



**TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE
COLLEGE FOR (W)
RAJANNA SIRICILLA - DEPARTMENT OF ZOOLOGY**



**ACTIVITIES
FOR THE
AY- 2022-2023**

DEPARTMENT ACTION PLAN (2022-23)			
MONTH	DATE	ACTIVITY	DESCRIPTION
AUGUST	20/08/2022	mosquito day	awareness programme among people to eradicate malaria
	31/08/2022	student seminar	encourage and motivate towards confidence
SEPTEMBER	16/09/2022	ozone day celebration	spread out awareness on OZONE layer depletion
	23/09/2022	student seminar	encourage and motivate towards confidence
OCTOBER	10/10/2022	world mental health	to raise awareness on mental health issues around and to mobilize efforts in support of mental health
	13/10/2022	quiz	to build knowledge and boost confidence
NOVEMBER	07/11/2022	cancer awareness day	to create public awareness about early detection, prevention, and treatment
	11/11/2022	quiz	
	22/11/2022	student seminar	encourage and motivate towards confidence
	32/11/2022	week end test	to identify student strength and weakness
DECEMBER	01/12/2023	HIV AIDS DAY	to raise awareness and knowledge about HIV call to move towards ending HIV
	07/12/2022	student activity	to observe animal behaviour
JANUARY	18/01/2023	student seminar	to identify student strength and weakness
	30/01/2023	student activity	review
FEBRUARY	09/02/2023	preparation for science day	
	28/02/2023	science day	seminar and poster presentation
MARCH	10/03/2023	quiz	to build knowledge and boost confidence
	16/03/2023	vaccination day	national vaccination day promote vaccination campaign and raise awareness about importance of vaccine
	18/03/2023	poster presentation	build confidence and encourage them towards research students
	24/03/2023	TUBERCULOSIS DAY	Raise public awareness and understanding about the infectious tuberculosis
APRIL	04/04/2023	webinar	webinar by ravalli RANCHARAN TEJ
	19/04/2023	student seminar	encourage and motivate towards confidence
JUNE	16/06/2023	QUIZE	to build knowledge and boost confidence
JULY	14/07/2023	Remedial classes	

WORLD ENVIRONMENTAL DAY

Title: World Environment Day

Date: 05/06/2022

Introduction:

World Environment Day, celebrated by department of zoology in collaboration with department of Botany on June 5th, is a global initiative aimed at raising awareness and promoting action for the protection of our environment. Degree College, a hub of academic excellence, embraced this occasion with enthusiasm, organizing a series of events and activities to engage students and faculty in environmental stewardship.

Event Highlights:

Tree Plantation Drive:-A symbolic gesture towards greening the campus and mitigating carbon emissions, a tree plantation drive was organized. Students and faculty actively participated in planting saplings of native tree species, thereby contributing to biodiversity preservation and ecological balance.



Awareness Programme: Engaging and informative workshops were conducted on various environmental topics such as climate change, waste management, and sustainable living. Experts from environmental NGOs and research institutions delivered insightful presentations, stimulating discussions on pressing environmental issues and potential solutions.

Clean-Up Campaign: Recognizing the importance of waste management and cleanliness, a campus clean-up campaign was initiated. Students volunteered to clean common areas, segregate waste, and promote recycling practices, instilling a sense of responsibility towards maintaining a clean and healthy environment.



Poster and Slogan Competition:- To encourage creativity and artistic expression on environmental themes, a poster and slogan competition was organized. Students showcased their talent through visually appealing posters and catchy slogans, conveying messages of environmental conservation and activism.



Pledge for Sustainability:- The event culminated with a collective pledge by students and faculty to adopt sustainable practices in their daily lives and promote environmental conservation both within the college campus and beyond. Participants vowed to reduce their carbon footprint, conserve resources, and advocate for policy changes to protect the environment.

Conclusion:

The World Environment Day celebrations at Degree College served as a catalyst for instilling environmental consciousness and promoting sustainable behavior among students and faculty. Through a combination of educational activities, community engagement, and collective action, the event underscored the importance of individual and collective efforts in safeguarding our planet for future generations. It is hoped that the spirit of environmental stewardship ignited during this celebration will continue to inspire positive change and foster a culture of sustainability within the college and the broader community.

WORLD MOSQUITO DAY

Activity:- World Mosquito day

Title: World Mosquito Day Awareness Programme

Date:- 20/08/2022

A typical World Mosquito Day awareness program involves a range of activities aimed at educating communities about the dangers of mosquito-borne diseases and promoting prevention measures. Mosquito day was celebrated by dept of zoology in collaboration with microbiology.

Objectives:

- ❖ Outline the specific goals of the program, such as raising awareness, distributing mosquito nets, or conducting educational sessions.

Activities Conducted:

Provide a detailed description of the activities organized during the program, including:

- ❖ Educational seminars on mosquito-borne diseases and prevention methods.
- ❖ Community clean-up drives to eliminate mosquito breeding sites.
- ❖ Health screenings for mosquito-borne diseases.
- ❖ Interactive workshops or demonstrations on mosquito control measures.



Participation and Engagement:

- ❖ Describe the level of participation from the community members, local authorities, and other stakeholders.
- ❖ Highlight any notable engagement or feedback received during the program.



Impact and Outcomes:

- ❖ Discuss the impact of the awareness program on the community, such as increased knowledge about mosquito-borne diseases and prevention methods.
- ❖ Share any quantitative data, such as the number of mosquito nets distributed or participants in educational sessions.
- ❖ Reflect on the overall success of the program in achieving its objectives.

Conclusion:

Summarize the key findings and outcomes of the World Mosquito Day awareness program. Emphasize the importance of continued efforts to combat mosquito-borne diseases and protect public health.

PG ORIENTATION PROGRAMME

Title: Post-Graduate Preparation Class for Higher Education

Purpose:- Empowering Degree Final Year Students

Date: 23/08/2022

Student Interested in Higher Education

B. MUNNY

S. PRASANYA

T. SANDYARANI

G. KAVITHA

C. MANASA

Introduction:

In the ever-evolving landscape of higher education, preparing undergraduate students for post-graduate studies has become imperative. Recognizing this need, a specialized class was organized for final year degree students to provide guidance and support in navigating the transition to post-graduate education. This report encapsulates the objectives, activities, and outcomes of the PG preparation class.

Objectives:

- ❖ To familiarize final year degree students with various post-graduate study options and requirements.
- ❖ To equip students with essential skills and resources for successful post-graduate applications.
- ❖ To empower students to make informed decisions regarding their academic and career aspirations.

Session Highlights:

Introduction to Post-Graduate Options:The session commenced with an overview of the diverse post-graduate study pathways available, including master's degrees, doctoral programs, professional certifications, and research opportunities. Emphasis was placed on understanding the specific requirements, duration, and career prospects associated with each option.



Exploration of Specializations: Students were encouraged to explore their academic interests and career goals through interactive discussions and self-assessment exercises. Guidance was provided on identifying suitable post-graduate specializations aligned with their strengths, aspirations, and market demand.

Application Process Guidance: Practical guidance on the post-graduate application process was provided, including tips for drafting personal statements, preparing resumes/CVs, securing letters of recommendation, and navigating admission requirements. Sample application materials and templates were shared to assist students in crafting compelling applications.

Standardized Test Preparation: Recognizing the importance of standardized tests such as GRE, GMAT, TOEFL, and IELTS for post-graduate admissions, the class included strategies and resources for test preparation. Students were introduced to online platforms, study materials, and mock tests to enhance their readiness for standardized exams.

Outcomes and Conclusion:

The PG preparation class for final year degree students proved to be instrumental in empowering students with the knowledge, skills, and resources necessary for pursuing post-graduate education. Feedback from participants indicated a heightened awareness of post-graduate options, increased confidence in the application process, and enhanced readiness for academic and professional pursuits beyond undergraduate studies. The class served as a catalyst for informed decision-making and strategic planning, enabling students to embark on their post-graduate journeys with clarity and confidence. Moving forward, continued support and mentorship will be essential in sustaining students' momentum and facilitating successful transitions to post-graduate education and beyond.

STUDENT SEMINAR

Activity:- Student Seminar

Date :- 31/08/2022

Student Seminar on Structure of the Cell

Introduction:

The seminar on the structure of the cell was held and aimed to develop into the intricate details of cellular composition and organization. The seminar provided a platform for students to explore the fundamental unit of life, the cell, and its various structural components.

Key Points Discussed:

Cell Membrane: The outer boundary of the cell, regulating the passage of substances in and out of the cell, maintaining its integrity.

Cytoplasm: The gel-like substance filling the cell, housing various organelles and serving as a medium for cellular activities.

Nucleus: The control center of the cell, containing genetic material (DNA) and governing cellular functions.

Organelles: Detailed discussions on organelles such as mitochondria (energy production), endoplasmic reticulum (protein synthesis), Golgi apparatus (protein modification and sorting), and lysosomes (waste disposal).



Conclusion:

The seminar provided a comprehensive overview of the structure of the cell, highlighting its complexity and functionality. Understanding cellular structure is crucial for unraveling the mysteries of life processes and holds significant implications for various fields, including medicine and biotechnology.

WORLD OZONE DAY CELEBRATION

Activity - Ozone day

Title: “Ozone Day Awareness Programme ”

Date: September 16, 2022

Introduction: Department of Zoology in collaboration with Microbiology and Botany celebrated World Ozone Day to raise awareness in people and educate people to protect Ozone layer.

On September 16, 2022, degree students organized a rally in honor of Ozone Day, aiming to raise awareness about the importance of preserving the ozone layer and combating ozone depletion. The rally aimed to educate the public about the detrimental effects of ozone depletion and promote sustainable practices to protect the ozone layer.

Objectives:

- ❖ Raise awareness about the significance of the ozone layer in protecting life on Earth.
- ❖ Educate the public about the causes and consequences of ozone depletion.
- ❖ Promote sustainable actions to mitigate ozone depletion, such as reducing emissions of ozone-depleting substances.
- ❖ Mobilize support for environmental protection initiatives within the community.

Activities:

Rally :Degree students organized a march through the community, carrying banners, placards, and posters with messages advocating for ozone protection and environmental conservation.

Street Performances: Students performed street plays, skits, and musical performances highlighting the importance of preserving the ozone layer and addressing climate change.



Pledges: Attendees were encouraged to take pledges committing to adopt eco-friendly practices and support initiatives aimed at preserving the ozone layer.



Interactive Sessions: Students engaged in interactive sessions with the public, answering questions, and discussing ways individuals can contribute to ozone layer protection.

Outcomes:

Increased Awareness: The rally succeeded in raising awareness about ozone depletion and its implications for the environment and human health.

Community Engagement: The interactive nature of the rally facilitated meaningful discussions and engaged the community in environmental conservation efforts.

Conclusion:

The Ozone Day Awareness Programme Rally organized by degree students was a resounding success, achieving its objectives of raising awareness, fostering community engagement, and promoting sustainable actions to protect the ozone layer. Such initiatives play a crucial role in mobilizing collective efforts to address environmental challenges and build a sustainable future.

STUDENT SEMINAR

Activity: Student Seminar

Date: - 23/09/2022

Title: Student Seminar Report on Chromosomes

Introduction:

The student seminar on "Chromosomes" was conducted to delve into the fundamental aspects and recent advancements in the field of genetics. The seminar aimed to provide a comprehensive understanding of chromosomes, their structure, function, and significance in genetics and human health.

