. Head, Staff members & Dr. P. Sumathi, Head, Department of Chemistry of our college were participated. We collected programme feedback from the Participants.

## 5. Photo:



## 6. Program Feedback:

- ❖ Hands on protein separation Technique was very useful for the participants
- ❖ Students were appreciated the arrangements made by both the department
- ❖ Students were actively participated and improved their practical skill

**Interdepartmental Activity: Hands on “Plant DNA Isolation Techniques” Report**

**1. Objective:**

To give hands on Plant DNA isolation Technique to the UG Biochemistry students to enhance practical skills

**2. Agenda:**

**Venue: B Block Mini Seminar Hall & Biotech Lab**

09.50 a.m. Welcome Address : Dr. M. Sureshkumar, Head, Dept. of Biotechnology

10.05 a.m. Hands on Isolation of Plant DNA

: Dr. D. Kavitha, Asst. Prof. Dept. of Biotechnology

03. 50 p.m. Vote of Thanks: Dr. P. Selvamaleeswaran, Asst. Prof. Dept. of Biotechnology

**3. Programme Title: Interdepartmental Activity: “Hands on Plant DNA Isolation Techniques”**

**4. Details of the programme:**

For the promotion of interdisciplinary activities, Department of Biotechnology was organized an Interdepartmental “Hands on Plant DNA Isolation Techniques” on 02.09.2022. In this workshop B.Sc., Biochemistry (16 Nos) Students of our college were participated. Dr. D. Kavitha, Asst Prof. Dept of Biotechnology was acted as the resource person. She explained the plant DNA structures, reagents preparation for the Plant DNA Isolation to the participants. After that, Plant DNA Isolation Techniques Hands on Training was given to all the participants. Hands on Plant DNA Isolation Techniques was enhanced the practical skills of the participants. We collected programme feedback from the Participants.

## 5. Photos:



## 6. Program Feedback:

- ❖ Hands on Plant DNA Isolation Techniques was very useful for the participants
- ❖ Students were appreciated the arrangements made by both the department
- ❖ Students were actively participated and improved their practical skill

**Interdepartmental Activity: Hands on Plant DNA Isolation Techniques Report**

**1. Objective:**

To give hands on Plant DNA isolation Technique to the B.Sc., Zoology students to enhance practical skills

**2. Agenda:**

**Venue: B Block Mini Seminar Hall & Biotech Lab**

09.50 a.m. Welcome Address : Dr. M. Sureshkumar, Head, Dept. of Biotechnology

10.05 a.m. Hands on Isolation of Plant DNA

: Dr. D. Kavitha, Asst. Prof. Dept. of Biotechnology

03. 50 p.m. Vote of Thanks: Dr. P. Selvamaleeswaran, Asst. Prof. Dept. of Biotechnology

**3. Programme Title: Interdepartmental Activity: “Hands on Plant DNA Isolation Techniques”**

**4. Programme Title: Interdepartmental Activity: “Hands Details of the programme:**

For the promotion of interdisciplinary activities, Department of Biotechnology was organized an Interdepartmental “Hands on Plant DNA Isolation Techniques” on 21.09.2022. In this workshop B.Sc., Zoology (14 Nos) Students of our college were participated. Dr. D. Kavitha, Asst Prof. Dept of Biotechnology was acted as the resource person. She explained the plant DNA structures, reagents preparation for the Plant DNA Isolation to the participants. After that, Plant DNA Isolation Techniques Hands on Training was given to all the participants. Hands on Plant DNA Isolation Techniques was enhanced the practical skills of the participants. We collected programme feedback from the Participants.

## 5. Photo:



## 6. Program Feedback:

- ❖ Hands on plant DNA Isolation Techniques was very useful for the participants
- ❖ Students were appreciated the arrangements made by both the department
- ❖ Students were actively participated and improved their practical skill

## **Muthayammal College of Arts and Science (Autonomous)**

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### **Workshop on Key Chain Preparation of Own DNA**

#### **1. Objective:**

To prepare keychain from own buccal DNA to III B. SC Biotechnology Students.

#### **2. Agenda:**

##### **Venue: B Block- Biotech Lab**

10.00 a.m. Welcome Address: Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology

10.15 a.m. Workshop on Key Chain Preparation of own DNA : Dr. K. Revathi, Asst. Prof.  
Dept. of Biotechnology

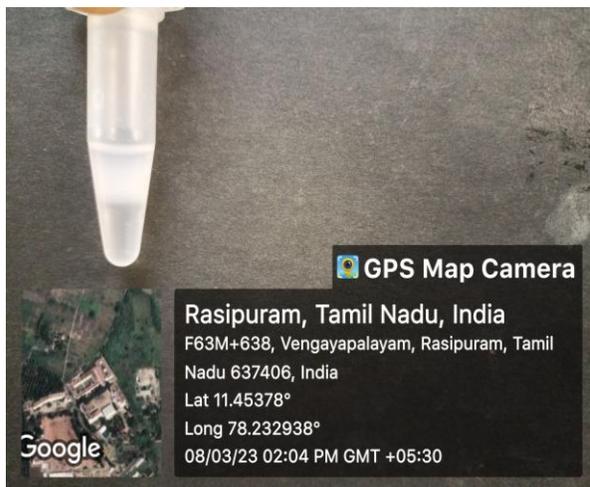
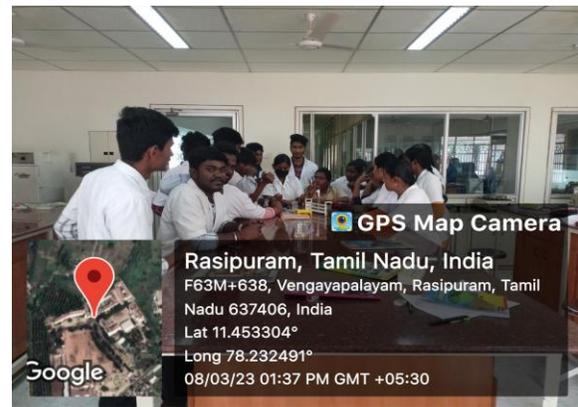
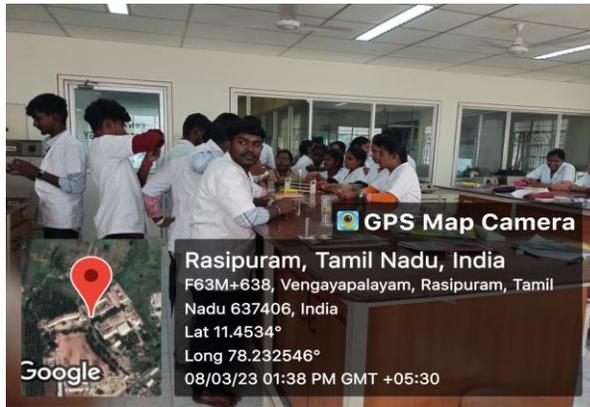
2. 40 a.m. Feedback

#### **3. Programme Title: Workshop on Key Chain Preparation of Own DNA**

#### **4. Details of the programme:**

The Department of Biotechnology organised a workshop for their own DNA keychain preparation from their buccal cells on March 8, 2023. In this workshop III B. Sc Biotechnology students (55 No's) participated. Dr. K. Revathi, Assistant Professor in the Department of Biotechnology, explains the process. In all young minds of students were eagerly participated to extract their own DNA to preserve it as keychain. Students learn the methods and steps involved in DNA isolation and preservation. From this workshop session, students became interested in learning about isolation procedures and empowered their practical skills. Students' queries were rectified, and students gave their feedback as to whether the session was informative and interesting.

## 5. Photo:



## 5. Program Feedback:

- ❖ The participants were satisfied and they said session was informative and meaningful
- ❖ Students appreciated the arrangement of the program

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**Alumni Interaction Programme Report**

**1. Objective:**

To provide the guidance to our students for their better employment in Industries and Academics

**2. Agenda:**

 <b>MUTHAYAMMAL COLLEGE OF ARTS &amp; SCIENCE</b> (Autonomous) A Unit of VANETRA Group Rasipuram - 637 408, Namakkal "Alumni Interaction" Organized by <b>Bio-Omics</b> Department of Biotechnology		
19.01.2023	THURSDAY	10.30AM
<b>B - Block Conference Hall</b>		
10.30 AM	Welcome Address	: <b>Ms.R. Anupriya</b> III- B.Sc. Biotechnology MCAS
10.33 AM	Introductory Remarks	: <b>Dr.P.Selvamaleeswaran</b> Assistant Professor Department of Biotechnology MCAS
10.35 AM	Felicitations	: <b>Dr.M.N.Petiasamy</b> Dean - Administration VANETRA Muthayammal Institutions <b>Dr.A.Stella Baby</b> Vice - Principal MCAS
10.40 AM	Special Address	: <b>Dr.S.P.Vijeth Kumar</b> Principal MCAS
10.45 AM	Presidential Address	: <b>Dr.R.Selvakumaran</b> Director - Academics VANETRA Muthayammal Institutions
10.55 AM	Alumni Interaction	: <b>Dr.L.Thamaraiselvi</b> Alumni (2005 - 2008 Batch)
11.45 AM	Vote of Thanks	: <b>Ms.V.M.Laxmi</b> I - M.Sc. Biotechnology MCAS

**1. Programme Title: Alumni Interaction Programme**

**2. Details of the programme:**

Department of Biotechnology was arranged an Alumni Interaction Programme in Our College. This programme was held at B-Block Conference Hall of our College on 19.01.2023. We honored our Alumni with shawl and memento. Our Alumni (2005-2008) **Dr.L.Thamaraiselvi**, delivered a motivational talk to the Biotechnology Students. She thanks all the faculty members of the College for their continuous efforts and support to

the students. In her interaction, she shared her Industrial and Educational experiences and explained career opportunities in Biotechnology to the students. She mentioned that students should develop their public speaking skills as well. She also shared some experiences of her interview and gave a realistic view about how co-curricular and extra-curricular activities matter along with excellence in academics. She also addressed about Women Empowerments. Our students also interacted with our Alumni. In this programme our Director Academics-

Dr. R. Selvakumaran, VANETRA Muthayammal Institutions delivered his presidential address, Head, Department of Biotechnology, Staff members (7 No's) and Students (200 No's) were participated.

### 3. Photos:



### 3. Program Feedback:

- Students know the career opportunities in Biotechnology through the Alumni Interaction Programme.
- Our students are actively interacted with our Alumni

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## Workshop on “Molecular Techniques” Report

### 1. Objective:

To give hands-on training and create awareness about molecular techniques, among the Govt. College students through workshop

### 2. Agenda:

	<b>MUTHAYAMMAL COLLEGE OF ARTS &amp; SCIENCE</b> Rasipuram-637 408, Namakkal Dt, Tamil Nadu <i>One Day Workshop on “Molecular Techniques”</i> 04 <sup>th</sup> November 2022 Organized by Department of Biotechnology VALEDICTORY FUNCTION
Venue: B Block-Mini Seminar Hall <u>AGENDA</u> Date & Time: 04.11.2022, 3.30 pm	
Welcome Address	: <u>Miss. G. Gopika</u> I B.Sc., Biotechnology Muthayammal College of Arts & Science (Autonomous), Rasipuram
Felicitation	: <u>Dr. A. Stella Baby</u> Vice Principal, Muthayammal College of Arts & Science (Autonomous), Rasipuram
Presidential Address	: <u>Dr. R. Selyakumaran</u> Director Academics Vanetra Muthayammal Institutions, Rasipuram
Feedback	:
Distribution of Certificates	:
Vote of Thanks	: <u>Miss. K. Keerthana</u> I M.Sc., Biotechnology Muthayammal College of Arts & Science (Autonomous), Rasipuram

### 3. Programme Title: Webinar on “Workshop on “Molecular Techniques”

### 4. Details of the programme:

Department of Biotechnology organized a one-day Workshop “Molecular Techniques” on 04.11. 2022. 33 members from Zoology Dept. (B.Sc., & M.Sc., Zoology) and a Ph.D. Research Scholar from Botany Dept. and faculty members (3 Nos), Arignar Anna Govt Arts College, Namakkal participated in this workshop. Dr. P. Selvamaleeswaran, Asst. Prof., Dr.D.Kavitha, Asst Prof., and Dr. D. Rajasekaran, Asst. Prof. Dept of Biotechnology explained the principle and working mechanism of basic and advanced instruments in our Biotechnology laboratory as well as demonstrated to the participants. Our staff members given hands on training in SDS PAGE, DNA Isolation technique and ELISA technique to the participants. Director Academics, Dr. R. Selvakumaran, VANETRA Muthayammal Institutions delivered a Presidential address & distributed certificates to the participants. Our Vice Principal, Dr.A.Stella Baby, distributed certificates to the Staff members. Lunch was provided to all the participants in our PG Hostel. Biotechnology Staff members were involved in made an arrangement for this workshop.

