

A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN (A)
(Accredited by NAAC with 'B' Grade, Cycle 3)
KAKINADA – 533 002, EAST GODAVARI, A.P.



DEPARTMENT OF CHEMISTRY
FIELD TRIP TO *NATIONAL INSTITUTE OF HYDROLOGY*
KAKINADA
DATE: 04-05-2022



From
V. Mallikarjuna Sarma
Head, Dept. of Chemistry
ASD Govt. Degree College for Women
Kakinada

To
Principal
ASD Govt. Degree College for Women
Kakinada.

Respected Madam,

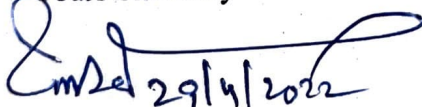
Sub: Request to grant permission for the field trip of III B.Sc cluster chemistry students to National Institute of Hydrology on **04-05-2022**.

With due regards, this is to bring for your kind perusal and consideration that as a part of curriculum the final year cluster students of B.Sc. Chemistry are planning to visit National Institute of Hydrology, Kakinada on **4th May 2022** to provide basic Research experience to the students.

In this connection, I request you to kindly grant the permission for the visit, so that the students will get benefitted.

Thanking you for your Consideration,

Yours Sincerely


msd 29/4/2022
V. Mallikarjuna Sharma


Principal

(Dr. V. Anantha Lakshmi)

Annaram Satyavathi Devi GOVERNMENT DEGREE COLLEGE FOR WOMEN (AUTONOMOUS), KAKINADA

(Under Jurisdiction of Adikavi Nannaya University, Rajamahendravaram)

Re-accredited by NAAC with B Grade

Dr. V. Ananta Lakshmi M. Sc., Ph. D.,
Principal

Mobile: 99637 86386

email: jkcrjyec.asdkkd@gmail.com

Date: 30.04.2022

To

Dr. Y. R. Satyaji Rao

Scientist - F & Head

Deltaic Regional Centre,

NIH, Kakinada.

Sir,

Sub: Department of Chemistry – Request for permission to allow our students to pursue project work in your organization – reg.

I wish to submit the following few lines for your kind perusal.

We have 28 students pursuing B. Sc (Final year) who have chosen Chemistry as cluster subject in their VI semester. It is mandatory for every student to pursue, complete and submit one project in chemistry as a part of curriculum. The project report carries 50 marks in the evaluation. Our students have chosen a project entitled “Evaluation of quality parameters of water samples in the local area”.

We came to know that National Institute of Hydrology is one of the premier organizations in Kakinada that take up projects in water analysis.

In this regard, I request you to support our students in pursuing the project on water analysis for one week from 04.05.2022 to 11.05.2022 in your organization.

The list of students is enclosed herewith.

Thank you.

V. Ananta Lakshmi

(Dr. V. Ananta Lakshmi)

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

DEPARTMENT OF CHEMISTRY

LIST OF STUDENTS PURSUING PROJECT WORK IN CHEMISTRY

S. No.	Regd. No.	Class	Name of the student
1	192009	III B. Sc (MPC)	M. Mani Ratna Mala
2	192015	III B. Sc (MPC)	R. Suguna
3	192010	III B. Sc (MPC)	K.Neela veni
4	192015	III B. Sc (MPC)	R.Naga lakshmi
5	192015	III B. Sc (MPC)	M.Mani priya
6	192015	III B. Sc (MPC)	A.Varshitha
7	192015	III B. Sc (MPC)	K.Mani kanta
8	192015	III B. Sc (MPC)	V.Jagadeeswari
9	192015	III B. Sc (MPC)	D.Ratnam
10	192015	III B. Sc (MPC)	K.Siva rani
11	192015	III B. Sc (MPC)	D.Mery
12	192015	III B. Sc (MPC)	P.Jyothi
13	192015	III B. Sc (MPC)	P.Jyothika
14	192015	III B. Sc (CZAQT)	M.Phaneedra
15	192015	III B. Sc (MPC)	V.Vasanth
16	192015	III B. Sc (MPC)	D.Reethu sri
17	192015	III B. Sc (MPC)	D.Bala sri
18	192015	III B. Sc (MPC)	D.Jyothi
19	192015	III B. Sc (MPC)	CH.Basaweswari
20	192015	III B. Sc (MPC)	T.Venkata sri durga
21	192015	III B. Sc (MPC)	S.Krupa sowndarya
22	192015	III B. Sc (MPC)	A.Jaya sri rama leela
23	192015	III B. Sc (MPC)	J.Uma devi
24	192015	III B. Sc (MPC)	G.Rajeswari
25	192015	III B. Sc (CBZ)	M.Malleswari
26	192015	III B. Sc (CBZ)	R.Mamatha
27	192015	III B. Sc (CBZ)	N.Ramya
28	192015	III B. Sc (MPC)	V.D.Reshma

Place: Kakinada

Date: 30.04.2022

V. Ananta Lakshmi

(Principal)

A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN
(A) KAKINADA - DEPARTMENT OF CHEMISTRY
FIELD TRIP TO NIH, KAKINADA

4th MAY 2022



The department of chemistry, A.S.D. Govt. Degree College for Women (A), Kakinada has organized a field trip to National Institute of Hydrology, Kakinada. Mr. V. Mallikarjuna sharma, head, dept. of chemistry, conceived the idea of executing a project in NIH, Kakinada for chemistry cluster students. Around 29 students did their final year cluster project on "Analysis of chemical parameters of water."

III B.Sc Chemistry cluster students field visit to NIH, Kakinada.



Dr. Vijay, Scientist - B, NIH, Kakinada demonstrating the brief history of NIH.

A.S.D. Government Degree College for Women (A)
Kakinada

Dept. of Chemistry - field trip to NIH

Date: 04/05/2022



A POSE BY THE FACULTY OF DEPARTMENT OF
CHEMISTRY IN FRONT OF NATIONAL INSTITUTE OF
HYDROLOGY KAKINADA.

from left to right: Dr. S. Priyadarshini, Mr. Vijay ko-
mar, Mr. V. Mallikarjuna Sharma, Dr. K. Tharu Lakshmi
and Ms. P. Leena.

FEEDBACK

Department of Chemistry

Gr.H.V.L. Phaneendra
III B.Sc Aquaculture
Technology

Visit - National Institute of Hydrology
Delhi, DRC

from 4-5-2022 to 6-5-2022 we went to the field trip on behalf of A.S.D. Govt. Degree college to NIH.

Feedback:-

- Firstly we thankful to ~~Satyajit~~ Satyajit Rao, Scientist Gr. for allowing us to learn.
- I am very grateful to learn from Vijay Kumar sir (Scientist-B)
- Now I am able to know which water is better to drink and what are the elements and physico-chemical parameters are there in water.