Key Points Covered:

Chromosome Structure: The seminar began with an overview of chromosome structure, highlighting the organization of DNA into chromatin, the role of histones, and the condensation of chromatin into chromosomes during cell division.

Types of Chromosomes: Different types of chromosomes, including autosomes and sex chromosomes, were discussed. The variations in chromosome number among species, such as diploid and haploid sets, were also explored.



Chromosome Mapping and Evolution: The seminar delved into chromosome mapping techniques, including karyotyping, fluorescence in situ hybridization (FISH), and comparative genomic hybridization (CGH), and their applications in studying genetic diseases and evolutionary relationships.

Conclusion:

The seminar concluded with a reflection on the significance of chromosomes in understanding inheritance, evolution, and human health. It highlighted the interdisciplinary nature of chromosomal research and the need for continued exploration to unravel the complexities of the genome.

Overall, the student seminar on chromosomes provided a platform for intellectual exchange, fostering a deeper appreciation for the role of chromosomes in shaping life and driving scientific innovation.

National Cancer Awareness Day

Activity:- National Cancer Awareness Day

Introduction:- National Cancer Awareness Day was celebrated by dept of Zoology in collaboration with Microbiology to raise awareness among students and people they taken a Rally in Thangallapally village

Date:-7-11-2022

Objectives:-

- ❖ Create public awareness about early detection, prevention and treatment of cancer.
- ❖ Reduce health inequalities and improve cancer outcomes.
- ❖ To provide cancer treatment facilities in addition to prevention activities across the country



About The Event:-the national cancer control programme established the regional cancer centers (RCCS) to improve the availability of cancer treatment facilities.increasing cancer awareness in more deprived areas could help to reduce health inequalities and improve cancer outcomes. Having cancer awareness will give you the confidence to speak to a doctor if something does not feel normal to you , as spotting cancer early increase the change of survival.

Feed Back:- students know the different types of cancer symptoms, treatment method. Cancer cannot cripple love it cannot conquer the spirit.

QUIZE COMPETITION

Activity :- Quiz

QUIZE PROGRAMME

Date:- 11/11/2022

Title: Report on Quiz Programme for Degree Students in Zoology

Introduction:

A quiz programme was organized for degree students majoring in Zoology, aiming to enhance their knowledge, foster a competitive spirit, and encourage teamwork. The event took place in the study hours and saw enthusiastic participation from students across different semesters.



Event Overview:

The quiz consisted of multiple rounds, each designed to test various aspects of zoological knowledge, including taxonomy, anatomy, ecology, behavior, and conservation. Questions were curated to be challenging yet accessible, ensuring engagement from participants of all levels.

Student Seminar

Date:- 22/11/2022

Name of the Student:- sindhu

Life science 2 nd year

OBJECTIVES:-

Student seminar allow the student to expand their knowledge and stay current with the subject that they are studying.they know what they have to do for their better future in their studies.

EXPLANATION:-

A seminar is given by MZC second year name Mss. sindhu she explained about “**SYCON CANAL SYSTEM**”.Se has given a good explanation about the topic with a neat labelled diagram she started the session by introducing her self and explained types oof canal systems



WORLD AIDS DAY

Activity :- World AIDS Day

Title:- Report on Pledge Taken on World AIDS Day at TTWRDC Women Degree College

Date:December 1, 2022

Introduction:

World AIDS Day is observed globally on December 1st to raise awareness about HIV/AIDS, commemorate those who have lost their lives to the disease, and show support for those living with HIV/AIDS. In alignment with this global initiative, TTWRDC Women Degree College Department of Zoology in collaboration with Microbiology and Botany organized a series of events centered around spreading awareness and solidarity.

Activities:

Pledge Ceremony: The day commenced with a solemn pledge-taking ceremony attended by students, faculty, and staff. Participants gathered to affirm their commitment to raising awareness, fighting stigma, and supporting individuals affected by HIV/AIDS.



Educational Workshops: Interactive workshops were conducted throughout the day, led by healthcare professionals and guest speakers. These workshops covered topics such as HIV prevention, testing, treatment, and support services available within the community.



Poster Exhibition: An exhibition of posters depicting key facts and statistics about HIV/AIDS was set up in the college premises. Students had the opportunity to explore the displays and deepen their understanding of the global impact of the disease.

Conclusion:

The observance of World AIDS Day at TTWRDC Women Degree College served as a poignant reminder of the ongoing battle against HIV/AIDS and the importance of solidarity and support for affected individuals. Through education, advocacy, and compassion, the college community reaffirmed its dedication to creating a world free from HIV/AIDS-related stigma and discrimination.

World Leprosy Day

Activity:- World Leprosy Day

Date:-30-1-2023

Introduction: Dept of Zoology in collaboration with Microbiology organized World Leprosy day celebrations. Leprosy, a chronic infectious disease caused by the bacterium *Mycobacterium leprae*, continues to be a significant public health concern in various parts of the world. Leprosy Day, observed annually on the last Sunday of January, serves as a platform to raise awareness about leprosy, combat stigma, and advocate for the rights and well-being of individuals affected by the disease.

Objectives:-

- ❖ Raise awareness of the disease.
- ❖ Reduce disease burden, prevention of disability.
- ❖ Improve awareness among the mass about Leprosy and its curability.
- ❖ Educate people about the condition. Symptoms of this disease.

Event Highlights:

Educational Seminars and Workshops: A series of educational seminars and workshops were organized to disseminate accurate information about leprosy, its causes, symptoms, transmission, and treatment. Health professionals, researchers, and representatives from leprosy organizations delivered informative presentations, debunking myths and misconceptions surrounding the disease.

About The Event:-World Leprosy Day takes place on the last Sunday of January each year. This day was established in 1954 by French philanthropist Raoul Hansen's disease mother name for leprosy. Leprosy is a chronic infectious disease caused by a type of bacteria mycobacterium leprosy.



Feed Back:-This session is very useful to students because students know the different type of leprosy, symptoms, treatment methods.

Outcomes and Conclusion:

The commemoration of Leprosy Day served as a catalyst for advocacy, awareness, and action towards eliminating leprosy as a public health problem and promoting the rights and well-being of affected individuals. Through collaborative efforts across sectors and communities, significant strides were made in dispelling myths, combating stigma, and advancing the agenda for leprosy control and rehabilitation. Moving forward, sustained commitment, innovation, and inclusivity will be essential in accelerating progress towards a world where leprosy is no longer a barrier to health, dignity, and human rights.

National Sciences Day

Activity :- National Sciences Day**Date :- 28/02/2023**

The celebration of National Science Day in our degree college typically involves a range of activities aimed at promoting scientific awareness and fostering a spirit of inquiry among students

Inaugural Ceremony: The day usually begins with an inaugural ceremony where faculty members, students, and sometimes invited guests gather to kickstart the celebrations. This may include speeches by dignitaries highlighting the significance of science and its impact on society.

Science Exhibitions: one of the central features of the celebration is often a science exhibition where students showcase innovative projects, experiments, and models related to various scientific disciplines. These exhibitions provide an opportunity for students to demonstrate their creativity and understanding of scientific concepts.

Seminars and Workshops: We organized seminars and workshops on specific scientific topics or emerging areas of research. Experts from academia, industry, or research institutions may be invited to deliver talks and interact with students, providing insights into cutting-edge developments in science.

Quiz Competitions: Quiz competitions focused on science-related trivia and concepts are commonly held during National Science Day celebrations. These competitions not only test students' knowledge but also encourage them to delve deeper into scientific principles and theories.



Debates and Panel Discussions: Debates and panel discussions on scientific topics of societal relevance are another way to engage students in critical thinking and debate. These sessions provide a platform for students to express their opinions and perspectives on issues such as climate change, biotechnology, or space exploration.



Conclusion :-

Overall, the celebration of National Science Day in a degree college serves as a platform to ignite curiosity, stimulate scientific thinking, and cultivate a passion for exploration and discovery among students.

National Vaccination day

Activity : - National Vaccination day

Date :- 16/03/2023

Title: Promoting Health and Well-being- National Vaccination Day Celebration at Degree College

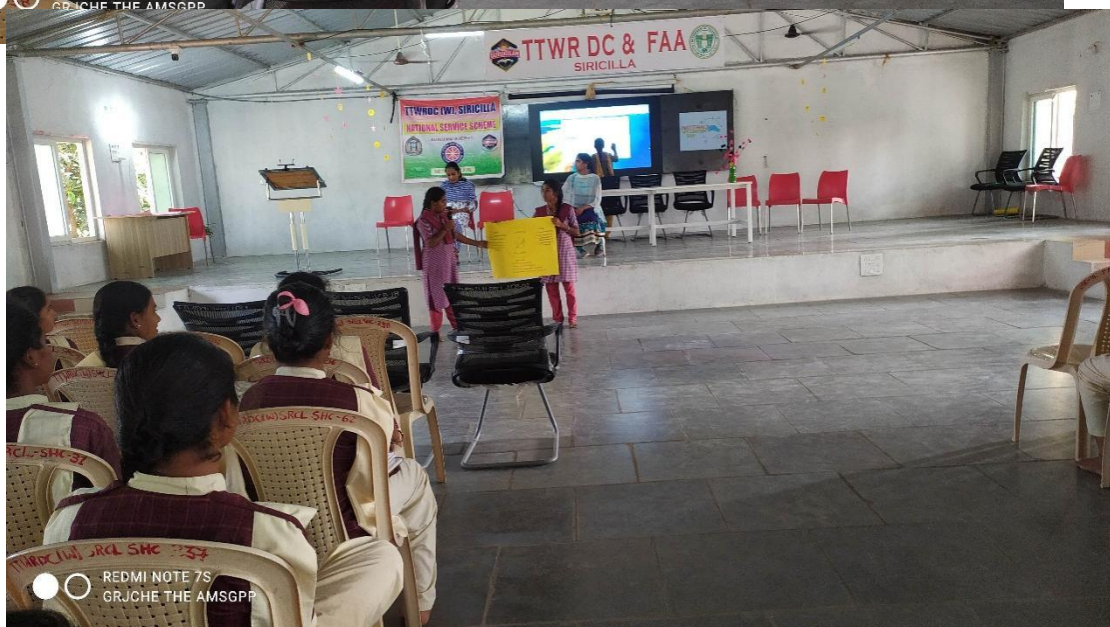
Introduction :- In our Degree College Dept of Zoology in collaboration with Microbiology organized National Vaccination Day. Students enthusiastically participated in the nationwide observance of National Vaccination Day, underscoring the crucial role of immunization in safeguarding public health. The event aimed to educate, engage, and empower students and faculty members regarding the significance of vaccination in disease prevention and community health.

Event Highlights:

Awareness Sessions: The day commenced with informative sessions led by healthcare professionals and faculty members, shedding light on the importance of vaccination in preventing infectious diseases. These sessions covered topics such as vaccine efficacy, safety, and the societal impact of immunization.



Student Engagement Activities: Various interactive activities were organized to actively involve students in the event. Quizzes, poster-making competitions, and role-playing scenarios were conducted to enhance understanding and stimulate discussions on vaccination-related topics.



Vaccination Booths: In collaboration with local health authorities, vaccination booths were set up on campus premises. Students and staff had the opportunity to receive vaccinations for a range of preventable diseases, including influenza, hepatitis, and tetanus. The convenience of on-site vaccination encouraged participation and facilitated access to essential healthcare services.