## 5. Photos:





## 6. Program Feedback:

- ✓ Govt. College Students gathered knowledge about Molecular Techniques. through this workshop.
- ✓ Participants were appreciated our Hospitality and the workshop arrangements

## 1. Objective:

The objective of the workshop is to identify and explore the role of intellectual property rights in the sharing of benefits arising from the use of biological usage among the students.

## 2. Agenda:

 <b>MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE</b> (AUTONOMOUS) (A Unit of VANETRA Group) Rasipuram – 637 408, Namakkal Dt.			
<b>DEPARTMENT OF BIOTECHNOLOGY</b> Organizes <b>Workshop on Intellectual Property Rights for the Usage of Biological Resources</b>			
06.04.2023		Thursday	
		10.00 AM	
<b>B – Block Mini Seminar Hall</b>			
10.00 AM	Welcome Address	:	<b>Ms.P. Renuga</b> III B.Sc., Biotechnology MCAS
10.05 AM	Introductory Remarks	:	<b>Dr.P.Selvamaleeswaran</b> Head - Department of Biotechnology MCAS
10.10 AM	Felicitation	:	<b>Dr.A.Stella Baby</b> Vice - Principal MCAS
10.15 AM	Presidential Address	:	<b>Dr.S.P.Vijeikumar</b> Principal MCAS
10.20 AM	Chief Guest Introduction	:	<b>Ms.R. Ramyadevi</b> II M.Sc., Biotechnology MCAS
10.25 AM	Key Note Address	:	<b>Dr.A. Usha Raja Nanthini</b> Professor & Head Department of Biotechnology Mother Teresa Women's University Kodaikanal
03.35 PM	Certificate Distribution		
03.45 PM	Vote of Thanks	:	<b>Ms. B.Nandhini</b> III B.Sc., Biotechnology MCAS

3. **Programme Title:** Workshop on Intellectual Property Rights for the Usage of Biological Resources.

4. **Details of the programme:**

Workshop on “Intellectual Property Rights for the Usage of Biological Resources” was organized by the Department of Biotechnology on 06.04.2023. **Dr. A. Usha Raja Nanthini**, Professor and Head, Department of Biotechnology from Mother Teresa Women’s University acted as resource person. She was alumni of our college (Batch 2002-2004). She delivered her key point about intellectual property rights and the methods involved to filing pattern, ways to get geographical indication, trademarks and trade secrets. Her way of interacting sessions with the students was wonderful. After the session students from other colleges shared their feedback. Our students also interacted with our Alumni. In this programme our Vice Principal **Dr.A.Stella Baby**, Muthayammal College of Arts and Science, delivered her felicitation address. **Dr.S.P.Vijeikumar**, Principal, Muthayammal College of Arts and Science and **Dr. P. Selvamaleeswaran**, Head, Department of Biotechnology, distributed the Certificates for participants(106 No’s).

**5. Photo:**



**6. Program Feedback:**

- ❖ The participants shared their experience about the IPR was knowledgefull.
- ❖ Students satisfied with the resource person interaction.

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### **Workshop on Molecular Techniques**

#### **1. Objective:**

To develop and strengthen the capacity of students in basic molecular biology techniques.

#### **2. Agenda:**

##### **Venue: B Block- Biotech Lab**

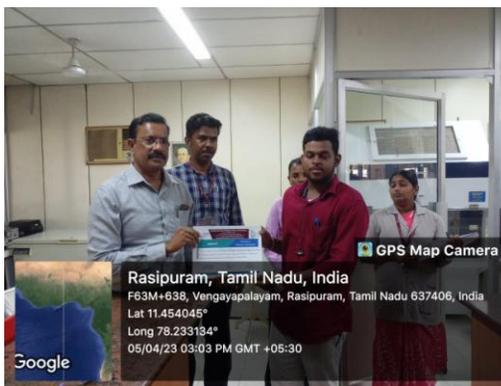
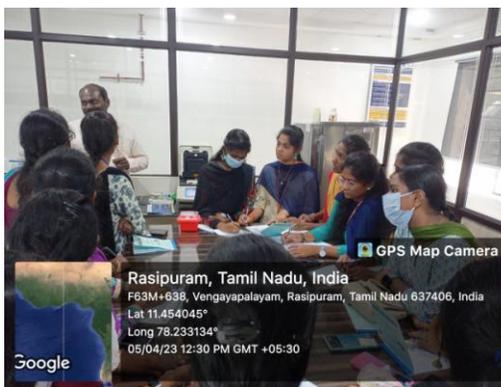
10.00 a.m.	Welcome Address: Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology
10.30 a.m.	Hands-on training session
03. 30 a.m.	Certificate distribution: <b>S.P.Vijeikumar</b> , Principal, MCAS
03.45 a.m.	Valedictory address by Dr. P.Selvamaleeswaran, Head, Dept. of Biotechnology

#### **3. Programme Title: Workshop on Molecular Techniques**

#### **4. Details of the programme:**

Workshop on “Molecular Techniques” was organized by the Department of Biotechnology on 05.04.2023. Students from various colleges including Periyar University, SSM College, KSR College of Arts and Science and Sona College of Arts and Science. Total numbers of students were segregated into two batches, Batch I was trained PCR techniques by Dr. P. Selvamaleeswaran and Dr. C. Raghu with equipped instruments. Batch II was trained ELIZA techniques by DR. D. Rajasekaran. Alternatively all the students were equipped all the techniques. All the techniques were explained well and students were allowed to do in hand. Our Principal, Dr. **S.P.Vijeikumar**, delivered a Presidential address & distributed certificates to the participants. Lunch was provided to all the participants in our PG Hostel. Biotechnology Staff members were involved in made an arrangement for this workshop.

## 5. Photo



## 6. Program Feedback:

- ❖ The participants from other collages shared they need more number of workshops like molecular techniques
- ❖ Students satisfied with the hospitality and demo sessions

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### “INFLIBNET ORIENTATION”

#### 1. Objective:

To create an awareness among the students about the usage of e-resources and INFLIBNET (Information and Library Network) through orientation

#### 2. Agenda:

MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE (Autonomous) (A Unit of VANETRA Group) Rasipuram- 637408, Namakkal DT.		
INFLIBNET ORIENTATION		
Organized by Department of Biotechnology		
22.09.2022	Thursday	10.00 AM
Venue: B - Block Conference Hall, MCAS		
10.05 AM	Welcome Address	: <b>Swetha B</b> III B.Sc., Biotechnology
10.10 AM	Introductory Remarks	: <b>Dr. P. Selvamaleeswaran</b> Asst. Professor, Dept. of Biotechnology
10.20 AM	Felicitation	: <b>Dr. M. Sureshkumar</b> Assistant Professor & Head, Dept. of Biotechnology
10.30 AM	Chief Guests Address	: <b>Dr. T. Sakthivel</b> Head- Librarian, MCAS
11.00 AM	Feedback	:
11.05 AM	Vote of Thanks	: <b>Joshika S</b> III B.Sc., Biotechnology

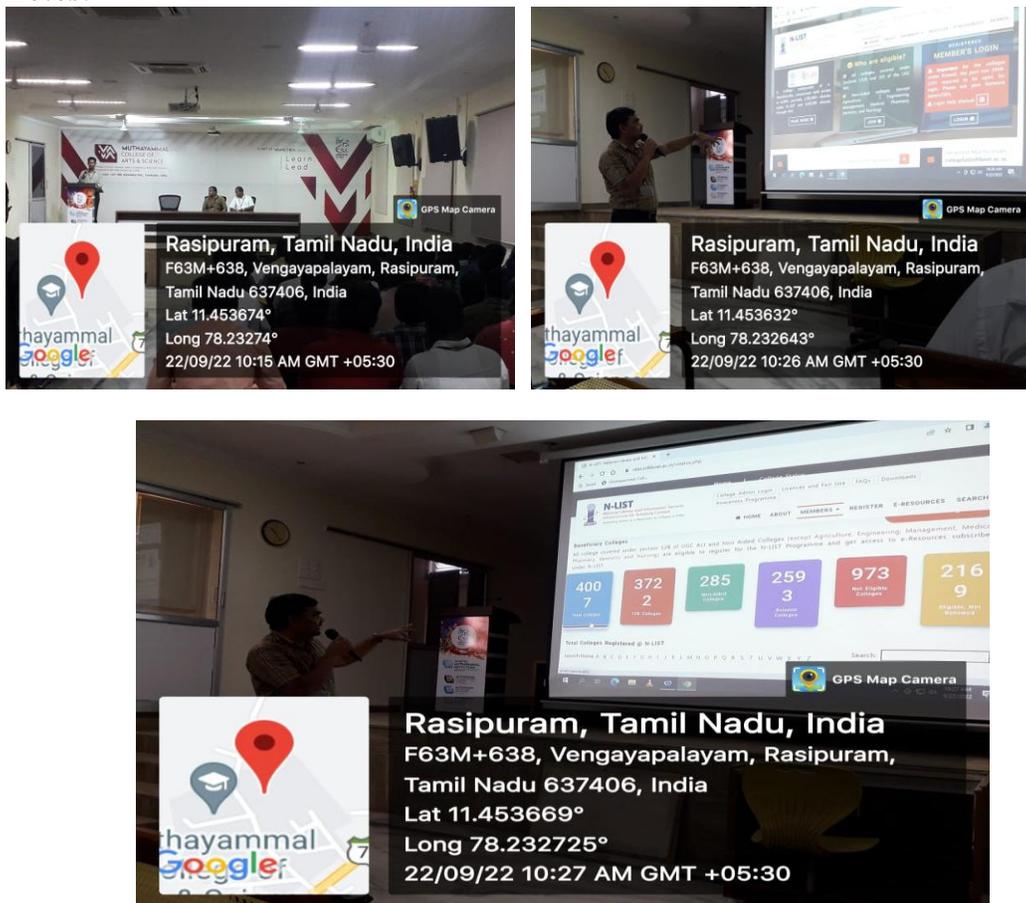
#### 3. Programme Title: INFLIBNET Orientation

#### 4. Details of the programme:

Department of Biotechnology was organized a “INFLIBNET Orientation” on 22.09.2022. In this event, 167 Students from the Department of Biotechnology, and 54 students from the Department of Zoology were participated. Dr. T. Sakthivel, Head,

Librarian, Muthayammal College of Arts & Science, delivered Chief Guest Address. He explained about reliable access to document collection of libraries by creating on-line union catalogue of serials, theses/ dissertations, books, monographs and non-book materials (manuscripts, audio-visuals, computer data, multimedia, etc.) in various libraries in India. Dr. M. Sureshkumar, Head, Department of Biotechnology & Zoology was delivered a lecture on INFLIBNET Major Programmes like INDCAT, SOUL, e-Shodh Sindhu, Shodhganga, and PG e-Pathsala. Faculty members also actively participated in this programme.

