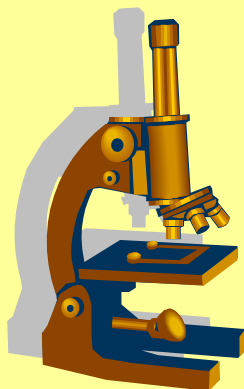




**TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE  
COLLEGE (GIRLS), KHAMMAM  
ACTIVITIES REPORT  
DEPARTMENT OF MICROBIOLOGY**

**AY-2023-24**



Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world.

- Louis Pasteur

TELANGANA TRIBAL WELFARE  
DEGREE COLLEGE (GIRLS),  
KHAMMAM  
NATIONAL SCIENCE DAY-2024

On the Occasion of National Science day 2024, Telangana Tribal Welfare Residential Degree College(G) Khammam in collaboration with Telangana Academy of Sciences (TAS) has organized one day seminar at TTWRDC (G) Khammam on 27.02.2024. As a part of this Programme, eminent and Dynamic Personalities like Prof. S. Satyanarayana, Former Vice Chancellor of Osmania University & General Secretary of TAS, Prof. Kotha Laxma Reddy, Professor of Chemistry (Retd.), NIT Warangal & Zone- IV Coordinator, TAS and Dr.V.Sambasiva Rao, District Coordinator of TAS & Assistant Professor of Mathematics, SR & BGNR Government Arts and Science College were invited.

**Telangana Tribal Welfare Residential Degree College for Girls - Khammam**  
*In Collaboration with*  
**Telangana Academy of Sciences (TAS) - TS**  
**One Day Seminar on the occasion of National Science Day - 2024**  
**Theme : " Indigenous Technologies for Viksit Bharat "**  
**Topic : Environmental Issues & Challenges**  
**Date : 27-02-2024      Time : 2.30 Pm**

<b>Chief Guest</b> <b>Prof. S. Satyanarayana</b> Former Vice Chancellor Osmania University Gen. Secretary Telangana Academy of Sciences - TS	<b>Guest of Honour</b> <b>Prof. K. Laxma Reddy</b> Professor (HAG) of Chemistry (Retd.) NIT-Warangal Zone-IV Coordinator Telangana Academy of Sciences - TS	<b>Guest of Honour</b> <b>Dr. V. Sambasiva Rao</b> Assistant Professor of Mathematics SR&BGNR GASC- Khammam District Coordinator-Khammam Telangana Academy of Sciences - TS
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**PRINCIPAL & STAFF**



**Telangana Tribal Welfare Residential Degree College for Girls, Khammam**

*In Collaboration with*

**Telangana Academy of Sciences (TAS) - TS**

**One Day Seminar on the occasion of  
National Science Day - 2024**

Theme : " Indigenous Technologies for Viksit Bharat "

**Topic : Environmental Issues & Challenges**

**Date : 27-02-2024**

**Time : 2.30 Pm**

**Chair Person**

**Chief Guest**

**Guest of Honour**

**Guest of Honour**



**KONDABATHINI MANASA**  
Principal  
TTWRDC(Girls)-Khammam



**Prof. S. Satyanarayana**  
Former Vice Chancellor  
Osmania University  
Gen. Secretary  
Telangana Academy of  
Sciences - TS



**Dr. K. Laxma Reddy**  
Professor (HAG) of Chemistry (Retd.)  
NIT-Warangal  
Zone-IV Coordinator  
Telangana Academy of  
Sciences - TS



**Dr. V. Sambasiva Rao**  
Assistant Professor of Mathematics  
SR&BGR GASC- Khammam  
District Coordinator-Khammam  
Telangana Academy of  
Sciences - TS

***" Success can come to you by courageous devotion to  
the task lying in front of you " - C.V. Raman***

All the invitees and Guests were welcomed by Parade and March Past by NCC Students. Principal, TTWRDC (W) Khammam welcomed them by presenting them bouquets and gave them a grand welcome.