Informational Campaign: The college campus was adorned with vibrant posters, banners, and informational displays promoting key messages about vaccination. These visual aids served as effective tools for raising awareness and dispelling myths and misconceptions surrounding vaccines.

Conclusion:

The National Vaccination Day celebration at Degree College served as a poignant reminder of the collective responsibility to prioritize public health and well-being. Through collaborative efforts, educational initiatives, and community engagement,

the event successfully amplified awareness of vaccination's critical role in disease prevention. Degree College reaffirmed its commitment to promoting vaccination uptake and fostering a culture of health-consciousness among its student body and faculty.

POSTER PRESENTATION COMPETITION

Title: Poster Presentation Competition on Relevant Topics

Date: 18/03/2023

Introduction:

The Zoology Department organized a Poster Presentation Competition as part of its ongoing efforts to promote academic engagement and scholarly discourse among students. The competition focused on relevant topics within the field of zoology, encouraging participants to explore and communicate their research findings, insights, and innovative ideas through visual representations.



 **T.T.W.R.D.C.F.A.A, THANGALLAPALLY, RAJANNA SIRICILLA** 

“POSTER PRESENTATION COMPETITION “

Topic:- Subject relevant
Date:-18/03/2023
Time :-2-00pm
Venue:- Seminar hall.

Programme co ordinators
K. Ravali
R.Sravanthi
Dept of zoology.

Convenor

Mrs. K. Rajani
M.Sc. Microbiology, Botany,
Principal(FAC),TTWRDC(W),Rajanna
Siricilla.

Event Overview:

The Poster Presentation Competition took place on 18/03/2023 providing a platform for undergraduate and graduate students to showcase their research projects, literature reviews, and conceptual frameworks on various topics in zoology. The competition aimed to foster critical thinking, scientific communication skills, and interdisciplinary collaboration among participants.

Participant Presentations:

Participants were required to design and present their posters in accordance with academic standards and guidelines. Each poster was expected to provide a clear and concise overview of the research topic, research objectives, methodology, results, and conclusions. Participants utilized visual aids, graphics, photographs, and diagrams to enhance the clarity and impact of their presentations.



Evaluation Process:

A panel of judges comprising faculty members and experts in the field of zoology evaluated the posters based on criteria such as scientific content, clarity of presentation, visual appeal, originality of research, and effectiveness of communication. Participants were also assessed on their ability to respond to questions and engage in scholarly discussions during the presentation session.



Highlights and Outcomes:

The Poster Presentation Competition witnessed enthusiastic participation from students across various academic levels, showcasing a diverse array of research topics and methodologies within the field of zoology and various subjects. Participants demonstrated creativity, ingenuity, and passion for their respective research areas, contributing to the vibrant intellectual atmosphere of the event.



Winners and Recognition:

Winners of the Poster Presentation Competition were announced based on the judges' evaluations and scores. Prizes and certificates were awarded to top-performing participants in recognition of their outstanding contributions to subject research and scientific communication.

Conclusion:

The Poster Presentation Competition organized by the Zoology Department served as a valuable platform for students to engage in scholarly discourse, share their research findings, and contribute to the advancement of zoological knowledge. The event fostered a spirit of inquiry, collaboration, and academic excellence among participants, reaffirming the department's commitment to nurturing the next generation of zoologists and scientists.

World Tuberculosis Day

Activity :- World Tuberculosis Day

Title: Raising Awareness and Action: Tuberculosis Day

Date: 24/03/2023

Introduction :- Our Degree College Dept of Zoology in collaboration with Microbiology joined the global effort in commemorating Tuberculosis Day, a day dedicated to raising awareness about tuberculosis (TB) and advocating for enhanced efforts to eliminate this infectious disease. The event served as a platform for educating students and faculty members about TB, its impact, and the importance of early detection and treatment.

Event Highlights:

Educational Seminars: The day commenced with educational seminars conducted by healthcare professionals and faculty members, providing insights into the epidemiology, transmission, and symptoms of tuberculosis. Participants learned about the risk factors associated with TB and the importance of timely diagnosis and treatment in preventing its spread.

Student Presentations: Students actively contributed to the event by delivering presentations on various aspects of tuberculosis, including its historical significance, current challenges, and innovative approaches to TB control. These presentations showcased the students' research efforts and promoted peer-to-peer learning within the college community.



Awareness Campaign: A comprehensive awareness campaign was launched across the college campus to disseminate information about tuberculosis prevention and control. Posters, pamphlets, and educational materials were distributed to raise awareness among students, faculty, and staff members.



Conclusion:

The Tuberculosis Day celebration at Degree College underscored the importance of collective action in addressing the global tuberculosis epidemic. Through educational initiatives, expert insights, and interactive activities, the event empowered participants to become advocates for TB awareness and contribute to efforts aimed at eliminating this preventable and treatable disease. Degree College reaffirmed its commitment to promoting public health and pledged to continue supporting initiatives that prioritize tuberculosis prevention, detection, and treatment within the college community and beyond.

TEACHING THROUGH PPT

Title: Teaching through PowerPoint- Meiosis Explained

Date: 28/03/2023

Introduction:

In today's dynamic educational landscape, leveraging multimedia tools such as PowerPoint presentations has become integral to effective teaching and learning. This report encapsulates the experience and outcomes of a PowerPoint-based class session on the topic of Meiosis.

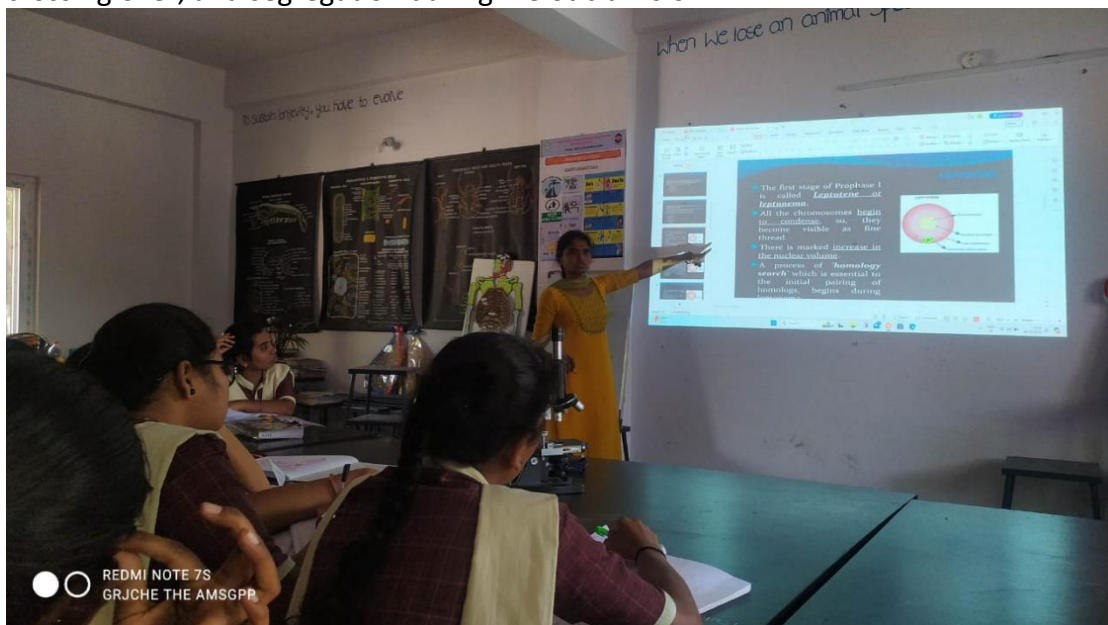
Objectives:

- ❖ To elucidate the process of meiosis, including its stages and significance.
- ❖ To facilitate student engagement and comprehension through visual aids and interactive content.
- ❖ To foster critical thinking and conceptual understanding of meiosis and its implications in genetics and reproductive biology.

Session Highlights:

Interactive Introduction: The session commenced with an interactive introduction, wherein students were prompted to recall their knowledge of cell division and its significance. This served as a foundation for introducing the concept of meiosis and its distinct role in sexual reproduction.

Visual Representation: A series of visually-rich PowerPoint slides were employed to elucidate the stages of meiosis, including Prophase I, Metaphase I, Anaphase I, Telophase I, and subsequent stages of Meiosis II. Color-coded diagrams and animations were used to illustrate the intricate processes of chromosome alignment, crossing over, and segregation during meiotic division.



Comparative Analysis: To enhance understanding, a comparative analysis between mitosis and meiosis was presented, highlighting the similarities and differences in their mechanisms, outcomes, and biological significance. This facilitated a deeper comprehension of the unique features and adaptive advantages of meiotic division in generating genetic diversity.

Outcomes and Conclusion:

The PowerPoint-based class session on meiosis proved to be highly effective in achieving its objectives of elucidating complex biological concepts, fostering student engagement, and promoting active learning. Feedback from students indicated a significant improvement in their understanding of meiosis and its implications in genetics and reproductive biology. The interactive and visually-rich nature of the presentation facilitated retention and comprehension, while the incorporation of real-world examples and clinical correlations enhanced relevance and applicability. Overall, the use of PowerPoint as a teaching tool proved instrumental in creating an enriching and immersive learning experience for students, thereby exemplifying its efficacy in modern pedagogy.

**ACTIVITEIS
FOR THE
AY- 2021-2022**

DEPARTMENT ACTION PLAN (2021-2022)

MONTH	DATE	ACTIVITY	DISCRIPTION
AUGUST	20/08/2021	World mosquito day	raise awareness about mosquito causing diseases
	22/08/2021	conduct a test	to know the basic knowledge of students
SEPTEMBER	02/09/2021	seminar	to improve student knowledge and develop skills
	16/09/2021	world ozone day	aware people about ozone depletion
OCTOBER	19/10/2021 to 26/10/2021	bridge course	to give basic knowledge in their interested subject
	28/10/2021	test on bridge course	to know what they learned newly
NOVEMBER	12/11/2021	field trip (project)	collection of insects to observe their characters
	14/11/2021	world diabetes day	raise awareness ab out impact of diabetes on the health
DECEMBER	01/12/2021	HIV aids day	to show support for the people living with HIV
	10/12/2021	student seminar	to improve student knowledge and develop skills
FEBRUARY	04/02/2021	world cancer day	students should know the importance to prevent cancer deaths and awareness about can er
	28/02/2022	national science day	prepare students to involve in science day celebrations by preparing posters models
MARCH	05/03/2022	review on project	to study characters of insects
	24/03/2022	world tuberculosis day	to raise awareness and step to end the global TB epidemic
APRIL	20/03/2022	student seminar	improve student knowledge and their skills
	25/04/2022	world malaria day	aware people to control and eradication of malaria
MAY	12/05/2022	student seminar	to improve student knowledge and develop skills
	29/5/2022	quize	to recall the knowledge
JUNE	05/06/2022	world environment day	raise awareness on environmental issues
JULY	11/07/2022	Sem preparation	

WEBINAR BY DR G. RENUKA Ph.D, PDF

Activity :- Webinar

Date :- 24/06/2021

Presenter: Dr. Renuka

Topic: Sericulture: Enhancing Silk Production Through Sustainable Practices

Overview:

Dr. Renuka's webinar on Sericulture provided a comprehensive insight into the silk production industry, emphasizing sustainable practices and modern innovations. The webinar aimed to educate participants on the significance of Sericulture in global economies, its environmental impact, and the potential for advancement in the field.