## 5. Photos:



## 6. Program Feedback:

- Participants also gained knowledge on library resources and information resources for their education
- Participants were gained the knowledge on e-resources and its retrieval process

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**Workshop on “Plant Tissue Culture & Molecular Techniques”**

**1. Objective:**

To provide hands-on training and create an awareness about Plant Tissue Culture & Molecular Techniques among Govt. college students through a workshop on “Plant Tissue Culture & Molecular Techniques”.

**2. Agenda:**

**Venue: B Block-Biotechnology Lab**

09.50 a.m. Welcome Address	: Dr. M. Sureshkumar, HOD/BT
10.00 a.m. Workshop	: Dr. D. Kavitha, Asst. Prof./BT
03. 50 p.m. Vote of Thanks	: Dr. D. Rajasekaran, Asst. Prof./BT

**3. Programme Title: Workshop on “Plant Tissue Culture & Molecular Techniques”**

**4. Details of the programme:**

Department of Biotechnology was organized a Workshop on “Plant Tissue Culture & Molecular Techniques” on 30.08.2022. In this workshop, 17 Students from Department of Botany, Arignar Anna Government Arts College, Namakkal, and 02 Staff Members were participated. Dr. D. Kavitha, Asst. Prof. Dept of Biotechnology of our college was explained Plant Tissue Culture Techniques & given the Hands-on training to all the participants. Department of Biotechnology was arranged all the necessary facility for this programme. We arranged this workshop for the Govt. college students at free of cost.

**5. Photo:**



## 6. Program Feedback:

- Plant Tissue Culture & Molecular Techniques Workshop was created an awareness about Plant Tissue culture & Molecular Techniques among the students.
- Our Laboratory facility was utilized by Govt. College students and appreciated our arrangements

# A Report on “Entrepreneurship Awareness - Interaction Meet” for I U.G. Students 2022-23

**Department Name:** Entrepreneurship Development Cell

## Objectives:

1. To create awareness among the students to think about business
2. To motivate the youth mind to learn entrepreneurial skills
3. To impart some idea on self employment and its privileges
4. To provide a business platform for the students to make it better way

## 1. Agenda

**Date:** 17.08.22, 18.08.22, 22.08.22, 23.08.22, 25.08.22 and 29.08.22

**Time:** 10.30 A.M to 12.15 P.M. and Afternoon session 1.30 P.M. to 4.00 P.M.

**Venue:** Muthayammal College of Arts and Science, Rasipuram – A, B, C & D -Block

## 2. Subject / Topic dealt with

**Topic:** “Entrepreneurship Awareness - Interaction Meet”

Our institution has performed well with lot of cells to impart extra knowledge among the students community. In the case of Entrepreneurship Development Cell is also functioning well in our college to imbibe entrepreneurial ability and practice to promote good business man in the society. “Entrepreneurship Awareness Interaction Meet” programme conducted by EDC from 26.10.21 to 27.10.21. Mr.A.Karthigaiselvam, Asst Prof of Economics, Department of BBA, MCAS had interacted with all the first year U.G. students and shared about EDC activities like awareness programme, orientation programme, E-Talk (Entrepreneur Talk), Guest Lecture etc. In this meet, Coordinator also shared about Business model i.e., Business Plan, opportunities in Micro Small and Medium Enterprises based business, central and state government schemes to establish a business.

This cell is conducting “Guest Lecture”, “Awareness Programme”, and “Field visit” periodically. The purpose of conducting Student interaction by EDC Coordinator is to know about students’ interest on starting business and to hone their mind to think as a business aspirant. This meet would be conducted not only to create awareness but to know about the student’s mentality and their selection of career. This meet would also be used to gather interested students,

## 3. Photograph



Mr.A.Karthigaiselvam, Asst Prof of Economics and Coordinator for EDC interacting with First Year U.G. students and shared about entrepreneurship Development Cell activities.

**5. Feedback:**

Students have interacted with EDC Coordinator and gained lot of information about entrepreneurship and its opportunities. Many students opinioned that the EDC is performing good role and students should utilize the chance to learn and apply in real life.

**6. No. of Staff Participant: Nil**

**No. of students:** EDC Coordinator interacted nearly with 1200 students.

]

# A Report on Entrepreneurship Development Cell Orientation Programme on “Business Mindset for Present Youth” 2022-23

**Department Name:** Entrepreneurship Development Cell

## **Objectives:**

1. To offer guidance to the students to learn entrepreneurship skill.
2. To develop the students mind to think as a business man.
3. To impart awareness on Central and State Government Scheme to establish business.

## **1. Agenda**

**Date:** 07.09.22 Time: 9.30 A.M. to 11.15 A.M.

**Venue:** Muthayammal College of Arts and Science, Rasipuram – B-Block Conference Hall

## **2. Subject / Topic dealt with**

**Topic:** Orientation for I U.G. Students on “Business Mindset for present youth”

Our college has offered many co-curricular activities including cell which form the awareness and personal improvement apart from the curriculum. Entrepreneurship Development Cell has formed to impart entrepreneurship skills and qualities among the student’s community. In this event, Dr.R.Selvakumaran acted as a Resource Person and delivered a speech on “Business Mindset for Present Youth” for the digitalized youth. He has highlighted on innovative idea, idea generation, creativity, copy right, intellectual property rights, trade mark, advertising and sales promotion and social development.

This cell is conducting “Guest Lecture”, “Awareness Programme”, and “Field visit” periodically. The purpose of conducting orientation is to know about students’ interest on starting business and to hone their mind to think as a business aspirant.

## **3. Photograph:**



Dr.H.Lookman Sithik, Associate Prof in CA Dept and Head – IQAC and Skill Development delivered a special address at the EDC orientation event on 07.10.22. He touched upon idea developing mechanism, innovative ideas, critical and logical thinking aspects and its importance. One who start any business with new idea or existing idea but some changes needed and that will be better for the next level Start-up he said. As an entrepreneur to establish any business they should first address the problem of the society and provide opportunities to grow the future.

## **5. Feedback**

Students have given a positive opinion and shared that it is a great chance to learn business skills and qualities of an entrepreneur. Many students appreciated about E-Cell activities involvement and learning entrepreneurial awareness camp and its tactics. Students have also expressed that they gathered central and state government schemes on business (MSME and TamilNadu Government). Our Director also highlighted copy right, Intellectual Property Rights,

### **4. No. of Staff Participant:** 3 Faculties

**No. of students:** About 195 students attended and gained.

## **A Report on “Awareness Programme on Innovation and Start-up”**

### **Objective:**

- To know about the innovation and its process
- To understand the business ideas and entrepreneurship development
- To find out interested field of which one can establish a business
- To impart Start-up business ideas and maintain the sales promotion

### **Agenda:**

**Date:** 21.09.2022

**Time & Venue:** 10.00 A.M. to 11.15 A.M, B-Block Conference Hall

### **Guest Details:**

1. Mr. A.Karthigaiselvam, Asst Prof of Economics,  
Department of Business Administration & Coordinator for EDC, MCAS, Rasipuram

**Subject:** Awareness Programme on “**Innovation and Start-up**”

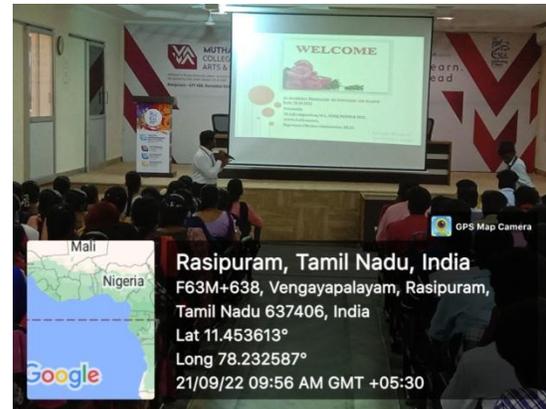
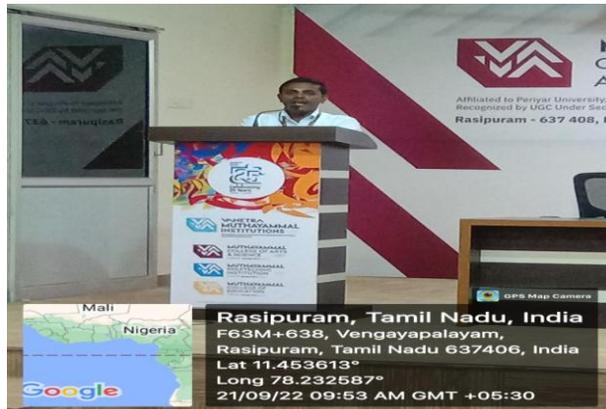
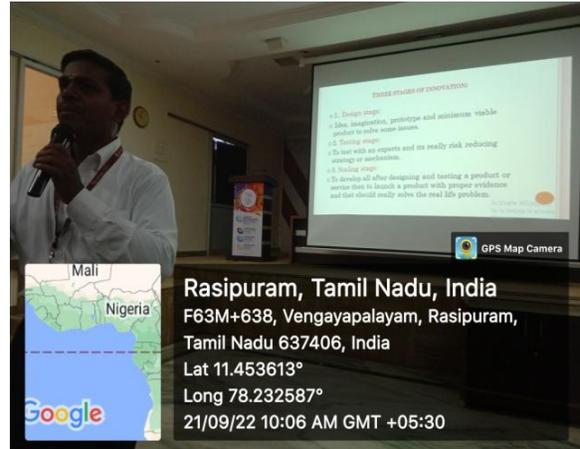
### **Topic: “Innovation and Start-up”**

Mr. A.Karthigaiselvam, Asst Prof of Economics, Department of Business Administration & Coordinator for EDC, MCAS, Rasipuram highlighted that as a youth should decide themselves the opportunities and ideas in establishing business and to provide job opportunities to all. Business ideas can be generated not only from one’s own mind but one who develop skills from others or sharing information from one person to other etc. As a business man should also think about Start-up business that will give new solution for a current problem faced by the society. The innovative ideas have given more priority for establishing Startup Company.

As a youth they should first decide which business is suitable for them and how to market that product and above all which product or service we have to decide. As a beginner to run the business, they should first know about the basic ideas about establishing business and choose the location, getting raw material better way, highly demanding product one who choose so that sales to be generated always and earn more profit.

As a coordinator for EDC and I need to share few areas to think on business like agricultural product, organic farming and its marketing, herbal medicine or garden maintaining, poultry and dairy farming, bakery and confectionery etc.

## Photos



Mr. A.Karthigaiselvam, Asst Prof of Economics, Department of Business Administration & Coordinator for EDC, MCAS shares his views on Innovation and Startup.

## Feedback

Most of the students have interacted with the EDC coordinator and gathered information about business ideas and project report. Some students have gathered business plan and loan process to establish the business. This awareness programme has really useful for them to make their ideas better to start the business good way.