The Programme was started by Hareesh.B, Lecturer in Physics & Convener Of National Science day at TTWRDC (G), Khammam by inviting distinguished guests, namely K. Manasa, Principal, TTWRDC

(W) Khammam, Prof.S.Satyanarayana, Chief Guest, Prof. Kotha Laxma Reddy, Guest of Honour and Dr.V.Sambasiva Rao, District Coordinator of TAS, Khammam(Dist). All the distinguished Guests were invited to lighten the Lamp on the stage. After lightening the Lamp, there was a message to the students by the convener of the programme. The Convener spoke about the importance of celebrating Science Day and told the students about it's the theme "Indigenous Technologies for Viksit Bharat" for the year 2024.



After the message by the convener of the programme, there was welcome address by Dr.V.Sambasiva Rao, Assistant Professor of Mathematics, SR & BGNR GDC, Khammam and District Coordinator for TAS. He also stressed the significance of Science Day -2024 and its theme. He mainly focused on career opportunities of B.Sc graduates once they finish their graduation, how to set a goal and strategies before their studies being completed. He also gave a brief Introduction of TAS and its functionalities. After that Ms. K. Manasa, Chair Person of the programme and Principal of TTWRDC (W) Khammam addressed the gathering. She extended her warm welcome to distinguished guests and expressed her gratitude towards TAS for funding National Science Day Celebrations - 2024 at TTWRDC (W), Khammam. She also appreciated all the students for their active participation in different competitions held at the college on the occasion of National Science Day. She concluded her speech by saying a moral story to habituate good Scientific Temper among the students.





This was followed by Introduction of Telangana Academy of Sciences by our Guest of Honour, Prof.K.Laxma Reddy, Zone IV Coordinator, TAS addressed the students. He gave a comprehensive introduction of TAS and explained how TAS is consistently working for science promotion by aiding various science related activities in schools and colleges. He also explained that the aims and objectives of the academy are mainly advancement of science and technology by providing a forum for discussing scientific developments, propagating scientific knowledge among the people and publication of books & journals on science. He mainly stressed on the objectives like the advancement of science in Telangana to provide a forum for reading and discussing



scientific papers, propagation of science knowledge among people by organizing lectures, seminars, workshops, symposia, exhibitions and distribution of books of popular sciences.

After this, the session was continued with amazing and inspirational speech by Prof S.Satyanarayana, Chief Guest of the programme and General Secretary for TAS. His speech mainly focused on environmental sustainability, making ecological balance, hazards of environmental pollution, causes for global warming and measures we should take in order to reduce pollution and maintain ecological balance. He made every student understand easily in such a way that even a non science student understood and interpreted the speech well. It was a systematic organization of all his thoughts, experiences and knowledge to grace us. It was such a lecture which showed the real impact on students. This was ended with a great round of applauds from students.

Before completion of this inaugural session, there was a poster presentation by B.Sravani, I MPC on “Sustainable Environment Development”. She presented her presentation in front of the guests, faculty and students. Her presentation has got a huge response from faculty, students and distinguished guests. There was a huge appreciation to her by all the participants.



After completion of inaugural session, Prof.K.Laxma Reddy, Zone IV Coordinator, TAS delivered a seminar on the topic “Environmental Issues and Challenges”. He explained the students how environmental activities are causing environmental pollution. He covered the topics like Climate Change, Air Pollution, Water Pollution, soil Contamination, Global Warming, Ozone Layer Depletion etc. He suggested the students certain solutions like replacing disposable items with reusable items, conservation of water and electricity, solid waste management, less paper usage, using biodegradable covers instead of polythene, less usage of pesticides, more usage of bio fertilizers, supporting environmental friendly practices like electric bikes and cars, solar power etc. His seminar ended with a big appraisal by the students and faculty.



The immediate activity after completion of seminar was distribution of prizes to winners of Essay Writing, Poster presentation and Science Quiz conducted during 23/02/2024 to 26/02/2024 on the occasion of National Science Day.

The Participants along with their prize winning rank in Essay writing and Poster Presentation is given below.