GURUKULAM
Aspire Acquire Inspire

TTWRDC(W), RAJANNA SIRICILLA
(Affiliated to Satavahana University)

DEPARTMENT OF ZOOLOGY

GOVERNMENT OF TELANGANA

Cordially invites you to a
WEBINAR on

“SERICULTURE IN INDIA”

Date & Time
24/06/2021
@
11.00 am

Join with Google meet

Programme Coordinators:
P. VEENA
K. RAVALI

INVITED SPEAKER
Dr. G. Renuka
M.Sc,Ph.D,PDF

PROGRAMME CONVENER
Mrs. K. Rajani
M.Sc. Microbiology,
Botany
Principal(FAC)

Key Points:

Introduction to Sericulture:

- Dr. Renuka commenced by introducing Sericulture as the art and science of silk production, tracing its historical roots and global significance.

Silk Production Cycle:

The presenter elucidated the intricate process of silk production, from silkworm rearing to cocoon harvesting, silk reeling, and weaving.

Sustainable Practices:

- Dr. Renuka emphasized the importance of adopting sustainable practices in Sericulture, including organic farming methods, efficient water management, and waste reduction techniques.

Innovations in Sericulture:

The webinar highlighted recent innovations in Sericulture, such as genetically modified silkworms for increased silk yield, automated silk reeling machines, and eco-friendly dyeing processes.

Economic and Social Impact:

Participants gained insights into the economic and social significance of Sericulture in rural communities, providing employment opportunities and empowering women through silk production.

Conclusion :-

Overall, Dr. Renuka's webinar on sericulture provided a comprehensive understanding of silk production, highlighting the importance of sustainable practices and innovation in shaping the future of the industry. Participants gained valuable insights into the economic, social, and environmental dimensions of sericulture, inspiring them to contribute to its advancement and sustainability.

ONLINE WEBINAR ON P.G ORIENTATION

Activity :- Webinar

Date :- 27/07/2021

Title: Webinar Report on Future Guidance for Higher Education by Swamy Sir

Presenter: Swamy Sir

Topic: Navigating the Future of Higher Education: Guidance and Perspectives

Overview:

Swamy Sir's webinar on the future of higher education provided valuable insights and guidance to participants navigating the evolving landscape of academia. The webinar aimed to address emerging trends, challenges, and opportunities in higher education, offering practical advice for students, educators, and policymakers.

TTWRDC(W), RAJANNA SIRICILLA
(Affiliated to Satavahana University)

DEPARTMENT OF ZOOLOGY

Cordially invites you to an Extension Lecture
on

INVITED SPEAKER

"Expostulation of Knowledge for higher Education"
Date & Time:- 24/07/2021
@12.00 pm
Join with Google meet

PROGRAMME

J. Swamy
M.Sc,B.ed,SET,NET
Asst Professor Of
Zoology
Gvt Degree College For
Women,
Nalgonda

Programme Coordinator:

K. Ravali
M.Sc , SET
DL in zoology

Mrs. K. Rajani
M.Sc. Microbiology,
Botany
Principal(FAC),
TTWRDC(W),Rajanna
Siricilla

Key Points:

Introduction to Higher Education Trends:

- Swamy Sir commenced by providing an overview of current trends shaping the landscape of higher education, including digitalization, globalization, and the growing demand for interdisciplinary studies.

Challenges Facing Higher Education:

- The presenter identified key challenges facing higher education institutions, such as accessibility, affordability, quality assurance, and adapting to rapid technological advancements.

Importance of Career Guidance:

- Emphasizing the significance of career guidance, Swamy Sir highlighted the role of educators and counselors in helping students make informed decisions regarding their academic and professional paths.

Skills for the Future:

- Participants gained insights into the essential skills and competencies needed to thrive in the future job market, including critical thinking, communication, adaptability, and digital literacy.

Conclusion :-

Overall, Swamy Sir's webinar on the future of higher education provided valuable guidance and perspectives to participants, empowering them to navigate the complexities of academia and prepare for success in the rapidly changing world.

Participants left the webinar with a deeper understanding of the emerging trends, challenges, and opportunities in higher education, along with practical strategies for personal and institutional advancement.

Pond Preparation

Date: 01/08/2021-14/08/2021

• Students are practice pond preparation and Aquarium fish Management was taken to impart employable skills.

Objectives :-

Impact of the Practice:

- To develop knowledge on fish pond preparation
- To explore knowledge on aquaculture
- To empower students to develop aquarium

for the academic year:-2022-2023 prepare simple Aquariums and fish food during 2022-2023 Department also prepared a small pond in collage.

Photo gallery:-



WORLD MOSQUITO DAY

Activity:- world Mosquito Day

Date :- 20/08/2021

Objectives:-

- ❖ To raise awareness of the dangers posed by mosquito-borne diseases.
- ❖ This day helps raise awareness about the ongoing threat of malaria and other diseases transmitted by one of the world's deadliest killers.

About The Event:-

Mosquitoes from an important source biomass in the food chain.Serving as food for fish as larva and for birds,bats and frogs as adult flies and some species are important pollinators.Their bites can cause an allergic reaction through their saliva,resulting in a red.Itchy bump adult mosquitoes live for about 2to4 weeks depending on the species,humidity,temperature and other factors.Female mosquitoes need a blood meal to produce eggs.Life science faculty and above 250 members are participated in this program.



Feed Back:-

Students know how the mosquitoes transmitted different types of diseases and all the mosquitoes are not harmful to human beings, students use the prevention methods like use mosquito nets.

❖ Use mosquito repellents.

Use coils and vaporizers.

❖ Use window screens.

World Ozone Day

Activity:-World Ozone Day

Date:-16-9-2021

Introduction: Department of Zoology in collaboration with Microbiology and Botany celebrated World Ozone Day to raise awareness in people and educate people to protect Ozone layer.

On September 16, 2022, degree students organized a rally in honor of Ozone Day, aiming to raise awareness about the importance of preserving the ozone layer and combating ozone depletion. The rally aimed to educate the public about the detrimental effects of ozone depletion and promote sustainable practices to protect the ozone layer.

Objectives:-

❖ To inform people about the significance of the ozone layer along with how its depletion.

❖ It can have adverse effects on human health, ecosystems and the environment.

❖ The stratospheric ozone layer is earth's sunscreen protecting living things from too much ultra violet radiation from the sun.

About the Programme :-

Ozone Day, observed annually on September 16th, serves as a reminder of the importance of protecting the Earth's ozone layer and addressing global environmental challenges. In commemoration of this significant day, a rally was taken by the students to raise awareness about ozone depletion and promote sustainable practices.



Awareness Campaigns:

An awareness campaign was launched to reach out to a wider audience and promote ozone-friendly practices. Posters, banners, and informational materials were displayed prominently, conveying messages about the importance of reducing emissions of ozone-depleting substances and adopting environmentally friendly lifestyles.

Conclusion:-

In essence, the Ozone Day celebrations at TTWRDCW RAJANNA SIRICILLA served as a platform to inspire local people to become responsible stewards of the environment, fostering a culture of sustainability within the community.

World First Aid Day

Activity:-World First Aid Day

Date:-11-9-2021

World First Aid Day

Date:- 19/09/2019

Objectives:-

- ❖ This raises awareness and encourages individuals and communities to equip themselves with life -saving skills.
- ❖ The main objective of First Aid is not to cure but to ensure safety until the patient or affected person accesses specialized treatment.
- ❖ It is the initial assistance or care of a suddenly sick or injured person.

About the Programme :-

World First Aid Day is celebrated on 19th of September. On this day many Health Superintends and staff nurse from local Physical Health Care centre came to college to educate students. Students gather at seminar hall gather to work together to educate people about the importance of having basic first aid skills and their rule during emergencies.

First Aid refers to medical attention that is usually administered immediately after the injury occurs and at the location where it occurred. It after consists of a one-time, short-time treatment and requires little technology or training to administer.



Solid waste Management

Date:- 15/09/2021-20/09/2021

Aim :- To reduce environmental and health hazardous

Objectives :-

❖ Controlling the amount of waste into landfills.

Maximize recycling , minimize waste , reduce consumption

Solid waste management is a crucial component of maintaining environmental health and safety, especially in educational institutions. The Women Rajanna Siricilla College under the TTWR (Telangana Tribal Welfare Residential) framework has implemented a solid waste management pit as a sustainable solution to manage and dispose of solid waste generated within the campus. This report outlines the planning, construction, operation, and benefits of the solid waste management pit at the college.

Introduction

The primary objective of establishing a solid waste management pit at the Women Rajanna Siricilla College is to promote sustainable waste management practices, reduce environmental pollution, and inculcate a sense of environmental responsibility among students and staff.

Planning and Design

The planning phase involved a thorough assessment of the type and quantity of waste generated within the college campus. The major types of solid waste include:

- Organic waste (food scraps, garden waste)
- Paper and cardboard
- Plastics
- Other non-biodegradable materials

Design Considerations

Location: The pit was strategically located in an areas of seminar hall class rooms kitchen and college entry gate that is accessible yet sufficiently distanced from



academic and residential buildings to minimize any potential nuisance.

Size and Capacity: The size of the pit was determined based on the daily waste generation rates, with a provision for future scalability.

Segregation: Separate sections within the pit or multiple pits were designated for different types of waste to facilitate effective segregation and management.

Construction

The construction of the solid waste management pit involved the following steps:

Excavation: Digging of the pit to the required dimensions.

Lining: Lining the pit with impermeable materials to prevent leachate from contaminating the soil and groundwater.

Operation and Management

The operational phase includes the regular collection, segregation, and disposal of waste. Key activities include:

Collection: Waste is collected from various points within the campus and transported to the pit.



Segregation: Waste is segregated at the source into biodegradable and non-biodegradable categories.

Decomposition: Organic waste is allowed to decompose naturally, with periodic turning to aerate the material and accelerate the decomposition process.

Recycling: Non-biodegradable waste like plastics and paper are sorted and sent to recycling units.

Monitoring and Maintenance

Regular monitoring and maintenance are critical to ensure the efficiency and effectiveness of the solid waste management pit. This includes:

Routine Inspections: Conducting periodic inspections to check for any issues such as overflow, pests, or structural integrity.

Maintenance: Regularly turning the composting material, removing non-decomposable contaminants, and ensuring proper aeration.

Benefits

The implementation of the solid waste management pit at Women Rajanna Siricilla College has yielded several benefits:

Environmental: Reduction in waste sent to landfills, decreased environmental pollution, and conservation of natural resources through recycling.



Economic:Cost savings on waste disposal and potential revenue from recycled materials.

Educational: Enhanced environmental awareness and responsibility among students and staff, providing a practical example of sustainable practices.

Conclusion

The solid waste management pit at TTWRCD Women Rajanna Siricilla College represents a significant step towards sustainable waste management. By effectively managing solid waste, the college not only contributes to environmental conservation but also sets a benchmark for other educational institutions to follow. Regular monitoring, community participation, and continuous improvement will ensure the long-term success of this initiative.

STUDENT SEMINAR

ACTIVITY:-STUDENT SEMINAR

Date:- 28/09/2021

OBJECTIVES:-

Student seminar allow the student to expand their knowledge and stay current with the subject that they are studying.they know what they have to do for their better future in their studies.