**6. No. of Student Participant:** Nearly 195 students took part in the programme.

**No. of Staff Participant:** Nearly 2 faculties took part in the programme.



# A Report on Entrepreneurship Awareness Meet

(For II & III Year U.G. Students)

**Department Name:** Entrepreneurship Development Cell

## 1. Objectives:

- To create awareness among the students to think about business
- To motivate the youth mind to learn innovation and entrepreneurship
- To provide information about MSME and its role
- To give some idea to the students to choose their interested field and bring the new idea

## 2. Agenda

Resource Person: Mr.A.Karthigaiselvam, Assistant Professor of Economics and Coordinator for EDC

**Date:** 13.10.22      **Time:** 10.00 P.M. to 11.00 P.M.

**Venue:** B – Block, Class Room

**Subject / Topic:** Entrepreneurship Awareness Meet

**3. Topic:** “Entrepreneurship Awareness Meet for II & III Year U.G. students

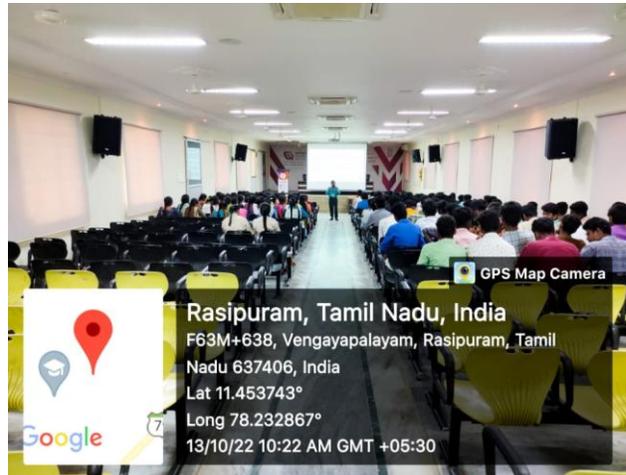
In this programme Mr.A.Karthigaiselvam, Asst Prof of Economics and Coordinator for EDC addressed the gathering.

If a person may think to establish a business in an innovative way that will be appreciated and recognized as a Start-up basis. The government is ready to provide lot of financial assistance and support to settle their life in venture capital or business side. After completing graduation, the student may think about starting business like agriculture side, catering, export units, herbal gardening and marketing etc. The innovation and entrepreneurship are inter-dependent with each other.

## 4. Photograph:



Mr.A.Karthigaiselvam, Asst Prof of Economics and EDC Coordinator gave the idea generation game in the picture-1 and interacted with the students in the second picture



Mr.A.Karthigaiselvam, Asst Prof of Economics and EDC Coordinator collects idea from the students in the picture-1 and addressed the gathering in the picture -2

## 5. Feedback:

In this programme II and III year students have got more information about business and current day context. Most of the students have interacted with the EDC coordinator and gave positive opinion about the programme.

**6. No. of Student Participant:** Nearly 185 students took part in the programme.

**No. of Staff Participant:** Nearly 2 faculties took part in the programme.

## **A Report on TamilNadu Student Innovator - 2022**

Organised by Entrepreneurship Development Cell, Institution Innovation Council in association with PU-IEDP and EDII – Chennai

### **1. Objectives:**

- To create awareness among the students to think about innovation
- To motivate the youth mind to bring out the innovative business ideas
- To encourage the students to register their idea in the TNSI portal
- To offer guidance to the students to think about start-up business opportunities

### **2. Agenda**

Welcome Address: Rashika S

Introductory Remarks: Dr. N.Sudha, Asst Prof of Chemistry & Head - IIC

Keynote Address: Mr.A.Karthigaiselvam, Asst Prof of Economics and  
Coordinator for EDC, MCAS, Rasipuram

Vote of thanks: M.Rithika, II BBA

**Date:** 12.01.23      **Time:** 10.00 A.M. to 1.00 P.M.

**Venue:** B – Block, Conference Hall

**Subject / Topic:** “Awareness Programme on TNSI -2022”

### **3. Topic:** “TamilNadu Student Innovator 2022

In this programme Rashika S of II BBA welcomed the gathering. The TNSI 2022 Programme was conducted by EDC, IIC in association with PU- IEDP and EDII – Chennai on 12.01.2023.

Dr. N.Sudha, Asst Prof of Chemistry & Head - IIC gave an introductory remark on: TamilNadu Student Innovator – 2022”. She highlighted that present youth have enormous chances to exhibit their talents and get reward from government agencies or private sector. Students have to think about business enterprise with innovative way instead of searching job.

Mr.A.Karthigaiselvam, Asst Prof of Economics, Department of BBA and Coordinator for EDC Muthayammal College of Arts and Science who gave a key note address to the students that present youth has lot of opening to excel their life and they should utilize the situation.

This TNSI-2022 programme main aim is to bring out an excellent idea from the students mind and validate that idea, then prove it as a prototype and convert a product or service for the benefit of the society. He pointed out that students have to think about business enterprise mind instead of seeking job.

If a student may think to establish a business in an innovative way that will be appreciated and recognized as a Start-up basis. The government is ready to provide lot of financial assistance and support to settle their life in venture capital or business side.

After completing graduation, the student may think about starting business like agriculture side, catering, export units, herbal gardening and marketing etc. If a student can think newly or anything

to be modified from the existing idea that will be invited and registered in the portal of TNSI 2022. The best idea will be awarded and encourage the students to start the business.

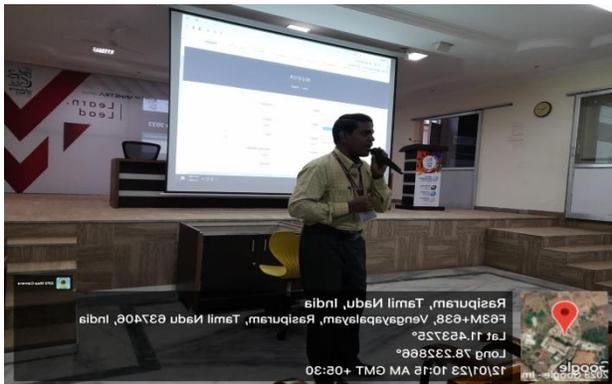
He also has given good option to the students to make use of it and bring their idea to register in the portal. Before to register the idea, the student has to decide about name of the Start-up, to give brief information about the business and product, identification of problem, finding solution, project report or business plan etc. He also gave some tips to select the domain like manufacturing goods, marketing or product etc of which one can select to give an idea and convert that idea into product. The programme has concluded with feedback session and students raised some questions about product identification, location of the business enterprise selection, risk and uncertainty in finance part etc.

#### Demo Session:

Before to register the student idea in the portal, they should first go to the website address related with EDII-Tamil Nadu. Students have to fill the candidate registration and TNSI registration to enter their innovative idea and fill whatever the requirements asked by the TNSI portal.

Finally, the programme concluded with vote of thanks given by M.Rithika, II BBA.

#### 4. Photograph:



Mr.A.Karthigaiselvam, Asst Prof of Economics oriented about TNSI 2022 and its significance.



Dr.N.Sudha, Asst Prof of Chemistry gave an Introductory remarks in this programme.



Students have actively involved in the TNSI 2022 awareness programme.



Mr.A.Karthigaiselvam, Asst Prof of Economics gave a demo to register innovative idea in the portal

## **5. Feedback:**

The TNSI – 2022 programme was really good to the students mind and they gave a positive opinion about this and learned a lot. Students also opined that this type of programme enable the students mind to think something newly apart from their curriculum. Each student has enjoyed the programme and got benefit also.

**6. No. of Staff Participant:** Nearly 2 faculties took part in the programme.

**No. of Staff Participant:** Nearly 184 students took part in the programme.

# **A Report on “Awareness Programme on Business Plan Preparation”**

**Department Name:** Entrepreneurship Development Cell

## **1. Objectives:**

To create awareness among the students to seek business opportunities

To motivate the youth mind to bring out the innovative business ideas

To encourage the students to know about business plan for securing fund from bank

To offer guidance to the students to get an experience about particular business area

## **2. Agenda**

Welcome Address: Rashika S

Introductory Remarks: Dr. N.Sudha, Asst Prof of Chemistry & Head - IIC

Keynote Address: Mr.A.Karthigaiselvam, Asst Prof of Economics, MCAS, Rasipuram

Vote of thanks: M.Rithika, II BBA

**Date:** 21.01.23      **Time:** 10.00 A.M. to 11.15 A.M.

**Venue:** B – Block, Conference Hall

**Subject / Topic:** “Awareness Programme on Business Plan Preparation”

## **3. Topic:** “Business Plan Preparation for U.G. Students”

In this programme Rashika S of II BBA welcomed the gathering.

Dr. N.Sudha, Asst Prof of Chemistry & Head - IIC gave an introductory remarks on : “Business Plan” She highlighted that present youth have enormous chances to exhibit their talents and get reward from government agencies or private sector. Students have to think about business enterprise with innovative way instead of searching job. She emphasized that preparing business plan will be useful for future business man.

Mr.A.Karthigaiselvam, Asst Prof of Economics, Coordinator for EED, Department of BBA, Muthayammal College of Arts and Science who gave a key note address to the students that present youth has lot of opening to excel their life and they should utilize the business opportunities.

In this programme, he emphasized on the role of MSME, DIC and its responsibilities, As a new comer who starts a business, he should first know about business plan and that would be useful to succeed ones business better way. In this business plan, each business man must know about the identification of the product, securing fund, man power, location of the business, market survey, technology in production, ownership of business, purchasing raw-material and machinery, competitor, target audience etc.

Preparation of business plan is either formal or informal one. But the formal level is always better to get financial assistance from the public sector banks as well as business opportunities. He also conducted an activity based competition and gave a prize on the spot to encourage our students to think about business ideas/

Finally, the programme concluded with vote of thanks given by M.Rithika, II BBA.

#### 4. Photograph:

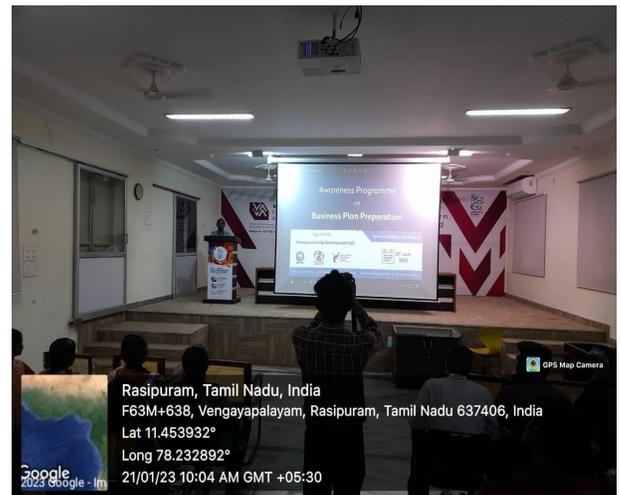


EDC coordinator addressed the gathering

EDC students observed the lecture



Dr.N.Sudha, IIC Head interacted with the students



EDC coordinator interacted with our students

#### 5. Feedback:

The programme was really useful and students gained more knowledge about business plan and its guidelines. Most of the students opined that as a beginner of business man surely learned more to establish a business and securing fund from the banks with best possible manner.