Gr.H.V.L. Phaneendra,
III B.Sc Aquaculture
Technology,
A.S.D. Govt. Degree college,
Jaganachapur, Kakinada.

Feedback
Department of Chemistry

K. Manikanta
III B.Sc MPC

visit - National Institute of Hydrology
(NIH)

Go to field trip on 4/5/22 Wednesday visiting national Institute of Hydrology. To learn ^{about} water analysis.

We learn Testing physical and chemical parameters of water. It is a very good Experience by visiting National Institute of Hydrology.

Scientist-B VIJAY KUMAR Sir give very good lecture about water Analysis. He Explained very detailed about water resources and water analysis.

We learn laboratory Equipments, water testing etc.. This trip is very useful to our future. It is Best Experience..

K. Manikanta
III B.Sc MPC (E.M)
A.S.D Women's college
Jaganaickpur
Kakinada

Department of Chemistry :- feed back.

A.S.D. GOVT DEGREE COLLEGE WOMEN [A]

Name :- M. Malleswari.

Group :- III B.Sc CBZ.

from 4-5-22 to 6-5-22. on behalf of A.S.D. Govt degree college, we went to the field trip to "National Institute of hydrology" Gudalurigunta.

feedback :-

- => we learnt the physical and chemical parameters of water.
- => the scientists are very cooperative and explained about all the parameters.
- => They also explained about the technique of conversion of ground water or waste water into drinking water.
 - => use of ground water,
 - => surface water
 - => Rain water.
- => We also learnt the techniques to detect the sodium by the method flame photometer
- => detection of the nitrate by the spectrophotometer.
- => we felt pleasure by learning all the above techniques.

* M. Malleswari

Department of chemistry
chemistry feedback

Name :- V. Jagadeeswari
class :- III Bsc
section :- MPC R.NO :- 1931018
group :- MPC (chemistry)

visiting - National Institute Hydrology (NIH)
kakinada.

ది. 4/05/2022 తేదీన NIH ఫిల్డ్రోలజీ విభాగం. మా
కాలేజీ A.S.D. government college for women's, kakinada
Department of chemistry తరఫున వెళ్ళాము.

NIH డ్విజన్ చాలా బాగా తెలుసుకోవడం. అక్కడ
T. vijay sir (scientist - B) మాకు water samples కోసం,
water కోసం మాకు చాలా బాగా వివరించి నేర్పించారు.
మాగ్నెటిక్ ఫీల్డ్, సముద్ర చలనం వలన సులభం చేస్తూ,
వలన వాడుకోవాలి, ప్రపంచ చలనం, వర్షం నోటిని వలన
వాడుకలో ఉండే మాకు చాలా బాగా వివరించారు.
physical parameters డ్విజన్ నేటికీ PH, DO,
Electric current, TDS, salinity, Temperature వలన
చూడాలి ఉండే vijay sir చూసి, మాకు ఉండే చేపించారు.
మాకు అందరి చాలా బాగా నచ్చాయి. నేను చాలా
నేర్చుకోవాలను. మాకు తెలియనివి ఉండే చూసి, నేర్చుకోవాలను.
physical parameters and wether observation's మాకు
బాగా నచ్చాయి. వాటిని చూడాలి, చేయాలి ఉండే
చూసి నేర్చుకోవాలను. NIH డ్విజన్ నేను చాలా నేర్చుకోవాలను
చాలా బాగా ఆనందంగా చూసి నేర్చుకోవాలను.

V. Jagadeeswari
III BSC (MPC)
Cluster Chemistry

Department of chemistry

Name :- M. Mani Ratna Mala

Group :- III BSc (Mpc)

Regd No :- 1931011

visit :- National Institute of Hydrology (NIH)

the Deltaic Regional center (DRC)

Date :- 4/5/22 Wednesday

On 4/5/22 Wednesday from A.S.D. Govt college. Chemistry students visit NIH as a field trip to learn water Analysis.

In NIH we saw a pleasant environment. By the guidance from Sr. Vijay of water and gain lot of knowledge about water sources. We take water samples from ground water and the water is tested by multi parameter we take the pH, EC, TDS, salinity of water.

Sr. Vijay give the detailed information about the laboratory equipments. By this trip we learn so many things. This trip is very useful for the further projects thanks to our HOD V.M. Sharma sir and lecturers of chemistry department

M.M.R. Mala

Feedback on Field trip

Name: Kelangi. Suguna

Group: III BSC MPC.

Regd NO: 1931015

Visit :- National Institute of Hydrology (NIH)
The Deltaic Regional center (DRC)

date :- 4/5/22 Wednesday.

On 4/5/22 Wednesday from A.S.D. Govt college.
Chemistry students visit NIH as a field trip
to learn water analysis.

In NIH we saw a pleasant environment.

By the guidance from Sir. Vijay (Scientist B) we
learn testing physical parameters of water and gain
lot of knowledge about water sources.

We take water samples from ground water
and the water is tested by multi parameter we
take the pH, E.C, TDS, salinity of water.

Sir. Vijay give the detailed information about the
laboratory equipments. By this trip we learn so many
things. This trip is very useful for the further
projects. Thanks to our HOD V.H. Shama sir and
lecturers of chemistry department.

R. Suguna.



A S.D.GOV.T.DEGREE COLLEGE(W), KAKINADA
DEPARTMENT OF CHEMISTRY

STUDENTS WHO ATTENDED IN THE PROGRAMME

Sl.No.	Signature of the Student	Sl.No.	Signature of the Student
1	1931035, P. Tyothi	20	1933002. Sk Karishma
2	2131001, S.P.S.S.M. Nirmala	21	1933005; D. Eswari Kumari
3	1931039, R. Pushpaletta	22	1933024 1933074 ; K. Rajeswari
4	1931034; M. Padma Devi	23	1933015 Chsai Lakshmi
5	1931040; R. Padma	24	1933011 S. Nagasatya
6	1931046; y. Akhila.	25	1933004 - b. Pb. Thiruse
7	1931036, P. Tyothi Ke	26	1933018. D. Jeeatya
8	1931042; T. Venkata Sridurga	27	1933016 .Ch. manasa
9	1931031; K. Purga Bhavani.	28	1933017 D. Sriavani
10	1931038; P. Sai Devi	29	1933019 - D. Sivamma
11	1931033, K. Sameera	30	1933014 - Ch. kumari
12	1931041, S. Karuna.	31	1933021 - G. Prema Tyothi
13	1931044, v. Lila Mallawari	32	1933001 - Sk. Balshree.
14	1931011, M. Mani Ranga Mala	33	1933003 - A. Devi.
15	1931002 A.S.N.S.S. Vaylita.	34	1933008 M. Malleswari
16	1931008 K. Hanikanta	35	1933023 G. Anjali Devi
17	1931007 K. Neelakanti	36	1933020 D. Mahalakshmi
18	1931001 R. Nagale kshmi	37	1933007 M. Sobha
19	1933006 L. Priyanka.	38	