EXPLANATION:-

A seminar is given by MZC second year name D.Lavanya she explained about "HEART OF SCOLIODON".Se has given a good explanation about the topic with a neat labelled diagram she started the session by introducing her self and explained structure of the scoliodon heart.type of heart about the circulation and finally how it is functioning



Motivational Talks: Ms B. Akhila shared her views on Inspirational talks of reputed institutions served as motivational catalysts, instilling confidence and determination among attendees.

Feedback:-

This sessions was really helpful to the students they enjoyed a lot and given a good response to the student teacher. she was inspired other student to come forward to give seminar.

WORLD PNEUMONIA DAY

Title: World Pneumonia Day Celebration

Date: November 12, 2022

Introduction:

World Pneumonia Day, observed annually on November 12th, serves as a global platform to raise awareness about pneumonia, one of the leading causes of death among children and adults worldwide. Recognizing the significance of this day, Department of Zoology in collaboration with Microbiology organized a series of events and activities to commemorate World Pneumonia Day and advocate for pneumonia prevention and treatment.

Event Highlights:

Educational Workshops: Informative workshops were conducted to educate students and faculty about the causes, symptoms, and risk factors associated with pneumonia. Healthcare experts delivered presentations on pneumonia prevention strategies, vaccination programs, and early detection measures, empowering participants with knowledge to protect themselves and their communities



Awareness By Skit: Creative awareness campaigns were launched across campus to disseminate key messages about pneumonia prevention and treatment. Posters, banners, and informational displays were strategically placed in common areas to grab attention and encourage engagement. Students actively participated in distributing informational pamphlets and organizing awareness drives to reach a wider audience.



Interactive Sessions: Interactive sessions were organized to facilitate discussions and dispel myths surrounding pneumonia. Students had the opportunity to ask questions, share personal experiences, and engage in dialogue with healthcare professionals, fostering a supportive and inclusive learning environment conducive to knowledge exchange and awareness-raising.

Call to Action: The event concluded with a call to action, urging students, faculty, and the wider community to prioritize pneumonia prevention and treatment efforts. Participants were encouraged to advocate for increased access to pneumonia vaccines, support pneumonia research initiatives, and take personal responsibility for maintaining respiratory health through lifestyle modifications and preventive healthcare measures.



Outcomes and Conclusion:

The World Pneumonia Day celebration at Degree College proved to be a resounding success, mobilizing students, faculty, and community members to raise awareness and take action against pneumonia. Through a combination of educational workshops, awareness campaigns, health screenings, and community engagement initiatives, the event succeeded in empowering individuals with knowledge and resources to prevent, detect, and manage pneumonia effectively. As we reflect on the significance of World Pneumonia Day, it is imperative to sustain the momentum generated by this event and continue our collective efforts towards achieving a world where pneumonia is no longer a silent killer but a preventable and treatable disease.

WORLD AIDS DAY

Activity:- World Aids Day

Date: 1/12/2021

Introduction:

Degree students initiated a significant step towards raising awareness about HIV/AIDS in rural communities by organized a rally by TTWRDC[W] Rajanna Siricilla Department of Zoology in collaboration with Microbiology. This event aimed to educate villagers about the prevention, transmission, and treatment of HIV/AIDS, emphasizing the importance of awareness and eradicating stigma associated with the disease.

Objective:

- ❖ The primary objective of the rally was to spread awareness about HIV/AIDS among the residents of the rural village.
- ❖ Additionally, the students aimed to promote acceptance, empathy, and support for individuals living with HIV/AIDS within the community.

Event Highlights:

- ❖ The rally commenced with a brief introduction by the organizing committee, explaining the purpose and significance of the event.
- ❖ Students, adorned in red ribbons symbolizing solidarity with people living with HIV/AIDS, led the procession through the village streets, attracting the attention of local residents.
- ❖ Banners and placards bearing educational messages about HIV/AIDS prevention, testing, and treatment were prominently displayed throughout the rally.



Community Engagement:

The rally garnered significant participation and support from the local community. Residents of all ages actively joined the procession, demonstrating their commitment to combating the spread of HIV/AIDS and fostering a more inclusive and understanding community.

Impact:

The AIDS awareness rally proved to be a transformative experience for both the students and the villagers. Through education and community engagement,

misconceptions surrounding HIV/AIDS were dispelled, and a more supportive environment for individuals affected by the disease was cultivated.

Conclusion:

The AIDS awareness rally organized by degree students served as a testament to the power of grassroots initiatives in addressing pressing public health issues. By taking proactive steps to educate and engage with rural communities, the students not only contributed to the fight against HIV/AIDS but also fostered a sense of solidarity and compassion within the village. This event exemplifies the importance of collaborative efforts in creating a more informed and inclusive society.

WORLD CANCER DAY

Activity:- World Cancer Day

Date:-04/02/2022

Introduction:-

On February 4th, Department of Zoology in collaboration with Microbiology commemorated World Cancer Day with a series of educational and awareness activities. The event aimed to raise awareness about cancer, promote early detection, and support those affected by the disease.

Objectives:-

The objectives of the event were:

- ❖ To educate students and staff about the importance of cancer prevention, early detection, and treatment.
- ❖ To promote healthy lifestyle choices that can reduce the risk of cancer.
- ❖ To provide a platform for cancer survivors to share their stories and inspire others.
- ❖ To raise funds for cancer research and support services.

Event Activities

Inauguration Ceremony

The event was inaugurated by the Principal, k. Rajani, who emphasized the importance of awareness and education in the fight against cancer.

Awareness Walk:-

Students and staff participated in an awareness walk around the campus, holding banners and placards with messages about cancer prevention and early detection. The walk aimed to draw attention to the importance of a healthy lifestyle and regular medical check-ups.



Closing Ceremony

The event concluded with a cultural program featuring performances by students, including a skit on cancer awareness, dance performances, and a musical tribute to those affected by cancer. Certificates of appreciation were awarded to volunteers and participants who contributed to the success of the event.

Impact and Feedback

The event received positive feedback from participants and attendees. Many expressed that they gained valuable knowledge about cancer prevention and the importance of early detection. The health screening camp was particularly well-received, with numerous individuals taking advantage of the free screenings.

Conclusion

World Cancer Day celebration was a resounding success, fulfilling its objectives of raising awareness, educating the community, and supporting those affected by cancer.

The event highlighted the critical role of education and community support in the fight against cancer.

NATIONAL SCIENCE DAY

Introduction:-

National Science Day at TTWRDC Women Rajanna Siricilla Degree College was celebrated with enthusiasm and a focus on scientific awareness and educational empowerment. The event featured a variety of activities including science exhibitions, seminars, and interactive sessions aimed at promoting scientific temper among students.

Objectives:-

- ❖ **Promote Scientific enthusiasm :**
Encourage a scientific mindset and critical thinking among the general public, especially students and young researchers.
- ❖ **Public Awareness:**
Raise awareness about the significance of science in everyday life and how scientific advancements contribute to societal development.
- ❖ **Celebration of Achievements:**
Honor and celebrate the contributions of scientists and researchers, particularly Indian scientists, in various fields of science and technology.
- ❖ **Encourage Young Scientists:**
Provide a platform for young scientists and researchers to showcase their work and encourage them to pursue careers in science and technology.

Highlights of the celebration included:

Science Exhibitions: Students showcased innovative projects and experiments, highlighting their understanding of scientific concepts and their practical applications.



Interactive Workshops: Hands-on workshops allowed students to engage in experiments and demonstrations, enhancing their learning experience through practical involvement.



Competitions: Various competitions such as quizzes, poster presentations, and model making were held to encourage student participation and creativity.



Conclusion:-

The celebration aimed not only at commemorating the achievements of scientists but also at inspiring young women to pursue careers in science and technology, aligning with the college's mission to empower marginalized communities through quality education

Field Visit to Study Ecosystem

Activity :- Field Visit to Study Ecosystem

Date :- 16/03/2022

Title: Field Visit Report: Investigating Pollution in Pond Ecosystems

Introduction:

The field visit aimed to assess the extent and impact of pollution on pond ecosystems. Led by degree students specializing in Environmental Science, the expedition focused on understanding the sources of pollution, its effects on aquatic life, and potential mitigation strategies.

Objectives:

- ❖ To identify sources of pollution in pond ecosystems.

- ❖ To assess the water quality parameters and their deviation from acceptable standards.
- ❖ To evaluate the impact of pollution on aquatic biodiversity and ecosystem health.



- ❖ To propose recommendations for pollution mitigation and ecosystem restoration.

Activities and Observations:

Water Quality Assessment :-

- Conducted on-site measurements of water parameters such as pH, dissolved oxygen (DO), turbidity, and nutrient levels.
- Collected water samples for laboratory analysis to determine concentrations of pollutants such as heavy metals, pesticides, and organic matter.
- Compared results with established water quality standards to assess pollution levels.





Biological Assessment :-

- Surveyed aquatic flora and fauna diversity, noting any signs of distress or pollution-induced abnormalities.



- Conducted macroinvertebrate sampling to assess water quality and ecosystem health based on indicator species presence and abundance.
- Documented observations of dead or diseased organisms as potential indicators of pollution impacts.

Source Identification :-

- Engaged with local stakeholders to identify potential sources of pollution, including agricultural runoff, industrial discharge, and urban waste.

- Conducted site inspections to visually assess point and non-point sources of pollution, such as sewage outfalls and litter accumulation.

Conclusion:

The field visit highlighted the pervasive influence of pollution on pond ecosystems, jeopardizing their ecological integrity and threatening biodiversity. The findings underscore the urgent need for concerted efforts to address pollution sources and implement effective management strategies to restore and protect these vital aquatic habitats.

World Tuberculosis Day

Activity: World Tuberculosis Day

Date: -24-3-2022

Introduction :- Our Degree College Dept of Zoology in collaboration with Microbiology joined the global effort in commemorating Tuberculosis Day, a day dedicated to raising awareness about tuberculosis (TB) and advocating for enhanced efforts to eliminate this infectious disease. The event served as a platform for educating students and faculty members about TB, its impact, and the importance of early detection and treatment.

Objectives:-

- ❖ To raise public awareness about the devastating health, social and economic consequences of tuberculosis.
- ❖ Step up efforts to end the global TB epidemic.

Activities:

Lectures and Presentations The programme commenced with informative lectures and presentations by healthcare professionals, experts, and faculty members. They discussed various aspects of tuberculosis, including its causes, transmission, symptoms, and available treatment options.



Poster Exhibition: A poster exhibition was set up showcasing facts, statistics, and preventive measures related to tuberculosis. The visually appealing posters served as effective educational tools, capturing the attention of students and faculty members.

Awareness Campaign: An awareness campaign was conducted within the college premises to reach a broader audience. Pamphlets, brochures, and other informational materials were distributed to disseminate key messages about TB awareness and prevention.



Outcome:

The Tuberculosis Awareness Programme at our college received an overwhelming response from the participants. It succeeded in increasing knowledge and understanding about TB among students, faculty members, and the wider community. The interactive nature of the event encouraged active participation and facilitated meaningful discussions on TB-related issues.

Conclusion:

In conclusion, the Tuberculosis Awareness Programme conducted at our college served as a commendable initiative to educate, inform, and empower individuals in the fight against TB. By fostering collaboration between educational institutions, healthcare providers, and community organizations, such programmes play a crucial role in raising awareness and promoting positive health outcomes. Moving forward, it is essential to sustain these efforts and continue working towards the eradication of tuberculosis on both local and global levels.