**6. No. of Staff Participant:** Nearly 2 faculties took part in the programme.

**No. of Staff Participant:** Nearly 185 students took part in the programm

## A Workshop on Innovation and Entrepreneurship

**Department Name:** Entrepreneurship Development Cell

### 1. Objectives:

1. To offer various sources of business ideas to the students to think about business
2. To learn innovative idea based business model in practical world
3. To impart awareness on innovation and entrepreneurship for younger generation
4. To provide business opportunities for the youth to establish the business on their own

### 2. Agenda

**Date:** 15.02.23 **Time:** 9.30 A.M. to 1.00 P.M.

**Venue:** Muthayammal College of Arts and Science, Rasipuram – B-Block Conference Hall

### 3. Subject / Topic: “A Workshop on Innovation and Entrepreneurship”

#### Chief Guest:

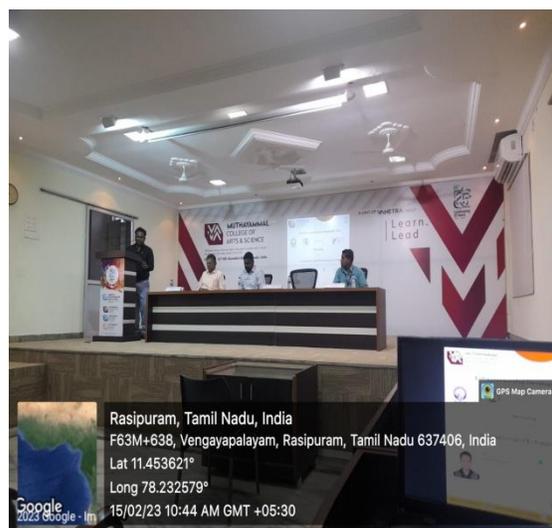
**Mr.P.Praveen**

Managing Director,  
Innovative Green Technology,  
Land Safe Trade Private Limited, India,  
Sea Benz Hub Limited,  
Mauritius and Hermico Limited

To develop the students mind apart from their curriculum, the EDC organized “A Workshop on Innovation and Entrepreneurship” for I, II and III year U.G. students. In this programme, **Mr.P.Praveen**, Managing Director, Innovative Green Technology was the Chief Guest. He focused on four types of business model which would establish business opportunities in this digitalized economy. He gave Business to Business Model, Business to Consumer Model, Subscription Based Model and On Demand Business Model. He highlighted innovation and its sources to create the business opportunities.

Innovators create new product or services but the entrepreneur only to turn into that idea convert into business line. Nothing comes easy without hard work and strategy. Today business world mainly focused on smart work more than hard work. He finally touched upon brand awareness and one who sells original and durable product that will speak their product quality.

### 4. Photograph:





Students eagerly observe the Resource Person speech

### **5. Feedback**

Students have given a positive opinion and interacted with the Resource Person frequently. Most of the students have got business based opportunities from the Chief Guest and he gave good ideas to the students. Students have also got branding secret and business tactics.

### **6. No. of Staff Participant: 3 Faculties**

**No. of students:** About 220 students attended and gained.

## **Muthayammal College of Arts and Science Entrepreneurs Development Cell**

### **EDC Program / Event – Report**

**Title of Program** : An Orientation program on Business Ideas for Younger Generation

**Expert Resource Speaker** : **Dr.A.Apdhul Kathar** ,Field Coordinator - PU-IEDP –HUB,  
Periyar University, Salem-11.

**Organizer** : EDC Cell & Institution's Innovation Cell

**Date & Time** : 12/9/2023 & 10.00 AM – 12.30PM

**Mode / Venue** : Offline Mode / B Block Conference Hall

#### **1. Objective**

- Enhancing the knowledge and skill of entrepreneurs .
- To develop a business Plan.
- Strengthen and increase the number of entrepreneurs.

#### **2. Guest Details / Agenda**

**Dr.A.Apdhul Kathar** ,Field Coordinator - PU-IEDP –HUB,  
Periyar University, Salem-11.

#### **3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)**

- Encouraging the students to face the social change and improving lives.
- Improving the quality of life with new ideas and building functional products or services.
- Enhancing one's capacity to work efficiently alone, as well as in collaboration.
- Reaching the desired goals and achieving excellent results.

# Muthayammal College of Arts and Science Entrepreneurs Development Cell

## EDC Program / Event – Report

### 4. Session / Program / Event Photographs



### 5. Feedback ( Collected through Google Form Feed Back link )

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

### 6. Participants

(i) Number of Staff Participants: 05

(ii) Number of Students Participants: 100, ( B.Sc Physics, B.Com, BBA, B.Sc., CS, B.Sc., IT, B.Sc., TFD )

### Prepared By

**Dr. C. Indira Priyadharsini**

**Coordinator – EDC**

**Assistant professor in physics,**

**MCAS**

**Muthayammal College of Arts and Science  
Entrepreneurs Development Cell**

Page < 2 of 2 >

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : A Session on “ Green Energy: Innovative NextGen Bio Fuel from Marine Algae “

**Expert Resource Speaker** : Er.G.M.Srinivasan, BTech, Petrochemical Technologist, Galileo Offshore & Research and Development Private Limited, Nagapattinam – Tamilnadu, India

**Organizer** : Institution's Innovation Cell

**Date & Time** : 19/8/2023 , 11AM – 12.30PM

**Mode / Venue** : On Line Mode, Google Meet

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- With the objective of the program in emerging innovative technologies for enhancing Microalgae Bio fuel Production: Recent Progress, Barriers, and Limitations

#### 2. Guest Details / Agenda

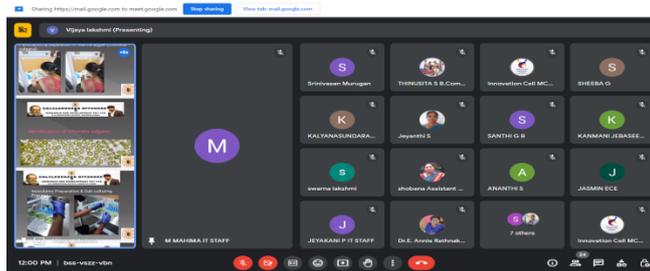
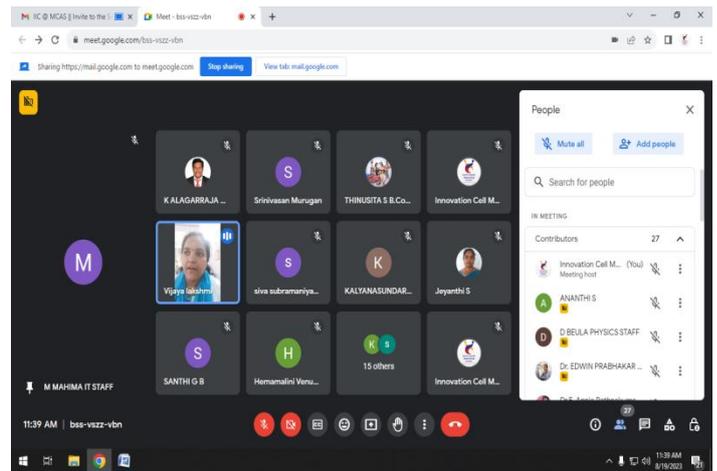
- Er.G.M.Srinivasan, BTech, Petrochemical Technologist, Galileo Offshore & Research and Development Private Limited, Nagapattinam – Tamilnadu, India
- 

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Advantage in biotechnology, such as the ability to genetically engineer algae to produce more oils
- Emerging Technologies for Enhancing Microalgae Biofuel Production: Recent Progress, Barriers, and Limitations
- Sustainable Energy & Power Systems Research Centre
- Most effective sources of renewable energy production

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

Benefitted on the awareness of emerging innovative technologies for enhancing Microalgae Bio fuel Production: Recent Progress, Barriers, and Limitations

**6. Participants**

- (i) Number of Staff Participants: 04
- (ii) Number of Students Participants: 20 ( UG Bio Technology )
- (iii) Number of External Participants (Staff/Students): 20

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**



## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : A Session on “Angel Investment/ VC Funding Opportunity for Early Stage Entrepreneurs “

**Expert Resource Speaker** : Mrs.P.Gayathri, Assistant professor.Department of Commerce,Muthayammal College of Arts and Science(Autonomous)

**Organizer** : Institution's Innovation Cell

**Date & Time** : 25/8/2023 ,& 2PM – 3.30PM

**Mode / Venue** : Offline Mode / D Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- To give an insight on Angel Investment/ VC Funding Opportunity for Early Stage Entrepreneurs
- To orient on the Techniques to bounce ideas, seek guidance and mentorship.

#### 2. Guest Details / Agenda

- Ms.GAYATHRI P, Assistant professor.Department of Commerce,Muthayammal College of Arts and Science(Autonomous)

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- The program designed to give an exposure on Angel Investors providing funds to small start-ups in projects
- The program designed to give an overview on seed capital to finance innovations in the pre-start up stage
- The pitfalls in the early stage of the start-ups, and methods to overcome them
- Brainstorming session on the techniques to bounce ideas, seek guidance and mentorship.

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**  
Affiliated to Periyar University, Salem  
Accredited by NAAC with 'A' Grade  
Recognized by UGC under Section 2(f) & 12 (B)  
Recognized by STAR College Scheme - DBT (2018 -2021)  
RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

**Institution's Innovation Council (IIC)**  
organizes  
**A Session**  
on  
**Angel Investment/VC Funding Opportunity for Early Stage Entrepreneurs**

Speaker  
Mrs. P. Gayathri,  
Assistant Professor of Commerce,  
Innovation Ambassador  
Muthayammal College of Arts  
and Science(Autonomous), Rasipuram

25<sup>th</sup> AUG  
2023  
2.00  
PM  
Venue : D - Block AV Hall

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**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

(i) Number of Staff Participants: 02

(ii) Number of Students Participants: 50 ( B.Com & B.Com CA – 1<sup>st</sup>,2<sup>nd</sup>,3<sup>rd</sup> years, BCA )

(iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**



## **Muthayammal College of Arts and Science**

### **Institution's Innovation Cell**

**( Established as per the norms of Ministry of Education's Innovation Cell )**

### **IIC Program / Event – Report**

**Title of Program** : A Session on “The Future of Work - Innovation Trends, Emergent Skills & Opportunities “

**Expert Resource Speaker** : Mr.R.Kaviarasan, Coordinator-IIC,R&D Member ,Muthayammal College of Arts and Science(Autonomous)

**Organizer** : Institution's Innovation Cell

**Date & Time** : 30/8/2023 ,& 2PM – 3.30PM

**Mode / Venue** : Offline Mode / D Block AV Hall

#### **1. Objective**

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- To emphasize Industry 4.0, Innovation & 21st Century Skills which intend to guide new objectives that address cutting-edge technology and creative thinking

#### **2. Guest Details / Agenda**

- Mr.R.Kaviarasan, Coordinator-IIC,R&D Member ,Muthayammal College of Arts and Science(Autonomous)

#### **3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)**

- **The outcome of the program emphasizing Industry 4.0, Innovation & 21st Century Skills which intend to guide new objectives that address cutting-edge technology and creative thinking.**
- **The millennial, technologies, globalization, mobility, new attitudes**
- **How workforces and workplaces can prepare for those changes about how work could shift**

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 02
- (ii) Number of Students Participants: 50 ( B.Com 1<sup>st</sup> Year & 2<sup>nd</sup> Year )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

<b>Title of Program</b>	: Orientation Session on Smart India Hackathon'2023
<b>Expert Resource Speaker:</b>	Mr.R.Kaviarasan, Coordinator-IIC, R&D Member, Muthayammal College of Arts and Science(Autonomous), Rasipuram
<b>Organizer</b>	: Institution's Innovation Cell
<b>Date &amp; Time</b>	: 14/9/2023 & 11:30PM – 12.30PM
<b>Mode / Venue</b>	: Offline Mode / C Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- To Orientate On Smart India Hackathon 2023 to nurture a culture of innovation
- To Orientate students in contributing their ideas against 16 predefined themes, ranging from technology and sustainability to healthcare and agriculture.