A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN(A),

KAKINADA - 533002, EASTGODAVARI, ANDHRA PRADESH

DEPARTMENT OF BOTANY & HORTICULTURE

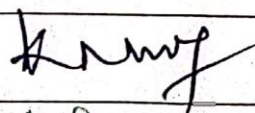
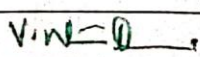


Visit To Nursery & Landscape Expo

2022

DEPARTMENT OF BOTANY & HORTICULTURE

ACTIVITY REGISTER FOR THE MONTH OF MARCH 2022

Title of the Activity	Visit to Nursery & Landscape Expo 2022 at Government Arts College (A) Rajahmundry.
Date	16-03-2022
Conducted by	Department of Botany & Horticulture
Nature of Activity	Visit to Nursery & Landscape Expo 2022 at Government Arts College (A) Rajahmundry
Number of Students Participated	33
Brief Report on the Activity	Faculty & Students of the Department visited Nursery & Landscape Expo 2022 organised by Agritech , Andhrapradesh at Govt. arts College Autonomous Rajamahendravaram. Students learnt about various plants best suitable for Gardening and Bonsai making and also for Agricultural purpose
Name of the Lecturer who planned and conducted the Activity	Ms. K.N.V.S.N.Eswari Smt.N.Pushpa
Signature of the Dept. Incharge / Convenor of the Committee	
Signature of the Principal	
Remarks	



Our Dept Students at Nursery & Landscape Expo at Govt. Arts College (A)
Rajahmahendravaram



Students Learning About the growth Pattern & Yield of various Fruit
Yielding plants



Students Observing Bonsai Plant

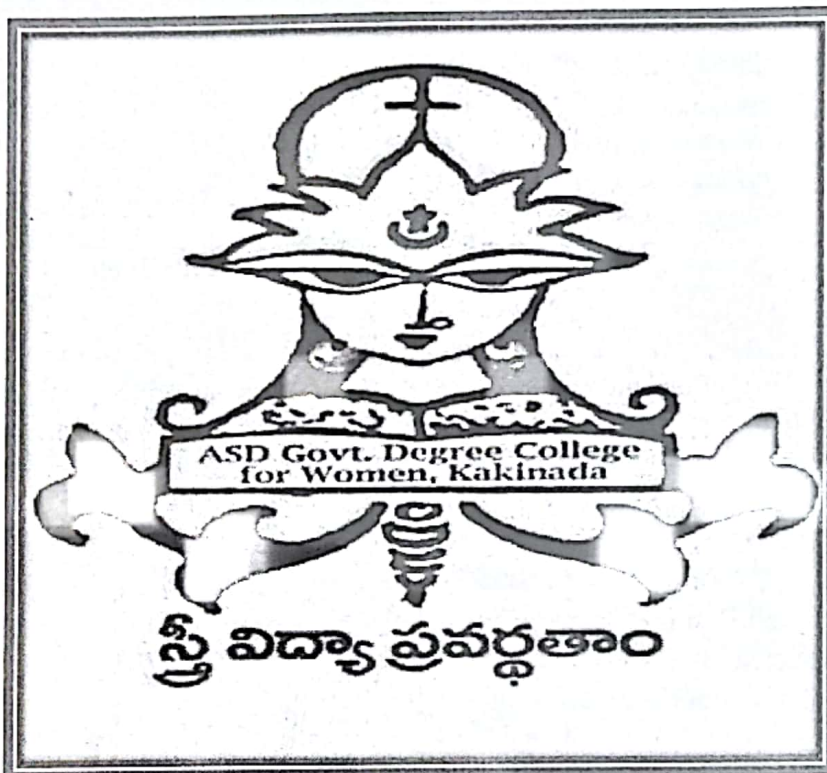




A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN (A),

KAKINADA - 533002, EASTGODAVARI, ANDHRA PRADESH

DEPARTMENT OF BOTANY & HORTICULTURE



A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN (A),

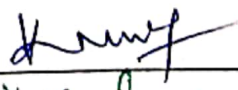

KAKINADA - 533002, EASTGODAVARI, ANDHRA PRADESH

FIELD VISIT

19.02.2022

DEPARTMENT OF BOTANY & HORTICULTURE

ACTIVITY REGISTER FOR THE MONTH OF JANUARY 2022

Title of the Activity	Field Visit to Local Nurseries and Olericulture fields in sarpavaram , kakinada
Date	19-02-2022
Conducted by	Department of Botany & Horticulture
Nature of Activity	Visit to the Local Nurseries, Olericulture Fields of Local Sarpavaram area in Kakinada and also to bring awareness about the cultivation of Various vegetable crops
Number of Students Participated	14
Brief Report on the Activity	Faculty & Students of CBHT group visited local nurseries and olericulture fields in Sarpavaram, Kakinada In this field visit, students learnt about various propagation techniques, different tools used in Nurseries and cultivation of Bonsai varieties and Succulents etc In sarpavaram olericulture fields students learnt about various cultivation practices to be followed while cultivating different vegetable crops , measures to be taken while controlling pests & diseases attacking various vegetable crops
Name of the Lecturer who planned and conducted the Activity	Ms. K.N.V.S.N.Eswari Dr.M.Sulakshana Smt.N.Pushpa
Signature of the Dept. Incharge / Convenor of the Committee	
Signature of the Principal	
Remarks	