SL.No	Name Of The Competition	Name Of the Student	Group	Status of prize	Topic
1	Essay Writing	T.Sai Chandana	I MPCS	First Prize	Indigenous Technologies for Viksit Bharat.
2	Essay Writing	T.Naga Kavya Sri	I MSDS	Second Prize	Indigenous Technologies for Viksit Bharat.
3	Essay Writing	J. Kavya	II MBZC	Third Prize	Indigenous Technologies for Viksit Bharat.
4	Poster Presentation	A. Sravani	I MPC	First Prize	Sustainable Developmental Goals.
5	Poster Presentation	A. Indhu	II MSDS	Second Prize	Sustainable Developmental Goals.
6	Poster Presentation	D. Nandini	I MPCS	Third Prize	Sustainable Developmental Goals.



There was also distribution of first and second prizes in Science Quiz competition to the teams consisting of 10 members each by our Guest of Honour, Prof. T.Laxma Reddy sir.

The Participants along with their prize winning rank in Quiz Competition is mentioned below.

SL.No	Name Of The Competition	Name Of the Student	Status of Prize	Group	Remarks
1	Science Quiz	B.Swetha Sri	First	III B.Com(CA)	
2	Science Quiz	B.Shirisha	First	III BA	
3	Science Quiz	S.Apoorva	First	II MPCS	
4	Science Quiz	B.Manasa	First	II BZC	
5	Science Quiz	T.Sudharani	First	II MSDS	
6	Science Quiz	B.Lavanya	First	II BZC	
7	Science Quiz	S.Anusha	First	II MSDS	
8	Science Quiz	B.Pavani	First	I MSDS	
9	Science Quiz	B.Srikala	First	I BZC	
10	Science Quiz	Ch.Jyothi	First	III MPCS	

SL.No	Name Of The Competition	Name Of the Student	Status of prize	Group	Remarks
1	Science Quiz	T.Samatha	Second	III MPCS	
2	Science Quiz	D.Ganga	Second	III MSDS	
3	Science Quiz	K.Sowjanya	Second	III MSDS	
4	Science Quiz	L.Mounika	Second	II MPCS	
5	Science Quiz	T.Srividhya	Second	II BZC	
6	Science Quiz	D.Nikitha	Second	II MBZC	
7	Science Quiz	Ch.Divya	Second	II BZC	
8	Science Quiz	B.Akshitha	Second	I MSDS	
9	Science Quiz	E.Kavya	Second	III BA	
10	Science Quiz	V.Priyanka	Second	III B.Com	





After this, there was a felicitation to Guests by K.Manasa, Principal, TTWRDC (W) Khammam and faculty as a token of respect. Students really felt happy for this session where they have so much Knowledge added to their minds. It was a real motivational session, session giving scientific temper and session of much knowledge shared.







# “GENE-HEALTH CONNECT” CCMB MOBILE VAN EXHIBITION ON 12-03-2024



## ABOUT THE PROGRAM:

CSIR-Centre for Cellular and Molecular Biology (CCMB) has developed a Mobile Science Exhibition (MSE) on Genetic Diseases ‘Gene-Health Connect’ in collaboration with the National Council of Science Museums. The bus (with 20 exhibits) is visiting colleges and hospitals of the Telangana and Andhra Pradesh states and creating awareness on how genes function to determine our characteristics, and how genetic diseases spread and can be prevented as well



as managed.

"The exhibition aims to educate young people on genetic diseases and how they can be managed and prevented," 7-9 cr Indians are estimated to suffer from genetic diseases. Earlier studies from CCMB had suggested that in-breeding in small communities propagates many of these diseases.

## OBJECTIVES:

- To create awareness on Genetical diseases.
- To create awareness about relation between Genes and health of the humans.
- To make understand using 3D models



## PROGRAM OUTLINE:

The mobile van was reached the college in the early morning, the program was inaugurated by Our beloved principal K.Manasa garu. The Coordinator Mr.Kedarnath garu explained to all the students about the Genetical aspects and concerned disease and possible ways to avoid such diseases.



Students listened to the session very interestingly and later students visited all the 20 exhibits one by one very enthusiastically and the facilitators of the Exhibition as well as the life science faculty have explained about each condition and the consequences and possible precautions to them. The entire program was so informative and created awareness on the Gene Health.