#### 2. Guest Details / Agenda

- Mr.R.Kaviarasan, Coordinator-IIC, R&D Member, Muthayammal College of Arts and Science(Autonomous), Rasipuram

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Explained about how to identify the problem in and around us with Use Case Scenarios
- Smart India Hackathon 2023 is a nationwide initiative to provide students a platform to solve some of the pressing problems we face in our daily lives, and thus inculcate a culture of product innovation and a mindset of problem solving.

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 04
- (ii) Number of Students Participants: 50
- (iii) Number of External Participants (Staff/Students): Nil

The Session / Program / Event posted on VMI Innovation cell Face book:

**Prepared By**

**Mr.R.Kavirasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : MoU Signing Ceremony with AIC RAISE BUSINESS INCUBATOR PRIVATE LIMITED

**Expert Resource Speaker** : Mr. Arun Raaj Manickaraj Associate Vice President - Atal Incubation Centre- RAISE BUSINESS INCUBATOR PRIVATE LIMITED

**Organizer** : Institution's Innovation Cell

**Date & Time** : 11/10/2023 , & 10 AM

**Mode / Venue** : Offline Mode / Principal Office

### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- A professionally driven structured Memorandum of Understanding between Muthayammal College of Arts and Science and AIC RAISE BUSINESS INCUBATOR PRIVATE LIMITED, Coimbatore
- To motivate, inspire, and ideate in early days which later drive ideas into meaningful products which is validated by industry experts

### 2. Guest Details / Agenda

- Mr. Arun Raaj Manickaraj Associate Vice President - Atal Incubation Centre- RAISE BUSINESS INCUBATOR PRIVATE LIMITED

### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- A professionally driven structured Memorandum of Understanding between Muthayammal College of Arts and Science and AIC RAISE BUSINESS INCUBATOR PRIVATE LIMITED, Coimbatore, signed on the 11th of October 2023
- Designed in a manner to bring maximum inclusion and opportunity for student entrepreneurs providing mentoring and support nurturing innovations and startups of varied sectors including social impact, technology, education etc. which are falling under the United Nation's Sustainable Development Goals.
- The MoU Program aims to motivate, inspire, and ideate in early days which later drive ideas into meaningful products which is validated by industry experts, collaborating to strengthen the start-up and innovation ecosystem in the region.

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

(i) Number of Staff Participants: 5

(ii) Number of Students Participants: 50 ( B.Com CA 2<sup>nd</sup>, year, BCA 1<sup>st</sup> & 2<sup>nd</sup> Yr, B.Sc CS 1<sup>st</sup> & 2<sup>nd</sup> Yr)

(iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : Innovative Ideas for New Entrepreneurs  
**Expert Resource Speaker** : Ms.A.Ramya,Assistant Professor of English, MCAS  
**Organizer** : Institution's Innovation Cell & EDC Cell  
**Date & Time** : 09/11/2023 & 10AM – 11.00 AM  
**Mode / Venue** : Offline Mode / C Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- With the objective of the program for opportunity creation with Entrepreneurial activities to influence local, regional & country's economic performance by bringing new products, methods more creatively.

#### 2. Guest Details / Agenda

- Ms.A.Ramya,Assistant Professor of English, MCAS
- 

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Entrepreneurial attitude: Innovation, opportunity seeking, risk taking, passion, bravery, flexibility, strong work ethics and integrity.
- Entrepreneurial behavior: Grasping opportunity, Taking initiative, Solving problems, Managing autonomously, Taking responsibility for, and ownership, of things, Seeing things through, Networking effectively to manage interdependence, Putting things together creatively, Using judgment to take calculative risk.

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

#### 4. Session / Program / Event Photographs



#### 5. Feedback ( Collected through Google Form Feed Back link )

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

#### 6. Participants

- (i) Number of Staff Participants: 02
- (ii) Number of Students Participants: 40 ( BA English 1<sup>st</sup> Yr: 20, B.Sc CS 1<sup>st</sup> Yr: 20 )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

#### Prepared By

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

<b>Title of Program</b>	: A Session on “Opportunity Meets Effort: Entrepreneurs as Job Creators “
<b>Expert Resource Speaker</b>	: Dr.C.Indira Priyadharsini , Assistant professor in physics , EDC Coordinator, Muthayammal College of Arts and Science(Autonomous), Rasipuram
<b>Organizer</b>	: Institution's Innovation Cell
<b>Date &amp; Time</b>	: 08/8/2023 & 2PM – 3.30PM
<b>Mode / Venue</b>	: Offline Mode / D Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- With the objective of the program for opportunity creation with Entrepreneurial activities to influence local, regional & country's economic performance by bringing new products, methods more creatively.

#### 2. Guest Details / Agenda

- Dr.C.Indira Priyadharsini , Assistant professor in physics , EDC Coordinator, Muthayammal College of Arts and Science(Autonomous), Rasipuram

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Entrepreneurship skills: Creative thinking, problem solving, communication, finance management, leadership skills, planning, decision making, market information and time management.
- Entrepreneurial attitude: Innovation, opportunity seeking, risk taking, passion, bravery, flexibility, strong work ethics and integrity.
- Entrepreneurial behavior: Grasping opportunity, Taking initiative, Solving problems, Managing autonomously, Taking responsibility for, and ownership, of things, Seeing things through, Networking effectively to manage interdependence, Putting things together creatively, Using judgment to take calculative risk.
- Explained about how to identify the problem in and around us with Use Case Scenarios

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 04
- (ii) Number of Students Participants: 53
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

<b>Title of Program</b>	: Orientation & Field Visit To Raise Awareness on Smart Innovative - Waste Management & Recycling
<b>Expert Resource Speaker</b>	: DR. S. ANBALAGAN, Associate Professor, Dept.of Microbiology, Muthayammal College of Arts and Science(Autonomous), Rasipuram
<b>Organizer</b>	: Institution's Innovation Cell
<b>Date &amp; Time</b>	: 26/9/2023 & 10AM – 12PM
<b>Mode / Venue</b>	: Offline Mode / A Block AV Hall & Field Visit @ MCAS

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To Orient & Field Visit To Raise Awareness on Smart Innovative - Waste Management & Recycling
- To give Awareness on solid waste management will change people's attitudes regarding trash.

#### 2. Guest Details / Agenda

- DR. S. ANBALAGAN, Associate Professor, Dept.of Microbiology, Muthayammal College of Arts and Science(Autonomous), Rasipuram

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Orientation & Field Visit To Raise Awareness on Smart Innovative – Waste Management & Recycling
- Innovations in waste management have proven successful in improving waste collection, disposal, and recycling while enabling traceability and transparency.
- Explained about Recycling visiting Waste Management & Recycling in MCAS campus with Use Case Scenarios

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 02
- (ii) Number of Students Participants: 40 ( UG B.Com, B.Com CA )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : Sustainability Hackathon'2023 : Solutions for Sustainability Challenges

**Expert Resource Speaker** : Mr.Arun Raaj Manickaraj Associate Vice President - Atal Incubation Centre- RAISE BUSINESS INCUBATOR PRIVATE LIMITED

**Organizer** : Institution's Innovation Cell

**Date & Time** : 11/10/2023 ,& 1 PM – 3.30 PM

**Mode / Venue** : Offline Mode / B Block Conference Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- To orient on the Techniques to bounce ideas, seek guidance and mentorship.
- Shortlisted Top 2 Teams from 10 Teams, by Jury

#### 2. Guest Details / Agenda

- Mr.Arun Raaj Manickaraj Associate Vice President - Atal Incubation Centre- RAISE BUSINESS INCUBATOR PRIVATE LIMITED

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- The program designed to give an exposure on Angel Investors providing funds to small start-ups in projects
- Brainstorming session on the techniques to bounce ideas, seek guidance and mentorship.
- Shortlisted 10 Teams presented their Ideas to Jury and Top 2 Teams were shortlisted for further Mentoring by both MCAS & AIC Raise

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 5
- (ii) Number of Students Participants: 50 ( B.Com CA 2<sup>nd</sup>, year, BCA 1<sup>st</sup> & 2<sup>nd</sup> Yr, B.Sc CS 1<sup>st</sup> & 2<sup>nd</sup> Yr)
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : Motivational Session for Successful Entrepreneurship & Start-up  
**Expert Resource Speaker** : Mr.A.Karthigaiselvam, Department of Business Administration,MCAS  
**Organizer** : Institution's Innovation Cell & EDC Cell  
**Date & Time** : 30/10/2023 & 1.30 – 3.00 PM  
**Mode / Venue** : Offline Mode / B Block Mini Seminar Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- With the objective of the program for opportunity creation with Entrepreneurial activities to influence local, regional & country's economic performance by bringing new products, methods more creatively.

#### 2. Guest Details / Agenda

- Mr.A.Karthigaiselvam, Department of Business Administration,MCAS

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Entrepreneurship skills: Creative thinking, problem solving, communication, finance management, leadership skills, planning, decision making, market information and time management.
- Entrepreneurial attitude: Innovation, opportunity seeking, risk taking, passion, bravery, flexibility, strong work ethics and integrity.
- Entrepreneurial behavior: Grasping opportunity, Taking initiative, Solving problems, Managing autonomously, Taking responsibility for, and ownership, of things, Seeing things through, Networking effectively to manage interdependence, Putting things together creatively, Using judgment to take calculative risk.
- Explained about how to identify the problem in and around us with Use Case Scenarios

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 02
- (ii) Number of Students Participants: 40 ( B.Com CA 2<sup>nd</sup> Yr: 10, BBA 2<sup>nd</sup> Yr: 20 )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : The Future of Car Rental - Trends and Innovations In The Industry

**Expert Resource Speaker** : Mr.R.Kaviarasan,MTech (IIT-Madras), Coordinator, Institution's Innovation Cell  
Muthayammal College of Arts and Science ( Autonomous)

**Organizer** : Institution's Innovation Cell & EDC Cell

**Date & Time** : 03/11/2023 & 11.15 – 12.45 PM

**Mode / Venue** : Offline Mode / B Block Mini Seminar Hall

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To highlight the shift toward environmentally friendly sustainable alternatives, integration of AI, ML and IoT technologies
- To give input on e-AMRIT

#### 2. Guest Details / Agenda

- Mr.R.Kaviarasan,MTech (IIT-Madras), Coordinator, Institution's Innovation Cell,Muthayammal College of Arts and Science ( Autonomous)

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- The emergence of new mobility solutions is reshaping the transportation landscape
- The future of the car rental industry is very exciting and promises significant evolution and growth, mainly fuelled by advancements in technology and changing consumer demands.
- Technology driven services, Electric Vehicles- Sustainability



**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 04
- (ii) Number of Students Participants: 40 ( BA English, B.Com 1<sup>st</sup> Yr )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**  
**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : Webinar on Carbon Zero Challenge and Ideas to Impact

**Expert Resource Speaker** : CZC Team, IIT - Madras

**Organizer** : Institution's Innovation Council & CZC Team IIT-Madras

**Date & Time** : 03/11/2023 & 1.30 – 3.00 PM

**Mode / Venue** : Online Mode / Google Meeting

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To orient on Carbon Zero Challenge and Ideas to Impact Challenge
- To create a Global impact by combining three powerful factors "Innovation & Entrepreneurship, Energy & Environment & Youth" to protect future generations

#### 2. Guest Details / Agenda

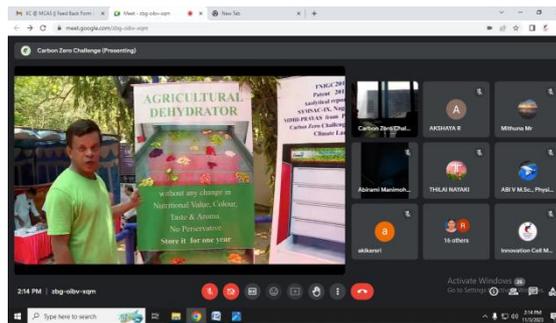
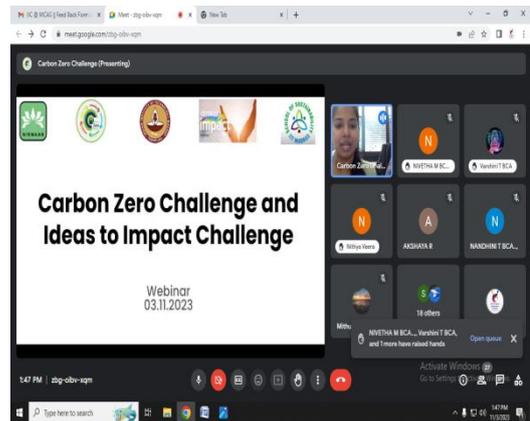
- CZC Team, IIT - Madras

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Carbon Zero Challenge (CZC) is a pioneering initiative by IIT Madras.
- The contest's uniqueness lies in the fact that it is one-of-its-kind initiative in its category that exclusively focuses on energy and environment technological innovations at a national level and supports the eco-entrepreneurs.
- The program's motto 'Ideate, Innovate, Incubate' essentially summarize IIT Madras's & IIC at MCAS's continuous efforts to enable an ecosystem where students/early stage start-ups from across the country ideate and innovate for the greater good of society and incubate start-ups to become job creators.