FIELD TRIP

Field trip for Butterfly Species collection at TTWRDC Women Rajanna Siricilla College

Date:- 02-04 to 12-04-2022

Student Names:-

A. Arnitha

B. Sandya

B.Sumalatha

A. Swathi

Introduction

The aim of this project was to identify and document the butterfly species found at the Telangana Tribal Welfare Residential Degree College (TTWRDC) for Women in

Rajanna Sircilla. This research contributes to the understanding of local biodiversity, the ecological roles of butterflies, and conservation efforts.

Objectives

- ❖ To identify and catalog butterfly species present in the college campus.
- ❖ To study the habitat preferences and seasonal variations in butterfly populations.
- ❖ To raise awareness about the importance of butterflies in the ecosystem.

Methodology

Site Selection: The college campus was divided into different zones including gardens, open fields, and wooded areas.



Identification: Butterflies were identified using standard field guides and online resources.

Data Recording: Each sighting was recorded with details including date, time, location, and weather conditions.

Results

The study identified a diverse range of butterfly species across different families.

Notable species included:

1. Papilionidae (Swallowtails):
Common mormon [*Papilio polytes*]



Lesser jay [*Graphium evemon*]



2. Nymphalidae (Brush-footed butterflies):
- Common Crow (*Euploea core*)



Blue Tiger (*Tirumala limniace*)



Towny coster [*Acraea evemon*]



Analysis

Habitat Preferences: Butterflies were most abundant in garden areas with flowering plants, suggesting a strong preference for nectar sources. Open fields with grasses also supported a variety of species.



Seasonal Variations: The highest diversity and abundance were observed during the post-monsoon season (August to October), correlating with peak flowering periods and availability of host plants.

Discussion:-

The presence of diverse butterfly species indicates a healthy ecosystem and highlights the importance of maintaining green spaces within the campus. Butterflies serve as pollinators and bioindicators, reflecting the overall health of the environment.



Conservation Recommendations

Habitat Management:

Maintain and expand garden areas with native flowering plants to provide nectar and host plants.

Awareness Programs:

Conduct workshops and seminars to educate students and staff about the ecological importance of butterflies.

Monitoring Programs:

Establish long-term monitoring to track changes in butterfly populations and assess the impact of conservation efforts.

Conclusion

The project successfully identified a rich diversity of butterfly species within the TTWRDC Women Rajanna Sircilla College campus. Continued efforts in habitat management and awareness can enhance biodiversity conservation and promote ecological education.

TEACHING USING DIGITAL CLASS -PPT

Title: Understanding the Cell Cycle: A Fundamental Journey into Cellular Dynamics
Date:- 20/04/2022

Introduction:

The cell cycle is a fundamental process governing the growth, development, and reproduction of all living organisms. In this PowerPoint presentation, we delve into the intricacies of the cell cycle, exploring its phases, regulatory mechanisms, and significance in both normal cellular function and disease.

Objectives:

- ❖ To familiarize students with the stages of the cell cycle.
- ❖ To explain the regulatory checkpoints and key molecules involved in cell cycle control.
- ❖ To highlight the importance of the cell cycle in various biological processes.
- ❖ To discuss implications of cell cycle dysregulation in diseases like cancer.

PowerPoint (PPT) classes can vary depending on the goals of the class, the level of expertise of the participants, and the instructor's preferences. Here's a general outline of a methodology that could be used:

Content:

Overview of the Cell Cycle

Definition and significance.

Phases: G1, S, G2, and M phase.



Regulatory Mechanisms

- Cell cycle checkpoints: G1/S, G2/M, and metaphase.
- Cyclins and cyclin-dependent kinases (CDKs).
- Tumor suppressor genes (e.g., p53) and oncogenes (e.g., Ras).

Cell Cycle Phases in Detail

- G1 Phase: Cell growth and preparation for DNA synthesis.
- S Phase: DNA replication.
- G2 Phase: Preparation for mitosis.
- M Phase: Mitosis (nuclear division) and cytokinesis (cytoplasmic division).

Significance of the Cell Cycle

- Growth and development.
- Tissue repair and regeneration.
- Reproduction.

Cell Cycle Regulation and Disease

- Cancer: Uncontrolled cell proliferation.
- Role of cell cycle regulators in cancer development.
- Therapeutic implications.

Conclusion:

Understanding the cell cycle is crucial for comprehending the basic principles of biology and the underlying mechanisms of various diseases. By grasping the intricacies of cell cycle regulation, students can appreciate the significance of maintaining cellular homeostasis and the potential implications of its dysregulation in pathological conditions.

**ACTIVITIES
FOR THE
AY-2020-21**

WORLD ENVIRONMENTAL DAY

Title: Online World Environmental Day Programme.

IN Collaboration with dept of Zoology, Botany, and Microbiology Departments
Amidst the COVID-19 Outbreak

Date: 05/06/2020

Introduction:

In response to the challenges posed by the COVID-19 pandemic, the Zoology Department in collaborated with the Botany and Microbiology Departments to organize an Online World Environmental Day Programme. The aim was to commemorate World Environment Day while adhering to social distancing guidelines and leveraging digital platforms to engage participants.

Event Overview:

The Online World Environmental Day Programme was conducted through Various online platforms such as Zoom, Microsoft Teams, and social media channels. The event comprised a series of webinars,, and interactive sessions designed to raise awareness about environmental conservation and sustainability.

Collaborative Efforts:

The collaborative effort between the Zoology, Botany, and Microbiology Departments ensured a comprehensive approach to addressing environmental issues. Each department brought its expertise to the table, enriching the programme with diverse perspectives and insights.



TELANGANA TRIBAL WELFARE RESIDENTIAL
DEGREE COLLEGE FOR WOMEN, SIRICILLA



**WORLD ENVIRONMENT DAY
ONLINE AWARENESS PROGRAM**

In collaboration with the
department of Microbiology and
Zoology

**World
Environment
Day**

DATE & TIME
JUNE:05-06-2020
TIME 11.30 TO 12.30

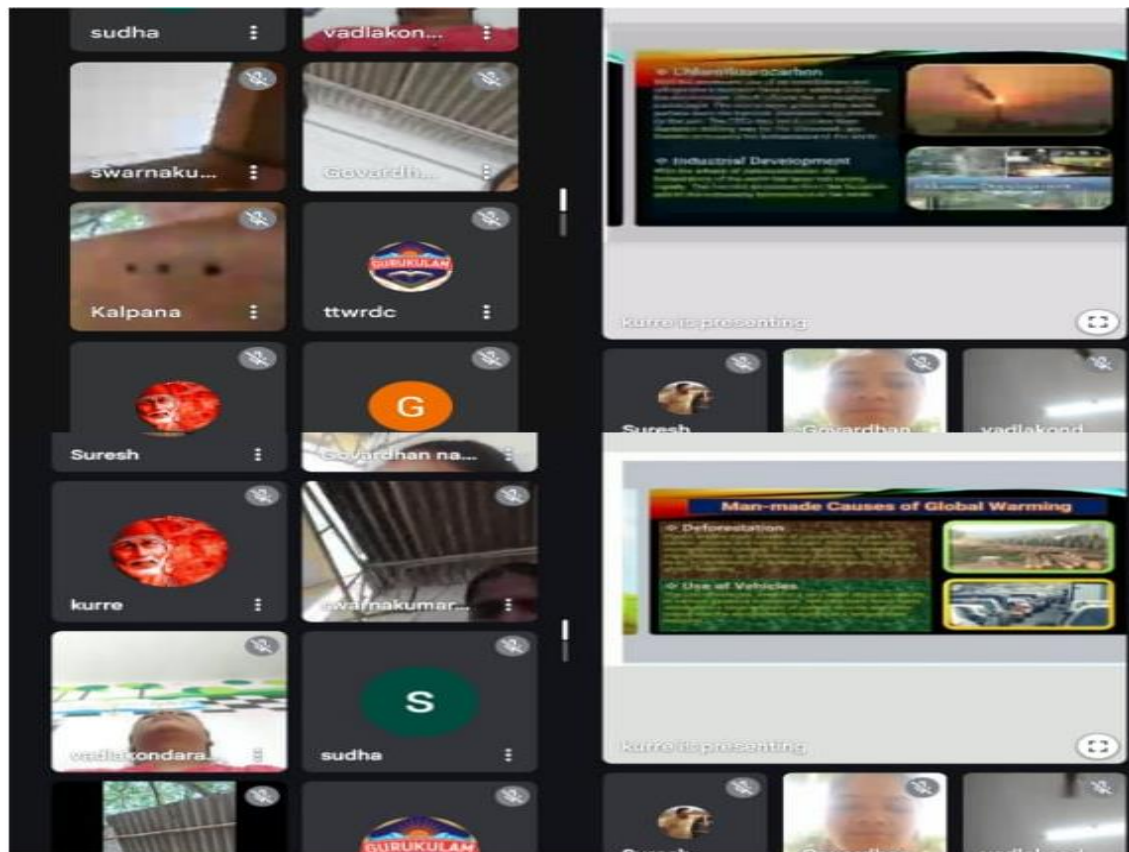


**ORGANIZED BY:
Department of Botany**

HOD of the Department
k.Rajani

Highlights of the Programme:

Webinars: Webinar conducted to the students , to deliver keynote speeches and conduct interactive sessions on topics such as biodiversity conservation, climate change mitigation, and sustainable practices.



Speeches: Invited Students gave speeches conducted to empower participants with the knowledge and skills to take action in their communities. Their idea covered areas such as organic farming, waste management, and renewable energy.

Student Engagement: Students from the participating departments actively contributed to the programme by organizing quizzes, poster competitions, and online campaigns to raise awareness about environmental issues among their villages

Outcomes and Impact:

The Online World Environmental Day Programme in collaborative efforts of the Zoology, Botany, and Microbiology Departments facilitated interdisciplinary learning and fostered a sense of collective responsibility towards environmental stewardship. Participants expressed newfound awareness and commitment to adopting sustainable practices in their personal and professional lives.

Conclusion:

The Online World Environmental Day Programme, organized by the Zoology, Botany, and Microbiology Departments in collaboration successfully raised awareness about environmental conservation and inspired action towards a more sustainable future.

WORLD OZONE DAY

Title: Online Ozone Day Celebration: A Collaborative Endeavor by the Departments of Zoology, Botany, and Microbiology Amidst the COVID-19 Pandemic

Date: 16/09/2020

Introduction:

In light of the ongoing challenges posed by the COVID-19 pandemic, the Department of Zoology collaborated with the Departments of Botany and Microbiology to organize an Online Ozone Day Celebration. The event aimed to commemorate International Day for the Preservation of the Ozone Layer while adapting to the constraints imposed by the pandemic through virtual platforms.

Event Overview:

The Online Ozone Day Celebration took place on 16/09/2020], utilizing various digital platforms such as Zoom, Google Meet, and social media channels. The programme consisted of a series of virtual activities, including webinars, and educational sessions, designed to raise awareness about ozone depletion and its implications for the environment and human health.

TTWRDC(W) RAJANNA SIRICILLA

World Ozone Day Celebration
September 16

As we need to educate students to know the importance of OZONE LAYER Department of Zoology In Association With Department of Botany & Department of Microbiology Is organizing "World Ozone Day- 2020".