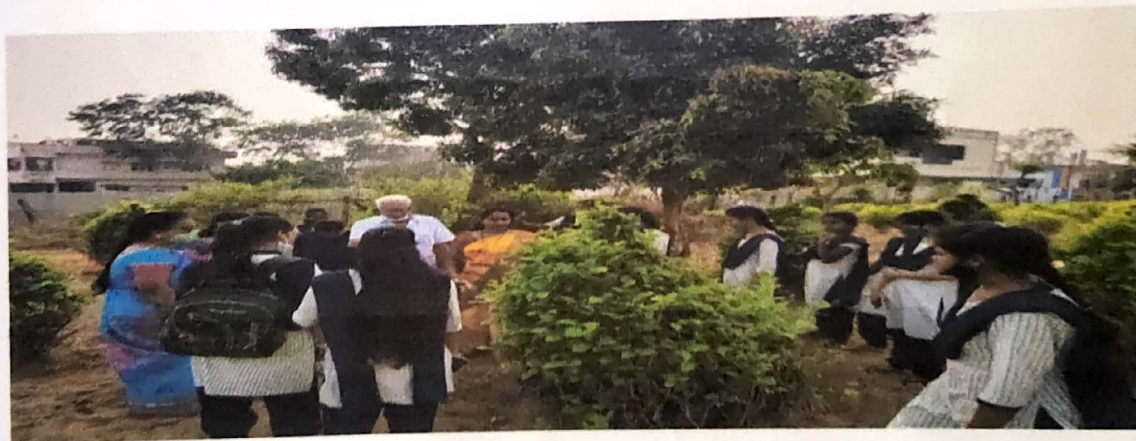
Faculty & Students of the Department visiting Local Nurseries in Kakinada on 19-2-2022



Awareness is given to the students about various containers and fertilizers used in Nurseries



Sri B. Veerabhadra rao garu Owner of olericulture fields in Sarpavaram explaining about cultivation of vegetable crops



Cultivation of Jasmine

Cultivation of Leafy vegetables





స్త్రీవిద్యా ప్రవర్ధతాం

GOVERNMENT DEGREE COLLEGE
For Women (Autonomous)
Kakinada

(NAAC Accredited "B")

(Affiliated to Adikavi Nannaya University, Rajamahendravaram, East Godavari
Dist.)

EDUCATIONAL TOUR/ STUDY TOUR
MOTHU GUEDEM
On 05/01/2022

Organized

By

Department of Humanities

Y. SITA MAHALAKSHMI

HEAD OF THE DEPARTMENT OF HISTORY

Dr.K. YAMUNA

HEAD OF THE DEPARTMENT OF ECONOMICS

G. PAVANI DEVI

LECTURER IN ECONOMICS

Capt. M. SRIRAMULU

Former Lecturer in Economics

P. V. BHUVANESWARI DEVI

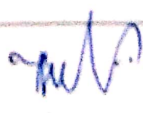

Guest Faculty in Political science

MS.L. BHANU TEJA

Guest FACULTY in History & Tourism



A.S.D GOVT. DEGREE COLLEGE (W), (Autonomous)
Jagannaickpur, Kakinada
Activity Register 2021-2022
Department of History

Date	05/01/2022
Conducted through (DRC\jke\ELF\NCC\NSS\Department etc.)	Department of HISTORY & Tourism
Nature of Activity (seminar\workshop\Extn. Lecture etc.)	"Educational Tour" / Study Tour
Title of the Activity	"Educational Tour" / Study Tour
Name of the Department\committee	Department of HISTORY & Tourism
Details of Resource Persons (Name, Designation etc.)	Sri Jagatha Srinu & A.E Narasimham
No. of students participated	45 of III B.A students
Brief Report on the Activity	<p>On 05/01/2022 as a part and part of co-curricular activity, the Department of History & Tourism along with Department of Economics & Department of Political Science went on a study tour / Educational Tour to Mothugudem, Sileru Hydro Electrical Power Project, Polluru water falls, Rampachodavaram ITDA, Maredumilli coffee plants, Sakuleru view point, Pamuleru Water falls Forest sceneries etc. In Mothugudem the Local Villager sri Jagatha Srinu, Nella Srinu received our team and arrange the visit to Power Project. (enclose separate page)</p>
Name of the Lecturer who Planned conducted the Activity	Y. Sita Maha Lakshmi, Lecturer in charge, Dept of History. & L. Bhanu Teja, guest faculty of History & Tourism.
Signature of the Dept. in charge/convener of the committee	
Signature of the Principal	
Remarks	The students were happy to see these places and enjoyed. They get more knowledge about the Power project and Natural sceneries.

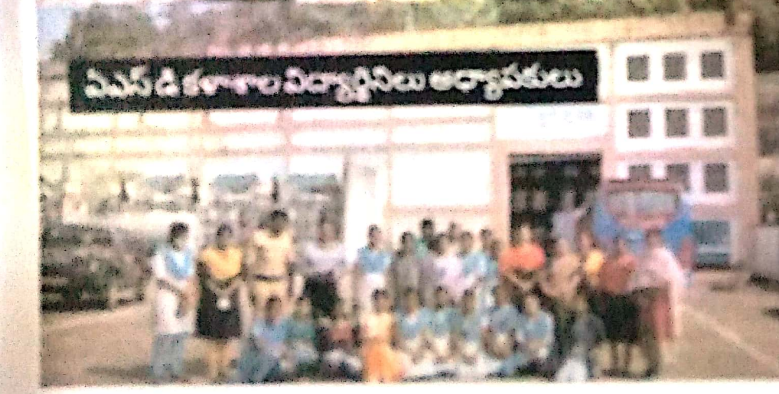
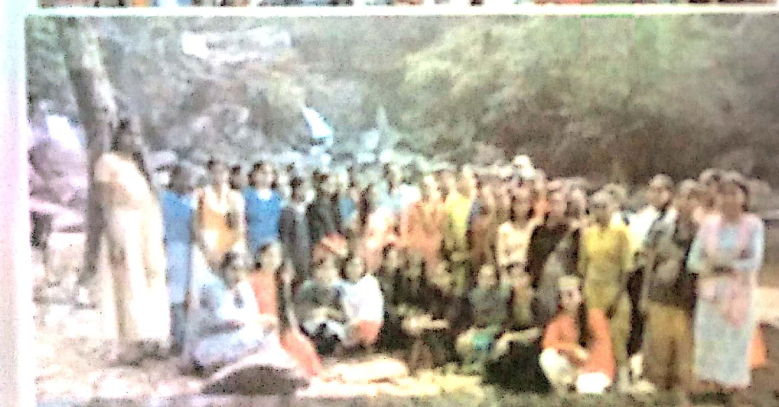
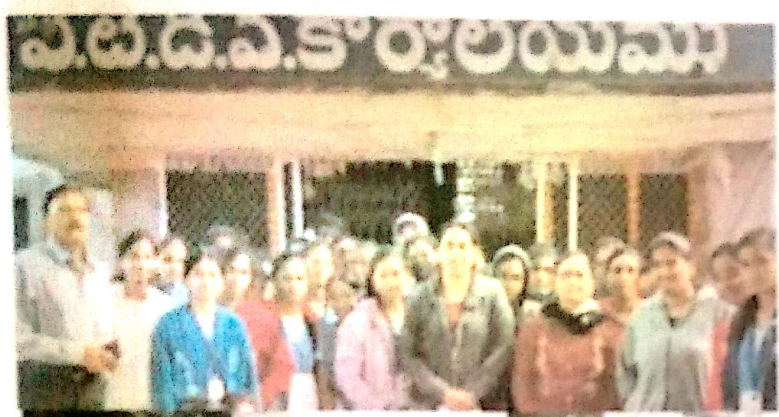
Brief Report

On 05/01/2022 as a part and part of co-curricular activity, the Department of **History & Tourism** along with **Department of Economics & Department of Political Science** went on a study tour / Educational Tour to Mothugudem. Dr. K. Yamuna, G. Pavani Devi (Dept. of Economics) Lt. Sriramulu (former Economics Lecturer), Y.Sitamaha Lakshmi, Dept. of History &, L.Bhanu Teja faculty of Tourism, P.V Bhuvaneshwari Devi faculty of Political Science accompanied along with 45 of III B.A (HEP, THP & HET) students. We started from the college at 5 am by a Travel bus and reached there at 10am.