**Muthayammal College of Arts and Science  
Institution’s Innovation Cell  
( Established as per the norms of Ministry of Education’s Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 04
- (ii) Number of Students Participants: 8
- (iii) Number of External Participants (Staff/Students): 20

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

<b>Title of Program</b>	: Institution's Innovation Day _ Dr APJ Abdul Kalam's birth anniversary Celebration
<b>Expert Resource Speaker</b>	: Mrs.Sri Vidya, Asst. Prof. Dept of English, MCAS,& Presentations By IIC Student Members
<b>Organizer</b>	: Institution's Innovation Cell
<b>Date &amp; Time</b>	: 17/10/2023 , 11AM – 12.30 PM
<b>Mode / Venue</b>	: Offline Mode / B Block Conference Hall

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To commenate Dr APJ Abdul Kalam's birth anniversary Celebration
- To recognize the contributions of students , motivate them to keep innovating, and foster a positive and supportive innovation culture

#### 2. Guest Details / Agenda

- IIC Student Coordinators
- Mrs.Sri Vidya, Asst. Prof. Dept of English, MCAS

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Institution's Innovation Day : Dr APJ Abdul Kalam's birth anniversary Celebration  
The former Indian President Dr. APJ Abdul Kalam's birthday is commemorated on this day.
- Students Presented their impressions on Institution's Innovation Day
- Mrs.Sri Vidya, Asst. Prof. Dept of English, MCAS recited a poem to mark Dr. APJ Abdul Kalam's birthday anniversary Celebration

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

#### 4. Session / Program / Event Photographs



#### 5. Feedback ( Collected through Google Form Feed Back link )

IIC Student Members displayed exceptional creativity, focus, organizing & coordination skills guided by IIC Faculty members

#### 6. Participants

(i) Number of Staff Participants: 02

(ii) Number of Students Participants: 80 ( B.Com & B.Com CA – 1<sup>st</sup>,2<sup>nd</sup>,3<sup>rd</sup> years, BA English )

(iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

#### Prepared By

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**



## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : A Session on “Innovation and Entrepreneurship Opportunities in Bio Technology Industry “

**Expert Resource Speaker** : Dr. D. RAJASEKARAN, Ph. D, Assistant professor.Department of Biotechnology Muthayammal College of Arts and Science(Autonomous)

**Organizer** : Institution's Innovation Cell

**Date & Time** : 28/8/2023 ,& 2PM – 3.30PM

**Mode / Venue** : Offline Mode / D Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- To orient on Innovation and Entrepreneurship Opportunities in BioTechnology Industry

**2. Guest Details/Agenda** : Dr. D. RAJASEKARAN, Ph. D, Assistant professor.Department of Biotechnology, Muthayammal College of Arts and Science(Autonomous)

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- With the outcome of the program outlining Biotechnology entrepreneurship activities essential to building a successful biotechnology company
- Scope of the BioTech industry is adopting new concept innovative trends like artificial intelligence (AI), data analytics, and automation to optimize production
- Oriented on Innovation and Entrepreneurship Opportunities in BioTechnology Industry

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

- (i) Number of Staff Participants: 02
- (ii) Number of Students Participants: 40 (UG Bio Technology )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**  
**Mr.R.Kaviarasan, MTech(IIT-Madras)**  
**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

#### IIC Program / Event – Report, [ Out Reach Activity ]

**Title of Program** : Orientation Session to Sensitize Students on Smart India Hackathon'2023  
**Expert Resource Speaker** : Mr.R.Kaviarasan, Coordinator – IIC, Member R&D, MCAS  
**Organizer** : Dhanalakshmi Srinivasan Engineering College ( Autonomous ),Perambalur  
**Date & Time** : 23/9/2023 , 10AM – 12PM  
**Mode / Venue** : Online Mode / Google Meeting

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To give an Exposure in Idea Development, Evaluation & Application
- To Orientate On Smart India Hackathon 2023 to nurture a culture of innovation
- To share Knowledge & Technical skill as an MoE's IIC Out Reach Activity

#### 2. Guest Details / Agenda

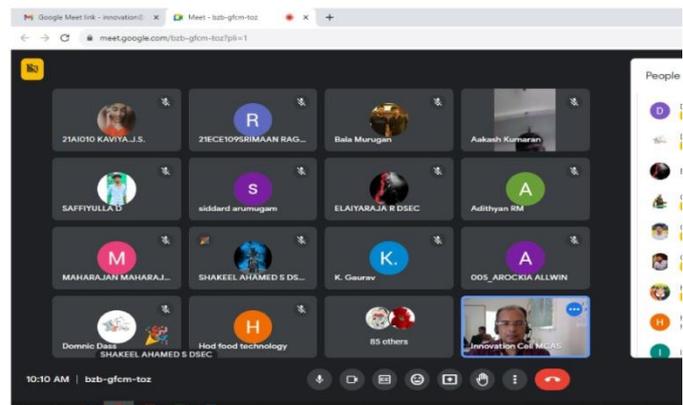
- Mr.R.Kaviarasan, Coordinator – IIC, Member R&D, MCAS
- Dhanalakshmi Srinivasan Engineering College ( Autonomous ),Perambalur

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Orientate students in contributing their ideas against 16 predefined themes, ranging from technology and sustainability to healthcare and agriculture.
- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Explained about how to identify the problem in and around us with Use Case Scenarios
- Orientate students in contributing their ideas against 16 predefined themes, ranging from technology and sustainability to healthcare and agriculture.

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

#### 4. Session / Program / Event Photographs



#### 5. Feedback ( Collected through Google Form Feed Back link )

IIC Student Members displayed exceptional creativity, focus, organizing & coordination skills guided by IIC Faculty members

#### 6. Participants

- (i) Number of Staff Participants: 01
- (ii) Number of Students Participants: 03
- (iii) Number of External Participants (Staff/Students): 5 / 90

**The Session / Program / Event posted on Linked in Self :**

#### Prepared By

**Mr.R.Kaviarasan, MTech(IIT-Madras)**  
**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : World Entrepreneurs Day Celebration

**Expert Resource Speaker** : Dr.P.Selvakumaran, Director Academics, Vanetra Muthayammal Institutions

**Organizer** : Institution's Innovation Cell & EDC Cell

**Date & Time** : 21/8/2023 & 11.30AM – 12.30PM

**Mode / Venue** : Offline Mode / D Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- Mind's eye for business implementation
- The need to become Entrepreneurs

#### 2. Guest Details / Agenda

- Dr.P.Selvakumaran, Director Academics, Vanetra Muthayammal Institutions

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Scouting for opportunities to identify Problem Statements to find a feasible solution
- Entrepreneurial attitude: Innovation, opportunity seeking, risk taking, passion, bravery, flexibility, strong work ethics and integrity.
- Precise identification of Problem Statement, Pain Points
- Explained about how to identify the problem in and around us with Use Case Scenarios

**Muthayammal College of Arts and Science  
Institution's Innovation Cell  
( Established as per the norms of Ministry of Education's Innovation Cell )  
IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation, startup, entrepreneurship initiatives and is career oriented.

**6. Participants**

(i) Number of Staff Participants: 04

(ii) Number of Students Participants: 40, ( B.Sc Physics, B.Com )

(iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

<b>Title of Program</b>	: Institution's Innovation Cell & EDC jointly organize AICTE Funded IDEA Labs Exposure Visit at KSR College of Technology, Thiruchengode
<b>Expert Resource Speaker</b>	: AICTE Funded IDEA Labs at KSR College of Technology, Thiruchengode
<b>Organizer</b>	: Institution's Innovation Cell & EDC cell
<b>Date &amp; Time</b>	: 20/9/2023 , 11AM – 3PM
<b>Mode / Venue</b>	: Offline Mode / KSRCT

#### 1. Objective

- To conduct program on the guidelines of Ministry of Education's Innovation Cell
- To give an Exposure in Idea Development, Evaluation & Application
- To Enhance hands-on experience, learning by doing, and product visualization
- To get an exposure to state-of-the-art tools and equipments

#### 2. Guest Details / Agenda

- 16 IIC Student Members, and
- Dr.N.Sudhaker, Mr.Kaviarasan,Dr.C.Indira Priyadharshini

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- Creating a sustainable ecosystem for promoting technology transfer in the Field of STEM
- Equip participants with the tools & technology necessary to turn their ideas into tangible prototypes, enabling real-world testing and iteration.
- Up skilling the future India, increase employment and to promote entrepreneurship / startup

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

IIC Student Members displayed exceptional creativity, focus, organizing & coordination skills guided by IIC Faculty members

**6. Participants**

- (i) Number of Staff Participants: 03
- (ii) Number of Students Participants: 16 ( B.Com & B.Com CA, BCA, B.Sc CS, B.Sc E&C )
- (iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

## Muthayammal College of Arts and Science

### Institution's Innovation Cell

( Established as per the norms of Ministry of Education's Innovation Cell )

### IIC Program / Event – Report

**Title of Program** : Chandrayaan Mahotsav Celebration  
**Expert Resource Speaker** : IIC Students Members & IIC Faculty Members  
**Organizer** : Institution's Innovation Cell  
**Date & Time** : 04/9/2023 & 2PM – 3.30PM  
**Mode / Venue** : Offline Mode / D Block AV Hall

#### 1. Objective

- The program conducted on the guidelines of Ministry of Education's Innovation Cell
- Celebrating at Muthayammal College of Arts and Science the successful launch completion of Chandrayaan-3 with presentations & webcast of the launch by IIC student members

#### 2. Guest Details / Agenda

- IIC Students Members & IIC Faculty Members

#### 3. Key Points / Subject / Topic dealt with (minimum 5-10 lines)

- CHANDRAYAAN MAHOTSAV Celebrating @ Muthayammal College of Arts and Science the successful launch completion of Chandrayaan-3
- Presentations & webcast of the launch by IIC student members
- A Talk by Mrs. Ramya Madam, Faculty Dep. of English, highlighting the vital boost to catalyze employment generation, country's space-tech ecosystem.