Theme of the Event
SAVE THE ROOF
SAVE THE HOME

Date & Time :- 16/09/2020, @ 10. 00 am
[Online Competitions](#)
Seminar
Posters
Essay Competitions

Join with Google meet

Organised by:
Dept of Zoology
Dept of Microbiology
Dept of Botany
TTWRDC(W),
SIRICILLA

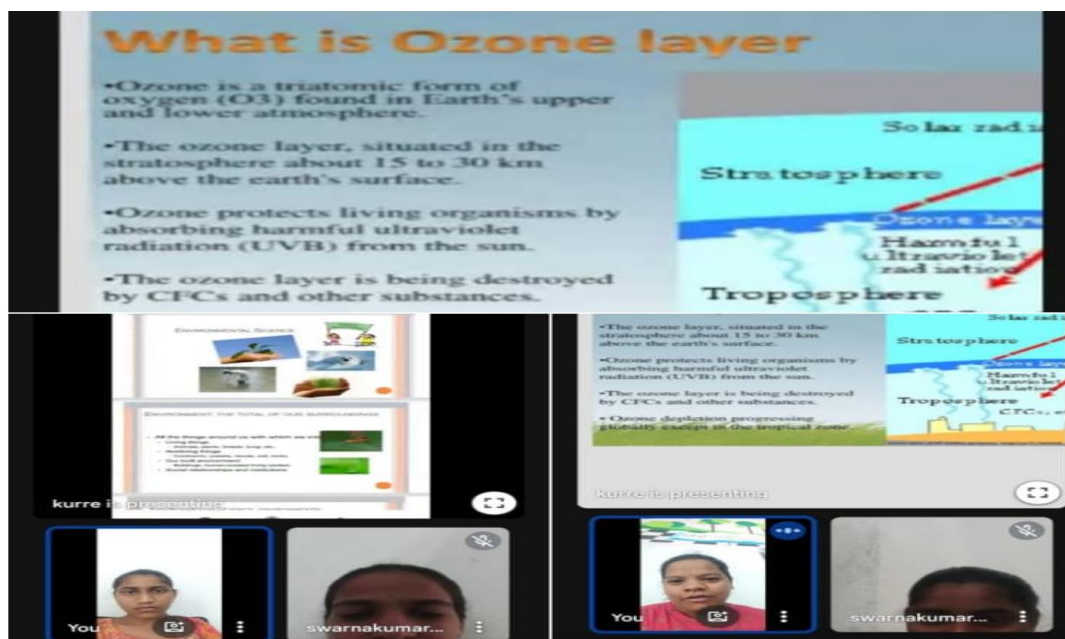
Programme Co- Ordinater
K. Rajani
Principal (FAC)

Collaborative Efforts:

The collaboration between the Departments of Zoology, Botany, and Microbiology facilitated a multidisciplinary approach to addressing ozone depletion and its associated challenges. Leveraging the expertise of each department, the programme offered comprehensive insights into the science behind ozone depletion, its ecological impacts, and potential mitigation strategies.

Highlights of the Programme:

Webinars: Webinar conducted to deliver keynote addresses and conduct informative sessions on topics such as the chemistry of the ozone layer, the effects of ozone depletion on biodiversity, and international efforts to combat ozone depletion.



Student Presentations: Students from the participating departments has shared their knowledge related to ozone depletion and environmental conservation. This platform provided a valuable opportunity for young researchers to contribute to the discourse on ozone protection.

Outcomes and Impact:

The Online Ozone Day Celebration witnessed active participation from attendees, including students, faculty members. The collaborative efforts of the Departments of Zoology, Botany, and Microbiology facilitated knowledge exchange, networking opportunities, and collective action towards ozone protection and environmental stewardship

Conclusion:

The Online Ozone Day Celebration, organized by the Departments of Zoology, Botany, and Microbiology in collaboration exemplified the resilience and adaptability of academic institutions in the face of unprecedented challenges. By harnessing digital technologies and interdisciplinary collaboration, the programme successfully raised awareness about ozone depletion and inspired collective action towards a more sustainable and ozone-friendly future.

Virtual Celebration of World Health Day

Title: Virtual Celebration of World Health Day: Nurturing Wellness in Challenging

Times

Date: April 7, 2021

Introduction:

Amidst the ongoing challenges posed by the COVID-19 pandemic, the celebration of World Health Day took on a new dimension as communities around the world adapted to virtual platforms to promote health and well-being. At [Insert Name of Institution/Organization], degree students came together virtually to commemorate World Health Day and reaffirm their commitment to prioritizing health in the face of adversity.

Event Highlights:

Virtual Inaugural Address: The day commenced with a virtual inaugural address delivered by the college administration, highlighting the significance of World Health Day and the importance of collective action to address global health challenges. Students were encouraged to stay resilient and prioritize their physical and mental well-being amidst the pandemic.



**TELANGANA TRIBAL WELFARE RESIDENTIAL
DEGREE COLLEGE FOR WOMEN, SIRICILLA**



WORLD HEALTH DAY

ONLINE AWARENESS PROGRAM

**In collaboration with the
department of Botany and
Zoology**

**World
Health
day**

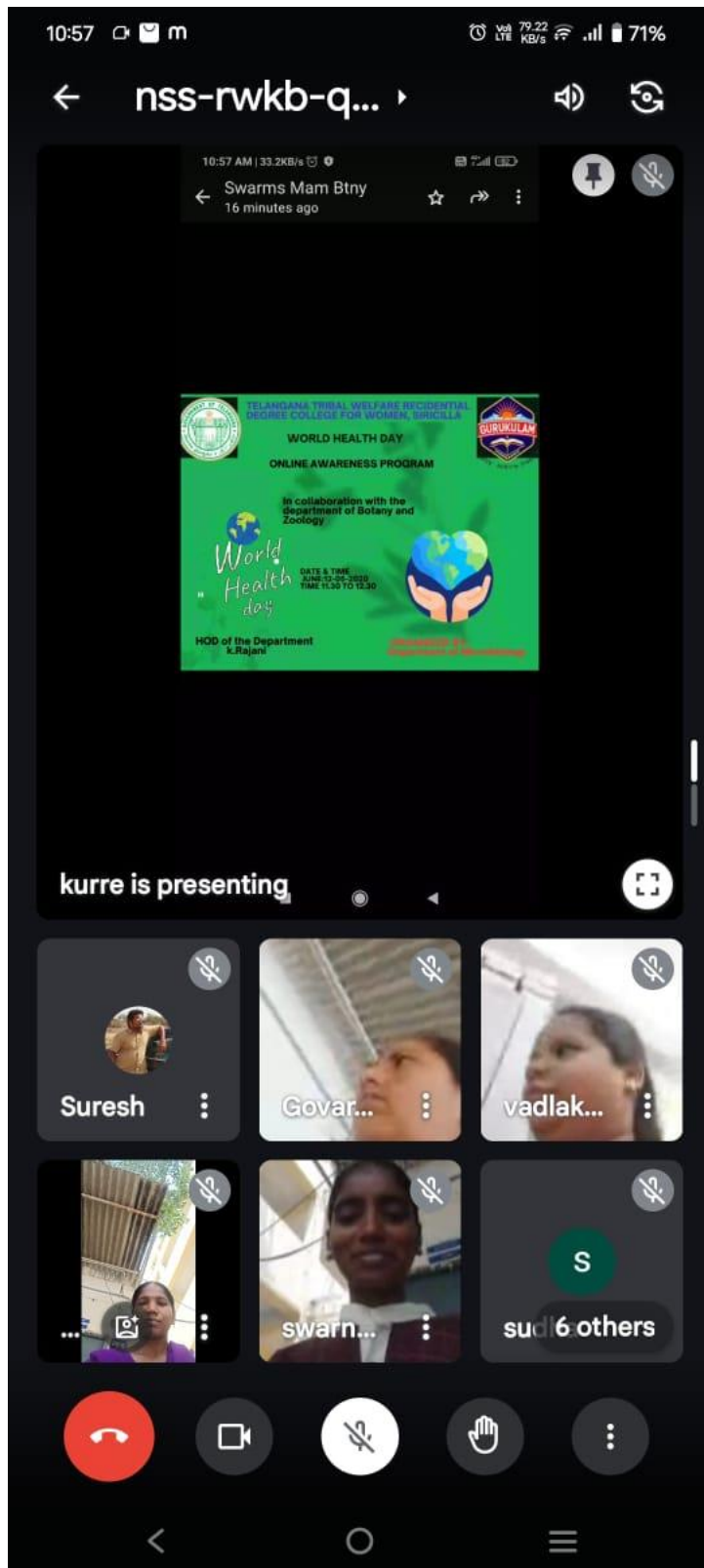
**DATE & TIME
JUNE:12-05-2020
TIME 11.30 TO 12.30**



**HOD of the Department
k.Rajani**

**ORGANIZED BY:
Department of Microbiology**

Educational Webinars: A series of educational webinars were organized to disseminate information about key health topics relevant to the COVID-19 pandemic. Experts from the fields of public health, medicine, and psychology delivered presentations on topics such as preventive measures against COVID-19, mental health coping strategies, and the importance of vaccination.



Fitness and Wellness Sessions: Virtual fitness and wellness sessions were conducted to promote physical activity and stress relief among students. Yoga and meditation sessions, led by certified instructors, provided students with practical tools to manage stress, enhance resilience, and maintain overall well-being during these challenging times.

Interactive Discussions: Interactive discussions and Q&A sessions were facilitated to engage students in dialogue about health-related concerns and questions. Students had the opportunity to share their experiences, seek advice, and exchange tips for staying healthy and resilient amidst the pandemic.

Health Challenges and Competitions: Health challenges and competitions were organized to encourage students to adopt healthy behaviors and lifestyles. Challenges such as step-count challenges, healthy recipe contests, and mindfulness challenges motivated students to prioritize their health and well-being in a fun and interactive way.

Outcomes and Conclusion:

The virtual celebration of World Health Day at [Insert Name of Institution/Organization] provided students with a platform to come together, learn, and reaffirm their commitment to health and well-being amidst the challenges posed by the COVID-19 pandemic. Through educational webinars, fitness sessions, interactive discussions, and community engagement initiatives, students were empowered with knowledge, skills, and resources to prioritize their physical and mental health. As we navigate these uncertain times, the spirit of resilience, solidarity, and commitment to health promotion fostered during World Health Day will continue to guide students in their journey towards a healthier and more resilient future.