There we saw the Sileru Hydro Electrical Power Project, Polluru water falls, Rampachodavaram ITDA, Maredumilli coffee plants, Sakuleru view point, Pamuleru Water falls Forest sceneries etc. In Mothugudem the Local Villager sri Jagatha Srinu, Nella Srinu received our team and arrange the visit to Power Project.

ఇండస్ట్రియల్ విజ్ఞాన యాత్ర అదరపాపా

జాఫర్ : కాకినాడ రూరల్, అక్షర లీడర్



స్థానిక కాకినాడ జగన్నాధపురం లోని గల ఎఎస్ డి ప్రభుత్వ కళాశాల అర్థ శాస్త్ర విభాగం అధ్యక్షంలో తృతీయ సంవత్సరం బి.ఎ చదువుతున్న విద్యార్థినిలకు ఫీల్డ్ మరియు ఇండస్ట్రియల్ విజ్ఞాన యాత్ర నిర్వహించారు. 45 మంది విద్యార్థులు 6 అధ్యాపకులు ఈ యాత్రలో పాల్గొన్నారు. మొదటగ దిగువ సీలేరు హైడ్రో ఎలక్ట్రికల్ పవర్ ప్రాజెక్టు సందర్శించారు. అనంతరం పొల్లూరు జలపాతం. రంపచోడవరం ఐటిడిఏ, మరేడుమిల్లి కాపీ తోటలు, సాకులేరు వ్యూ పాయింట్, పాములేరు జలపాతం అడవి ప్రాంతాలను విద్యార్థులు సందర్శించారు. వీరికి మొత్తగూడంలో స్థానిక జగతా శ్రీను, నెల్ల శ్రీను, స్వాగతం చెప్పి ప్రాజెక్టు సందర్శించడానికి ఏర్పాటు చేశారు. దిగువ సీలేరు ప్రాజెక్ట్, డివిజనల్ ఇంజనీర్ బాలకృష్ణ ప్రాజెక్ట్ సందర్శించడానికి అనుమతి ఇచ్చి వీరికి సహకరించారు. ఈ యాత్రలో విద్యార్థులం దరూ ఆడుతూ పాడుతూ సరదాగా గడిపారు. కళాశాలలో గడిచిన రెండు సంవత్సరాల మధుర జ్ఞపకాలను గుర్తుచేసుకున్నారు. కళాశాల ప్రిన్సిపాల్, మరియు ఇతర అధ్యాపకులు ఈ యాత్ర ను జయప్రదం చేసినందుకు విద్యార్థులను, అధ్యాపకులను

అభినందించారు. ఈ యాత్రలో అర్థశాస్త్ర అధ్యాపకులు డా.కె.యమున, జీ. పావని శ్రీరాములు, పాలిటిక్స్ అధ్యాపకులు భువన, హిస్టరీ అధ్యాపకులు సీతామహాలక్ష్మి, భాను, మరియు 45 మంది విద్యార్థినులు పాల్గొన్నారు.

పోల్లూరు జలపాతం సందర్భించి విఎస్డీ గవర్నమెంట్ డిగ్రీ కాలేజీ ఫర్ ఉమెన్ (వి)



జనదీపిక మోతుగూడెం : మోతుగూడెం పోల్లూరు జలపాతం సందర్భించడం జరిగింది. దాని చుట్టుపక్కల ప్రాంతాలను ఆ యొక్క పర్వతాలను పరిశీలించుట జరిగింది. అధ్యాపకులు, విద్యార్థులు స్టడీ టూర్ పోల్లూరు ఏపీ జెన్స్ పవర్ ప్లాంట్ సందర్శించడం జరిగింది. దీనిలో ము

ఖ్యంగా మేము గమనించిన అంశాలు జలవిద్యుత్తు వివిధంగా జనరేట్ అవుతుంది దానికి సంబంధించిన బ్లాప్రింట్ టర్బైన్ పరిశీలించుట జరిగింది. పవర్ ప్లాంట్ ను ఏతూ.నరసింహం దగ్గరుండి చూపించారు.

**A.S.D GOVERNMENT DEGREE COLLEGE
(WOMEN),
(AUTONOMOUS), KAKINADA**
With NAAC "B" Grade
DEPARTMENT OF HISTORY & TOURISM



Study Tour
ITDA Rampachodavaram & Lower Sileru
Project Power House
On 06/01/2022

మారేడిమిల్లి స్టడీటూర్

Introduction :- స్టడీటూర్ నిమిత్తం మా కళాశాల అయినటువంటి అన్నివరం సత్వవతిదేవి ప్రభుత్వ మహిళా ఉన్న కళాశాల యాజమాన్యం మా అధ్యక్షులు అయినటువంటి డి. B.A గౌరవు అందరినీ స్టడీటూర్కి తీసుకువెళ్ళారు. మా ఉపాధ్యాయులు అయినటువంటి అడ్మినిస్ట్రేటివ్ విభాగం యమనా మరియు పావనీ మేడమ్, చరిత్ర విభాగం నీతా మవలక్ష్మి మరియు టూరిజం భాగస్వామి మేడమ్ మరియు రాజనీతి సాస్ట్రే విభాగం భువనేశ్వరదేవి మేడమ్ గారు మరియు రిటైర్డ్ అధ్యాపకులు అయినటువంటి గోరామల సూర గారు అందరూ కలిసి మా స్నేహితులు 45 మందిని స్టడీటూర్ నిమిత్తం మారేడిమిల్లి తీసుకువెళ్ళారు.