# STUDENT SEMINAR 03-01-2024 ON THE TOPIC BACTERIAL CELL

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## ABOUT THE PROGRAM:

As a part of encouraging the students involvement in the class room student seminar was conducted by the department of Microbiology. One student from MZC 1<sup>st</sup> year Miss Sruthi came forward to give seminar on the topic BACTERIAL CELL.

## OBJECTIVES:

- To involve the students in the subject.
- To implement experiential learning.
- To encourage the teaching skills in the students.



## PROGRAM OUTLINE:

- The student prepared the material for the seminar with the help of the department and also by referring the books.
- On the Day of seminar the student gave the lecture by using PPT as well as black board.

## **TEACHING-LEARNING METHOD INVOLVED:**

- **Experiential Learning-** By performing the test for number of times students experienced the topic by practicing it and understood very clearly.
- **Collaborative Learning-** As the Students performed the tests in a collective manner they have learned by discussing with each other.

## **TEACHING-LEARNING PRACTICES:**

- **Active Learning-**Students involved in the program by making their own notes, PPTs and through Q &A session they have participated in the session.

## **Q & A SESSION:**

- Students asked their doubts and the speaker cleared doubts and the faculty also helped to clear the student's doubts.



# STUDENT SEMINAR 03-01-2024 ON THE TOPIC MORPHOLOGY OF VIRUSES

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## ABOUT THE PROGRAM:

As a part of encouraging the students involvement in the class room student seminar was conducted by the department of Microbiology. One student from MZC 2<sup>nd</sup> year Miss Nikhitha came forward to give seminar on the topic MORPHOLOGY OF VIRUS.

## OBJECTIVES:

- To involve the students in the subject.
- To implement experiential learning.
- To encourage the teaching skills in the students.



## PROGRAM OUTLINE:

- The student prepared the material for the seminar with the help of the department and also by referring the books.
- On the Day of seminar the student gave the lecture by using PPT as well as black board.

## **TEACHING-LEARNING METHOD INVOLVED:**

- **Experiential Learning-** By performing the test for number of times students experienced the topic by practicing it and understood very clearly.
- **Collaborative Learning-** As the Students performed the tests in a collective manner they have learned by discussing with each other.

## **TEACHING-LEARNING PRACTICES:**

- **Active Learning-**Students involved in the program by making their own notes, PPTs and through Q &A session they have participated in the session.

## **Q & A SESSION:**

- Students asked their doubts and the speaker cleared doubts and the faculty also helped to clear the student's doubts.

# QUIZ COMPETITION ON THE TOPIC STERILIZATION TECHNIQUES ON 22-01-2024

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## INTRODUCTION

The Department of Microbiology organized a quiz competition on January 22, 2024, focused on the topic Sterilization techniques. The competition aimed to enhance students' understanding of different types of sterilization techniques and to encourage a healthy competitive spirit among them. This interactive event provided an engaging platform for students to showcase their knowledge and learn more about the History of microorganisms.

## OBJECTIVES

- To reinforce students' knowledge of Sterilization techniques.
- To encourage active learning and participation among microbiology students.
- To foster a spirit of healthy competition and teamwork.

## PROGRAM SUMMARY

### a. Preparation and Organization

The quiz competition was meticulously planned by the faculty members of the Department of Microbiology. The quiz content was designed to cover different types of sterilization techniques like Autoclaving, Hot air oven, UV radiation., etc. Students were informed about the competition in advance and were encouraged to prepare thoroughly.

### b. Participants

The competition was open to all 3 Years microbiology students and everyone participated. The participants were divided into 03 teams, each consisting of 4 members. This team-based approach encouraged collaboration and collective problem-solving.

### c. Quiz Format

The quiz was structured into multiple rounds, each testing different aspects of the topic:

#### Quiz Rounds

- Round 1: Basic Concepts - Questions on the fundamental concepts of sterilization
- Round 2: Scientists and their Contributions to sterilization techniques
- Round 3: Different sterilization techniques.
- Round 4: Rapid Round





### **TEACHING-LEARNING PRACTICES:**

- **Collaborative Learning-** As the students are participating as a team and discussing on the topic they are learning collaboratively.
- **Peer learning and Active learning-** by conducting the quiz we are enabling the peer learning and as well as active learning.