**Muthayammal College of Arts and Science**  
**Institution's Innovation Cell**  
**( Established as per the norms of Ministry of Education's Innovation Cell )**  
**IIC Program / Event – Report**

**4. Session / Program / Event Photographs**



**5. Feedback ( Collected through Google Form Feed Back link )**

The outcomes & content is relevant to academic, and to pursue creativity & innovation.

**6. Participants**

(i) Number of Staff Participants: 02

(ii) Number of Students Participants: 30 ( 10 B.Com, 20 BA English )

(iii) Number of External Participants (Staff/Students): Nil

**The Session / Program / Event posted on VMI Innovation cell Face book:**

**Prepared By**

**Mr.R.Kaviarasan, MTech(IIT-Madras)**

**Coordinator – IIC / MCAS**

**Title of the Event:** Hands-on Training in DNA Taxonomy & Phylogeny

**Event Type:** Training program

## 1. Objective

To provide knowledge and training in DNA taxonomy and phylogenetic tools used in the field of biological research, this would provide an added advantage for the growth of the students and researchers.

## 2. Agenda

Duration & Date: 2 days – 14/09/2023 & 15/09/2023

Venue: A1 Computer Lab

Course Instructors: Dr. Amit Kumar, Center for Climate Change Studies, Sathyabama Institute of Science and Technology, Chennai.

Dr. Raghu Chandrasekaran, Department of Biotechnology (R&D), Muthayammal College of Arts and Science, Rasipuram.

## 3. Subject / Topic dealt

Students were taught about the terms and concepts used in DNA taxonomy phylogeny, quality check of sequence chromatogram, selection of substitution models, phylogenetic tree construction, interpretation of results, sequence retrieval and deposition in databases.

## 4. Photographs





## 5. Feedback

- Participants appreciated the way the hands-on was conducted (theory & practical sessions in parallel)
- Participants were impressed with the course format, way of teaching and gained enough knowledge on the topic.

## 6. Participation

Number of students participated – 30

Students and research scholars from ICMR – VCRC, Kottayam; ZSI, Kozhikode; TNHS, Travancore; The American College, Madurai; Auxilium College, Vellore; and Life Science students of MCAS participated in the program.



**Feedback**

<i>Name</i>	<i>Institute / College</i>	<i>Role</i>	<i>How did you come to know about the program</i>	<i>Overall impression of the course and its format? (Rate between 0 to 5) (0=poor, 5= best)</i>	<i>Did the course live up to your expectations? (Rate between 0 to 5) (0=poor, 5= best)</i>	<i>Do you think the course gave you enough knowledge to begin data analysis on your own dataset?</i>	<i>Have you been actively participated during the course?</i>	<i>How did you find the lecturers and their way of teaching? (Rate between 0 to 5) (0=poor, 5= best)</i>	<i>Suggest how the lectures/practical sessions can be improved in future</i>	<i>What was the most appreciated/enjoyable/best thing about the course?</i>
Gayathri v	The American College	Research Scholar	Others (Mailing lists)	5	5	Yes	Yes	5		The workshop concentrated more on the hands training which was really good to gain experience
Harish Kumar Shah	ICMR-VCRC	Research Scholar	Flyer	Very informative and interactive training program. It was a well organised program. 5	5	Yes	Yes	5	Throughout its was good.	Hands on training with raw data



PHILOMI NA A F	Auxilium college (autonomous)	Research Scholar	Others (Mailing lists)	5	5	Yes	Yes	5	It was so good and very informative	The lecture did not lag ...it was not boring
Fathima P A	ICMR Vector Control Research Centre, field station Kottayam	Research Scholar	Flyer	5	5	Yes	Yes	5		Everything explained with practical session
mohammad faizan j	muthayammal college of arts and science Rasipurasi- puram	PG	Flyer	05	05	Yes	Yes	05	improved very much	way of teaching is much good
JAYASRI. J	MUTHAYA MMAL COLLEGE OF ARTS AND SCIENCE	PG	Flyer	5	5	Yes	Yes	5	Not with class it's with the system we using	Practical classes
N. Gayathri	Muthayamma l college of arts and science	PG	Flyer	5	5	Yes	Yes	5	Not with classes it's with a system we are using	Practical class
M.Iswarya	Muthayamma	PG	Flyer	4	4	Yes	Yes	5	Not with classes	Practical classes



	l college of arts and science								it's with the system we are using it get hang or other reasons	
Vikram .s	Muthayamma l college of arts and science	UG	Flyer	4	4		Yes	5		
Mohan.R	muthayammal college of arts and science	PG	Flyer	5	5	Yes	Yes	5		
Rebecca Vinolia	Auxilium College (Autonomous )	Research Scholar	Flyer	5	5	Yes	Yes	5	Various software used in bioinformatics can be taught	It was illuminating and resourceful
MONISH V	Muthayamma l College Of Arts And Science	PG	Flyer	5	5	Yes	Yes	5	the session is good and improve than this session, is use for you	it is a good session to me
ANUPRIY A R	MUTHAYA MMAL COLLEGE OF ARTS AND	PG	Flyer	4	4	Yes	Yes	4	-	Practical



	SCIENCE									
Durgadevi P	Muthayamma l college of arts and science	PG	Others (Mailing lists)	5	5	Yes	Yes	5	No suggestion	Everything fine
THASIN IRFANA I	MUTHAYA MMAL COLLEGE OF ARTS AND SCIENCE, AUTONOM OUS, RASIPURA M	UG	Flyer	4	4	Yes	Yes	5	Nil	Hands on training
Yanmozhi S	Muthayamma l college of arts and science Rasipuram	UG	Flyer	5	4	Yes	Yes	5	Nil	Hands on training
SRIRAM K	Muthayamma l college of arts and science	PG	Flyer	4	4	Yes	Yes	5		We learn more about taxonomy and current research ideas....The tutor guest and



										quardinator support us more...Thank you
GOWTHA M.S	MUTHAYAMMAL COLLEGE OF ART AND SCIENCE	PG	Flyer	5	5	Yes	Yes	4	UESD TO OUR FUTURE	INTERSETING TO LEARN THE TOPIC
Kamila A. P.	Zoological Survey of India, WGRC, Kozhikode, India	Research Scholar	Flyer	5	5	Yes	Yes	5	Include a demo session on how the DNA sequencing is getting done in the lab.	The hands on training, the lectures, the way of presenting
RENUGA P	MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE	PG	Flyer	5	5	Yes	Yes	5	Yes	Practical
B. Swetha	Muthayamma l college of arts and science	PG	Flyer	4/5	4/5	Yes	Yes	4/5	-	Practical session



KIRUTHIGA C	Muthayamma college of Arts and Science	PG	Others (Mailing lists)	5 =best	5 =best	Yes	Yes	5 = best	The lecture improved in future practical sessions	The most appreciated best thing about the course
Mohan.R	mcas	PG	Flyer	5	5	Yes	Yes	5	This lectures usefull for my future	yes
Nandhini. S	Muthayamma college of arts and science rasipuram	PG	Others (Mailing lists)	5=best	5=best	Yes	Yes	5=best	The lectures improved in future practical	The most appreciated best thing about the course
Priya Gothandapani	Vanetra muthayammal college of arts and science Rasipuram	PG	Flyer	5	5	Yes	Yes	5	Overall nice...sometimes face the technical difficult	Chief not only reaching the session...he is also help to the output also.

## **Six Point Report**

**Title:** One Day training program on Development of Herbal Products-Oil, Soups & powder

**Date:** 28.04.2022

**Venue:** A Block Conference Hall

**No. of Participants:** 82

- 82 Students from various departments were attended and benefited by this program
- In this program Academic director explained the importance and values of medicinal plants in the treatment of various diseases.
- Preparation of Herbal Hair oil (Antidandruff) and pain relieving oil was explained and prepared.
- Herbal Soups- Preparation methods were explained and prepared practically for health purposes.
- Herbal Bathing Powder & Facial cream were explained and prepared.
- All the participants were actively participated and benefited.

## **Six Point Report**

**Title:** One Day training program on Development of Herbal Products-Oil, Soups & powder

**Date:** 21.06.2022

**Venue:** A Block Conference Hall

**No. of Participants:** 102

- 102 Students from various departments were attended and benefited by this program
- In this program Academic director explained the importance and values of medicinal plants in the treatment of various diseases.
- Preparation of Herbal Hair oil (Antidandruff) and pain relieving oil was explained and prepared.
- Herbal Soups- Preparation methods were explained and prepared practically for health purposes.
- Herbal Bathing Powder & Facial cream were explained and prepared.
- All the participants were actively participated and benefited.

## **Six Point Report**

**Title:** One Day training program on **HANDLING AND CARE OF LABORATORY ANIMALS**

**Date:** 11.8.23 -12.8.23    **Time:** 9.30 am to 4 pm,

**Venue:** A Block Conference Hall

**No. of Participants:** 38

- 38 Students from various departments were attended and benefited by this program
- In this program Academic director explained the importance of Lab animal experimentation .
- We have given a talk on the Biology of Laboratory Animals and handling and maintenance of laboratory animals according to CPCSEA guidelines.
- Route of drug administration and biological sample (specimen) collection explained.
  
- We have provided practical demo for handling, routes of administration and specimen collections, Analgesics, Anesthesia methods & Surgical procedures
- All the participants actively participated and benefited.

## Six Point Report

**Title:** One Day training program on **HANDLING AND CARE OF LABORATORY ANIMALS**

**Date:** 04.11.2022, **Time:** 9.30 am to 4 pm,

**Venue:** A Block Conference Hall

**No. of Participants:** 30

- 30 Students from various departments were attended and benefited by this program
- In this program Academic director explained the importance of Lab animal experimentation .
- We have given a talk on the Biology of Laboratory Animals and handling and maintenance of laboratory animals according to CPCSEA guidelines.
- Route of drug administration and biological sample (specimen) collection explained.



- We have provided practical demo for handling, routes of administration and specimen collections, Analgesics, Anesthesia methods & Surgical procedures
- All the participants actively participated and benefited.



**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE, (AUTONOMOUS)  
RASIPURAM**

**Department of Chemistry**

**Workshop on - Research Methodology**

**1. Objective:**

To provide students a practical perspective of high-end instruments and it will make use of them in their research.

**2. Agenda:**

**Research person:** Dr. N. Sudhakar,

**Designation:** R& D Head, Muthayammal College of Arts and Science (Autonomous), Rasipuram

**Venue:** R& D lab

**Date:** 16-11-2022

**Time:** 10 pm to 4.00 pm

**3. Subject/topic deal with (minimum 5-10 lines)**

The students learned about the functioning and uses of the following instruments:

- IR spectrometer
- UV-Visible spectrometer
- HPLC
- Deep freezer
- Gel Doc
- QPCR

#### 4. Photographs 4 nos (for both FN and AN session)



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RASIPURAM, NAMAKKAL Dt -637 408, TAMIL NADU, INDIA

### Department of Chemistry

*Organizes*

### Workshop

on

## Research Methodology



16<sup>th</sup> NOV  
2022



01.30  
PM

**Venue : R & D Lab**

**Participant: M.Sc., Chemistry Students**



**Speaker**

**Dr. N. SUDHAKAR**

R & D Head

Muthayammal College of Arts and Science (Autonomous)  
Rasipuram

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## 5. Feedback:

- ✓ The students learnt about the handling of IR and UV Spectroscopy, HPLC and QPCR techniques.
- ✓ It's useful for their M. Sc., project.

6. (i) Number of Staff Participants – 3

(ii) Number of Students Participants - 56