5 June 2022 న ఉదయం 4:30 గంటలకు మా కళాశాల నుండి బస్సు ఎక్కి బయలుదేరాము.

Integrated Tribal Development Agency - ITDA

ఇందులో గ్రామీణ ప్రాంతాల వారికి కావలసిన సదుపాయాలను అందించని ఈ ITDA కావలసిన సదుపాయాలను అందించని ఈ ITDA కార్యాలయం చూసుకుంటుంది. గ్రామీణ ప్రాంతాలలో ఉన్న పిల్లలకు విద్యను మరియు పెద్దలకు వృత్తిని, వారికి కావలసినటువంటి సదుపాయాల ఆసుపత్రి, ప్రైవేట్, విద్య

కొండలు ఇతర సమస్యలు అన్నింటినీ ఈ ITDA కార్యక్రమం
నిర్వహిస్తుంది.

భూమిలపల్లి రిజిస్ట్రార్ :- భూమిలపల్లి రిజిస్ట్రార్ ప్రాజెక్ట్
అనేది తొమ్మిదవది జిల్లాలోని భూమిలపల్లి రిజిస్ట్రేషన్
సబ్ డివిజన్ గోదావరి నదికి కొండ ప్రాంతం మరియు ఉపనది

అయిన నీటిపల్లి లోని ముఖ్య నీటివారుదల ప్రాజెక్ట్
మొత్తం నీటి వినియోగం 1,151 Mc .ft. కిన్ని కనీసం

మరియు జనాభాకు కావలసిన నీటిని ఈ ప్రాజెక్ట్ ద్వారా
అందిస్తుంది. దీన్ని 7-11-2007 మరియు 31-10-2008

మధ్యలో అన్ని విధాలుగా ప్రాజెక్టును పూర్తి చేశారు.

Birds Nest : దాదాపుగా 8:30 గంటలకు Birds Nest
ప్రదేశాన్ని సందర్శించాము. ఈ ప్రదేశం ఎండ్లెస్ చెట్లలో నిండి

ఉంది. ఈ ప్రదేశాన్ని మరీడిమిడ్ల పర్వతం దానికి వచ్చినట్లు వారు
వర్షాటకులు సందర్శించారు. ఈ రిజిస్ట్రేషన్ అనేది అందరికీ

అందుబాటులో ఉండే సమస్యలను అన్నింటినీ అందిస్తుంది.

The Woods, Tea Shop Interview :- మేము ఈ ప్రదేశాన్ని
చేరుకున్నాము. మా మేడమ్ మరియు మా స్నేహితులు

బిక్కెట్ లో మరియు వారు స్వీకరించారు. ఈ ప్రదేశం చాలా
అందంగా ఉంది. అంతేకాక ఈ ప్రదేశం గురించి మా స్నేహితులు

కొందరు వారి భావాలను Interview రూపంలో చెప్పారు. ఈ
ప్రదేశాన్ని అందరూ సందర్శించాము.

Sokulleru View Point :- ఈ ప్రదేశం చాలా అందంగా
ఉంది. ఈ ప్రదేశంలో మా స్నేహితులు అందరూ చాలా

ఆనందంగా గడిపాము. రెండు కొండల మధ్య నుండి రాయిలపై



నీరు ప్రవహించడం మరకు చాలా భనంసాన్ని కల్పించింది. మా ఉపాధ్యాయులు అవరూ మమ్మల్ని, చాలా రనంసానికి నిలి చేశారు. ఆ ప్రదేశాన్ని మేము ఎంతో ఆనందంగా ఉన్వోంబాము. ARGENCO కి వెళ్ళే ముందు నిరాక్షణ కోసం మా బస్సును తనిఖి చేశారు. అక్కడ మా ఉపాధ్యాయులు అనుమతి ప్పతాన్ని తీసుకున్నారు.

అంథ్రాప్రదేశ్ పవర్ జనరేషన్ కార్పొరేషన్ లిమిటెడ్ భారతదేశంలోని అంథ్రాప్రదేశ్ రాష్ట్ర ప్రభుత్వ నిర్వహణ క్షేత్రం కంపనీ. ఇది విద్యుత్ ఉత్పత్తి కార్పొరేషనలను నిర్వహిస్తుంది. కొత్త ప్రాజెక్టుల నిర్మాణం, మాత్రం విద్యుత్ కేంద్రాల పునరుద్ధరణ పనులను చేపడుతోంది. ఈ దిగువ స్థలీరు పవర్ హౌస్ లను చూపించటానికి అనుమతి కల్పించారు. అలాగే ఆ ప్రాజెక్టు యొక్క వివరాలను బాలకృష్ణగారు వివరించారు. మాడు తోడుగా

కాన్స్ట్రక్టర్ నరసింహ మూర్తి గాను తోడుగా ఉంటారు. ఈ దిగువ స్థలీరు పవర్ హౌస్ ల ద్వారా ఏడు ప్రాంతాలకు నీటిని సరఫరా చేస్తూనే తెలియజేశారు. నీటిని నిలువ ఉంచి విద్యుత్ ను తయారు చేస్తారు. వేరే ప్రాంతాలకు కూడా నీటి ద్వారా విద్యుత్ సరఫరా చేయడానికి ఈ ప్రాజెక్టు ఉపయోగపడుతుంది.

Polluru Waterfalls : ఈ Waterfalls దగ్గరకు వెళ్ళే దారిలో ఘాట్ రోడ్ ల కలవు. మేము ఈ ఘాట్ రోడ్ లను చాలా ఆనందంగా ఆస్వాదించాము. మళ్ళీ దారిలో చెట్లు ఉండి చుట్టూ కొండలు చెట్ల మళ్ళీ నుండి నూర్పుడు కలిపిస్తుంటే చాలా ఆనందంగా ఉంది.

చెట్లు అందంగా ఉంటూ ఘోటకోడలు ఎంతో ఆనందాన్ని కలిగించాయి.
 మేము మా స్నేహితులందరూ చాలా ఆనందంగా గడిపాము. మా
 స్నేహితులు అలా ఈ Waterfalls ను చాలా ఆనందంగా గడిపాము.
 మేము మా ఉపాధ్యాయులు అందరూ చాలా ఆనందంగా గడిపాము.
 మాకు తోడుగా ఉంటూ కానిస్టేబుల్ నరసింహమూర్తిగారికి ధన్యవాదములు
Bambo chicken : Bambo chicken అనిది మారీడియల్ గుండర్లంబడానికి
 వెళ్ళినటువంటి ఒక ప్రత్యేకమైన పంట. ఇది చాలా బాగా అయినటువంటి
 వంట. త్వరిత వెళ్ళినటువంటి వారు అలా ఈ పంటను కొనుక్కంటారు.
 దీని ప్రత్యేకత ఏమనగా బాగు కర్రలలో పండటమే. దీనిని మా
 స్నేహితులు మరెవరూ ఉపాధ్యాయులు ఆస్వాదించారు.