**ACTIVITEIS
FOR THE
AY- 2019-2020**

DEPARTMENT ACTION PLAN (2019-20)			
MOMTH	DATE	ACTIVITY	DISCRPTION
JULY	01/07/2019	class work started for all semesters	
	2/07/2019 to 12/07/2019	Bride course	Help students to improve their knowledge and communication
	14/07/2019	stuedent seminar	to enable student to improve their understanding of a topic by engaging with key issues
AUGUST	20/08/2019	World Mosquito day	To understand mosquito cause diseases
	22/08/2019	student seminar	generating a situation for group to guided interaction among themselves
		Quiz	They can help you learn more and can also used as a tool for self improvement
SEPTEMBER	19-08-2019	Quiz	to learning it used as tool for self improvement
	20-08-2019	World Mosquito Day	to understand mosquito cause diseases
	27/08/2019	quize	To evaluate learning skills
	11/09/2019	world first aid day	students taken for rally to raise awareness among people about first aid
	16/09/2019	World ozone day	to develop student thinking skills
	28/09/2019	slip test	improve learning capabilities in students
OCTOBER	11/10/2019	STUDENT SEMINAR	to enable student to improve their understanding of a topic by engaging with key issues
	23/10/2019	quize	Aid in confidence building
	12-10-2019	student seminar	To improve individual skills
NOVEMBER	16/10/2019	world food Day	
	19/11/2019	student seminar	generating a situation for group to guided interaction among themselves
	29/11/2019	slip test	improve learning capabilities in students
DECEMBER	11/12/2019	National Education Day	
	16-12-2019	World Ozone Day	improve learning capabilities in students
JANUARY	19/01/2020	QUIZE	
	29/01/2020	STUDENT SEMINAR	to enable student to improve their understanding of a topic by engaging with key issues
FEBRUARY	08/02/2020	FEILD TRIP	to observe habitat of insects in local area
	20/02/2020	weekly test	improve learning capabilities in students
	28/02/2020	science day celebrations	prepared models and exhibition
MARCH	11/03/2020	quize	improve concentration
	25/03/2020	student seminar	generating a situation for group to guided interaction among themselves
APRIL	16/04/2020	remedial class	to encourage and help the learner prevent them failing
	23/04/2020	weekly test	improve learning capabilities in students
MAY	07/05/2020	quize	improve concentration
	10/05/2020	SEM PREPARATION	

ACTIVITY :- STUDENT SEMINAR
DATE:-14/07/2019

OBJECTIVE:-

Student seminar held to bring good communication skills in students and also to improve their knowledge on their area of interest and to explore their knowledge.

EXPLANATION:-

A seminar was given by first year student name B. akila she was explained about the “JAM” entrance test how to prepare for JAM exam.



FEED BACK:-

The seminar proved to be an invaluable resource for students preparing for the JAM entrance exam. By offering expert guidance, subject-specific insights, and practical tips, it equipped participants with the tools and knowledge necessary to excel in this highly competitive examination. The event fostered a conducive learning environment, encouraging collaborative learning and personal growth among aspirants

WORLD OZONE DAY

Ozone Day Awareness Programme

Activity:-World Ozone Day

Date: September 16, 2019

Introduction:

On September 16, 2019, TTWRDCW Rajanna Siricilla Department of Zoology in collaboration with Microbiology and Botany joined the global community in celebrating International Ozone Day, dedicated to raising awareness about the importance of the ozone layer and its protection.

Objectives:-

- ❖ To inform people about the significance of the ozone layer along with how its depletion.
- ❖ It can have adverse affects on human health,ecosystem and the environment.
- ❖ stratospheric ozone day is earth's sunscreen-protecting living things from to much ultraviolet radiation from the sun.

Ozone layer protection is very important so avoid using pesticides,limit private vehicle driving ,banning the use of dangerous nitrous oxide,use eco-friendly household learning product.

Students engaged in rally to get awareness about OZONE layer in atmosphere in Thangallapally village.

Activities:-

Poster and Slogan : Students participated in poster-making and slogan-writing competitions, creatively expressing their commitment to ozone protection and sustainable living.



Conclusion:-

In essence, the Ozone Day celebrations at TTWRDCW RAJANNA SIRICILLA served as a platform to inspire local people to become responsible stewards of the environment, fostering a culture of sustainability within the community.

Field Trip

Activity :- Field Trip

Topic :- Collection and characterization of insects

Date :- 13/11/2019

Introduction:

The field trip was organized for degree life science students with the objective of collecting insects for characterization. The trip aimed to provide hands-on experience in insect taxonomy, ecology, and conservation.

Field Work:

The field trip commenced early in the morning to maximize insect activity. Equipped with nets, jars, and magnifying glasses, students explored various habitats including forests, grasslands, and wetlands. The collection focused on diverse insect orders such as Coleoptera, Lepidoptera, Diptera, and Hymenoptera.



Insect Collection:

Students meticulously collected specimens using ethical and sustainable practices, ensuring minimal disturbance to the ecosystem. Emphasis was placed on documenting the collection site, habitat characteristics, and associated flora.

Identification and Characterization:

Upon returning to the laboratory, students sorted and identified the collected specimens using taxonomic keys, field guides, and microscopy techniques. They characterized the insects based on morphological features, behaviour, and ecological roles.



Data Analysis and Interpretation:

Collected data were analyzed to assess insect diversity, abundance, and distribution patterns across different habitats. Students gained insights into the importance of insects as bioindicators of ecosystem health and functioning.



Educational Outcomes:

The field trip provided invaluable experiential learning opportunities, enabling students to:

- Develop practical skills in insect collection, handling, and identification.
- Understand the ecological significance of insects in various ecosystems.
- Appreciate the complexities of insect diversity and adaptation.
- Apply scientific methods to characterize and study insect communities.

Conclusion:

The field trip for insect collection proved to be an enriching and educational experience for degree life science students. It fostered a deeper understanding of insect biology, ecology, and conservation, while also instilling a sense of stewardship towards the natural world.

QUIZE PROGRAMME

Activity :- QUIZE PROGRAMME

Date:- 20/11/2019

Title: Report on Quiz Programme for Degree Students in Zoology

Introduction:

A quiz programme was organized for degree students majoring in Zoology, aiming to enhance their knowledge, foster a competitive spirit, and encourage teamwork. The event took place in the study hours and saw enthusiastic participation from students across different semesters.

Event Overview:

The quiz consisted of multiple rounds, each designed to test various aspects of zoological knowledge, including taxonomy, anatomy, ecology, behavior, and conservation. Questions were curated to be challenging yet accessible, ensuring engagement from participants of all levels.



Feedback:

Following the event, feedback was collected from both participants and evaluate the success of the quiz programme. The overwhelming response was positive, with attendees expressing appreciation for the opportunity to test their knowledge in a fun and competitive environment.

Conclusion:

The quiz programme for degree students in Zoology proved to be a resounding success, fostering a sense of camaraderie among participants while deepening their understanding of the subject. Such initiatives are instrumental in nurturing academic excellence and promoting a culture of lifelong learning within the student community.

WORLD AIDS DAY

Activity :- World AIDS Day

Date :- 1/12/2019

Introduction:

TTWRDC womens degree college Department of Zoology in collaboration with Microbiology and Botany commemorated World AIDS Day on December 1st, with a series of events aimed at raising awareness and promoting understanding of HIV/AIDS among students and faculty members.

Activities Undertaken by Students:

Awareness Campaigns:- Students organized awareness campaigns throughout the campus, distributing informational pamphlets, posters, and brochures to educate their



peers about HIV/AIDS transmission, prevention, and stigma reduction.

Interactive Sessions: - Several interactive sessions were conducted, where students engaged in discussions, quizzes, and role-plays to deepen their understanding of HIV/AIDS-related issues and challenges.

Volunteer Initiatives: Many students volunteered at local HIV/AIDS organizations, offering support services, counseling, and HIV testing assistance to those in need, demonstrating their commitment to making a positive difference in the fight against HIV/AIDS.

Outcomes:

Increased Awareness: The AIDS Day celebrations successfully raised awareness about HIV/AIDS among students, fostering a more informed and compassionate campus community.

Conclusion:

The AIDS Day celebration in the degree college was a meaningful and impactful event, empowering students to take proactive steps towards combating HIV/AIDS and promoting a culture of empathy, understanding, and solidarity within the campus community.

ONLINE WEBINAR

Activity :- Webinar

Date 12/01/2020

Topic :- Webinar Report on “Osmoregulation”

Speaker :- Dr. Mamidala Estari

Introduction:

Dr. Mamidala Estari, a renowned biologist specializing in osmoregulation, conducted an insightful webinar for degree students. Osmoregulation, the biological process that regulates the concentration of solutes in the fluids of organisms, is crucial for maintaining internal balance despite external environmental changes.

Key Points Discussed:

Fundamentals of Osmoregulation: Dr. Estari elucidated the basic principles of osmoregulation, emphasizing its significance across different species and environments.

Mechanisms in Different Organisms: He delved into various osmoregulatory mechanisms employed by different organisms, ranging from marine animals to terrestrial plants.

Adaptations and Challenges: Dr. Estari highlighted the diverse adaptations organisms have developed to cope with osmotic challenges, such as osmoconformers vs. osmoregulators.




TTWRDC(W), RAJANNA SIRICILLA
(Affiliated to Satavahana University)

DEPARTMENT OF ZOOLOGY

Cordially invites you to an Extension Lecture

on

"Osmoregulation And Homeostasis"

Date & Time:- 21/01/2020
@12.00 pm

Join with Google meet:



Programme Coordinator:

INVITED SPEAKER



Dr. Estari mMamidala
Ph.D, PDF
Assistant Professor Kakatiya university

P. Veena
M.Sc
DL in zoology

PROGRAMME CONVENER



Mrs. K. Rajani
M.Sc. Microbiology,
Botany
Principal(FAC),
TTWRDC(W), Rajanna
Siricilla

Interactive Session:

The webinar featured an interactive Q&A session, where participants engaged with Dr. Estari to clarify doubts and deepen their understanding of osmoregulation. The session fostered a dynamic exchange of ideas and insights.

Conclusion:

Dr. Mamidala Estari's webinar on osmoregulation provided degree students with a comprehensive overview of this fundamental biological process. By elucidating key concepts and addressing relevant applications, the webinar contributed to the participants' knowledge and appreciation of osmoregulation's role in maintaining life's delicate balance.

Overall, the webinar was a resounding success, leaving participants enriched and inspired to explore the intricacies of osmoregulation further

**ACTIVITEIS
FOR THE
AY-2018-2019**

STUDENT SEMINAR

Title: Understanding Cloning Vectors: Tools for Genetic Engineering

Introduction:-

- Define cloning vectors and their significance in genetic engineering.
- Brief history of cloning vectors and their development.

Objectives:-

- ❖ **Enhance Subject Knowledge:**
Provide students with an in-depth understanding of specific topics within the seminar's theme.
Expose students to recent advancements, research, and trends related to the subject matter.
- ❖ **Develop Presentation Skills:**
Enable students to develop and refine their public speaking and presentation skills.
Teach students how to effectively communicate complex information to an audience.

Types of Cloning Vectors

Plasmids

- Structure and function.
- Advantages and disadvantages.
- Examples of commonly used plasmids.



Bacteriophages

- Characteristics and applications.

- Examples of bacteriophage vectors.

Cosmids

- Structure and applications.
- Comparison with other vectors.

Yeast Artificial Chromosomes (YACs)

- Overview and utility in cloning large DNA fragments.
- Challenges and considerations.

Features of Cloning Vectors

Origin of Replication (ORI)

- Importance in replication.
- Types of origins.

Selectable Markers

- Purpose and types.
- Commonly used selectable markers.

Cloning Strategies and Techniques

Insertion of DNA Fragments

- Restriction enzyme digestion and ligation.
- PCR-based cloning.

Transformation

- Introduction of vectors into host cells.
- Methods and optimization.

Screening and Selection

- Methods for identifying recombinant clones.
- Importance of proper screening.

Objectives

- ❖ Functional analysis of genes.
- ❖ Biotechnology and Industry

- ❖ Ethical and Regulatory Considerations
- ❖ Discussion on the ethical implications of cloning vectors.
- ❖ Regulatory frameworks governing the use of cloning technology.

Conclusion

- Summary of key points.
- Importance of cloning vectors in genetic engineering and biotechnology.