మా అనుభవం :

మేము ఈ సందర్భంలో మేము చాలా విషయాలు
 తెలుసుకున్నాము. ITDA కార్యాలయం మాకు చాలా విషయాలను
 తెలియజేసింది. చుట్టూ ఉండి ప్రాంతాలలో మేము చాలా విషయాలను
 తెలుసుకున్నాం. చుట్టూ ఉండి చెట్లు మాకు చాలా ఆనందంగా కనిపిస్తాయి.
 మేము ఎంతో ఆనందంగా గడిపిన ప్రదేశం అయి Waterfalls.
 ఈ Waterfalls ను మా స్నేహితులు అందరూ చాలా ఆనందంగా
 గడిపాము. మా ఉపాధ్యాయులు మరెవరూ కానిస్టేబుల్ గారికి మా
 ఆనందానికి కారణమయినందుకు అందరికీ ధన్యవాదములు.
 ఈ స్టేషన్ గారికి వెళ్ళడానికి అనుమతి ఇచ్చినందుకు మా కృతజ్ఞులు
 యోజమాన్యానికి ధన్యవాదములు.

**A.S.D GOVERNMENT DEGREE COLLEGE
(WOMEN),
(AUTONOMOUS), KAKINADA**
With NAAC "B" Grade
DEPARTMENT OF HISTORY & TOURISM



Study Tour Report
ITDA Rampachodavaram & Lower Sileru
Project Power House
On 06/01/2022

Submitted by:

- | | | |
|--------------------|-----|--------|
| 1. CH. Asha Jyothi | - | 19106 |
| 2. V. Devi | --- | 191081 |
| 3. Y. Yamini | --- | 191052 |
| 4. Ch. Suguna | --- | 191046 |
| 5. Y. Jyoshna | --- | 191029 |

Tour For Educational Development

అనంతపురి సర్వకళాశాల ప్రభుత్వ మహిళా కళాశాలలో చదువుచున్న III BA [H.E.P, T, H, P H.E.T] విల్లులను ECONOMICS DEPARTMENT and POLITICAL SCIENCE, HISTORY Department ఉపాధ్యాయులు ఈ కళాశాల యొక్క principal గారి యొక్క అనుమతిని పొంది. ఈ యొక్క ప్రాజెక్టును నిర్వహించడం జరిగింది. ఈ ప్రాజెక్టునకు 45 మంది విద్యార్థులు సత్సహాయంగా పాల్గొన్నారు.

ఈ ప్రాజెక్టునకు భాగంగా విల్లుల యొక్క తల్లివంతుల అనుమతి కూడా పొంది, మారాణ్డిమిల్లి Trip వెళ్లడం జరిగింది. ఉపాధ్యాయుల మరియు విద్యార్థుల అందరూ కళాశాల వద్ద 5/1/2022 న ఉదయం 4:30 గంటలకు BUS లో ప్రయాణం తీసుకువచ్చారు. ఈ BUS ప్రయాణ సమయంలో విద్యార్థులందరూ ఆటవంటలతో అంతర్జాతీయ పోటీలను జరుపుకుంటూ మొదటిగా ITDA ప్రదర్శనా సంస్కారచదువు జరిగింది.

Integrated Tribal Development Agency

సమీకృత గిరిజన ఆభివృద్ధి కార్యాలయం [ITDA]

ఇంటిగ్రేటెడ్ ట్రిబల్ డెవలప్ మెంట్ ఏజెన్సీ, సం-
సౌకవ్యత తో కూడిన అభివృద్ధి కార్యాలయం ఏర్పాటు
కార్యాలయంగా 1975 లో స్థాపించబడింది. ఈ ITDA
జిల్లా విస్తీర్ణం 4,445 చదరపు కిలోమీటర్లు విస్తరించి
ఈనాటి సుమారు 2,13,195 హెక్టార్లకు తెగలు అందిస్తుంది
జిల్లాలోని (64) మండలాల్లో, (12) మండలాల 4445
చ. కి.మీ విస్తీర్ణంతో ఏర్పాటు కేంద్ర 5 సబ్ డివిజన్ మండ-
లాలను కలిగి ఉంటుంది. ఈ ప్రాంతంలో గిరిజనుల
సమగ్ర ఆభివృద్ధి ప్రాధాన్యతగా ITDA స్థాపించబ-
డింది. ఈ ప్రాంతంలో ఈనాటి ఏర్పాటు తెగలు కొండారెడ్డి
కొండారెడ్డి, కొండ జాతి, కొండకాకా, కేయజాతి & వాల్మీకి.
మొదల వారు ఉంటారు. వీరందరి ఆభివృద్ధి కార్యాలయం ఈ
కార్యాలయం ప్రస్తుత పాత్ర వహించి వారి కార్యాలయ
సౌకర్యాలను అందిస్తుంది.





Birds Nest

ఈ ప్రాంతానికి వెళ్లినది రాత్రు 8:30 కు వెళ్ళాము.
ఈ ప్రాంతములో పెద్ద, నల్లలు ఆటంకంగా ఉంది.
మాకిమల్ల సొరకొండరాని వచ్చినట్లు వంటి వీధినియలు
మరియు స్కూలుకు Resort లు ఉంటారు. ఇది 2వ
ప్రకారము ప్రాంతం. ఈ ప్రాంతంలో ఎటువంటి లిటుగా
రావ్వకుండా ఆరికి యాజమాన్యం అందరి ఆందోళన
లు ఉంటాయి



The Woods, Tea Shop Interview.

Birds Nest & సొరకొండరాని తరువాత మేము ఈ
ప్రాంతాన్ని సందర్శించాము. వచ్చి స్కూలుకుండా Tea &
Milk & సొరకొండరాని. మేము కూడా వారిని స్వీకరించా
ఈ ప్రాంతం నాలు అందంగా ఉంది, ఈ ప్రాంతం
గురించి మా స్నేహితులు. అంతా ఈ ప్రాంతం
గురించి వారి ఆభిప్రాయాలను వ్యక్తం చేశారు. ఈ ప్రాంతం
ఎంతో అందంగా ఉంటుంటే వీరిమంతా కలిసి మా
ఈ ప్రాంతాన్ని సందర్శించి వారు కూడా సాగించారు.

Sekulera View point

Tea shop తరువాత ఈ Sekulera View point ను
చాలానే సందయం 10:30 కు చేరుకున్నాం. ఈ ప్రదేశములో
శిల్పంగా మంచుతో పువడి ఎంతో అందంగా ఉంది
అలాగే అక్కడ 26 అందమైన నర్సి తోట సందర్భంగా
ఆ నర్సిల ఎంతో అందమైన కలవళ్ళు ఉంటే ఉన్నాయి
ఆ పూవులను తులసి మంచు ప్రవహిస్తూ ఉండి ఈ సమ్రా
మాకు ఎంతో ఆనందాన్ని కల్పించింది.



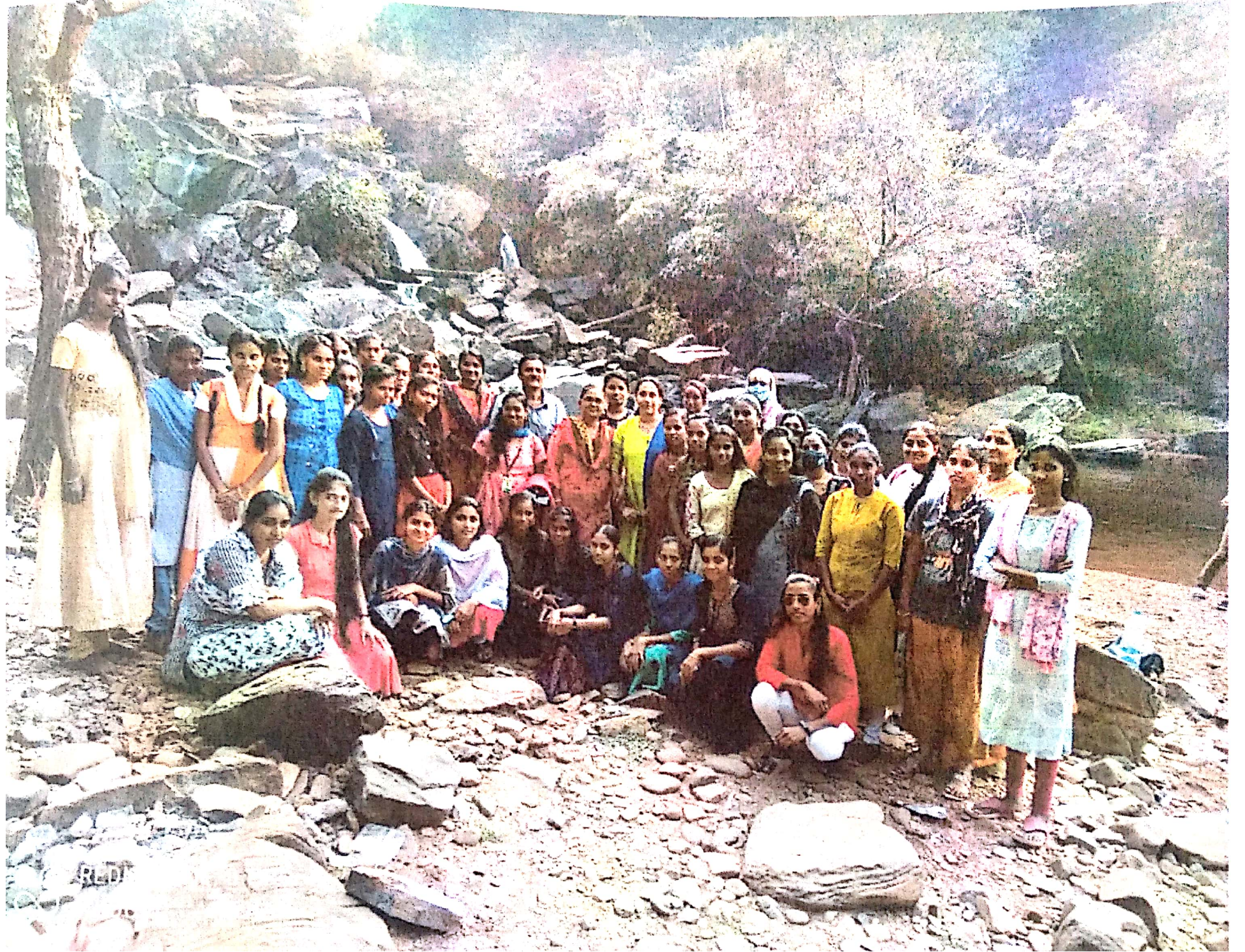
కొంభు ప్రదేశం ఏవం విశాఖ నాగార్జున ఆసుపత్రికి

భారతదేశంలోని కొంభు ప్రదేశం రాష్ట్ర ప్రభుత్వం 'విశ్వాత్
ఉత్పాదన కేంద్రం'. ఇది విశ్వాత్ ఉత్పత్తి కార్యకలాపాలను
సాధిస్తుంది. ఇక్కడ విశ్వాత్ ప్రాజెక్టుల సౌకర్యం, పాత
విశ్వాత్ కేంద్రాల ప్రనర్థనకు ఏర్పాటు చేయబడింది.
ఇది 11/2/1999 న ఏర్పడి అప్పటినుండి కార్యకలాపాలను
ప్రారంభిస్తుంది. ఈ విషయ సమాచారం ఏవం పాఠకులకు చు-
పించడానికి మారు అనుమతి కల్పించారు. అలాగే ఆ
ఆ project యొక్క సాంఘిక సహకారముల గా -

Bamboo Chicken

మేము waterfalls తరువాత మనకి విల్డి సాసాక్ర
6:00 గంటలకు సాడుకున్నాం. ఆరేడ చుట్టూ ను
విందుకు Bamboo chicken ను మా స్నేహితులు &
కాపాక్చుయలు కుసి వెలిగించారు. ఆరేడ కంటే స్వల్ప
ఆ మట్టు ఉన్న ప్రాంతాన్ని గమనిస్తూ, వాటిని
సరిగిరించారు. తరువాత Bus పై ప్రయాణించి ఆరి
మా కళానాటకు వచ్చేటప్పటికి 10 గంటలకు సాడుకున్నాం.
కాపాక్చుయలకు అర్జునాదులు వారి పిల్లలను తమ ఇంటికి
తీసుకుళ్ళగా మా కాపాక్చుయలు కూడా తమ ఎవాస్-
ప్రొజెక్టుకి సాడుకువడం జరిగింది. 200 మందికి
పూజించు క్షేమంగా పేర్కొని ఆరేడ ఆనందంగా గడిపి,
మళ్ళా మైన జైపికాలను పొంది, ఆనుభవించి క్షేమంగా
మా యేక ఎవాస్ ఫిలాన్సీ సాడుకున్నాం.....





FIELD TRIP TO SURVIVAL



A.S.D.GOV'T.DEGREE COLLEGE FOR WOMEN
DEPARTMENT OF PHYSICS

GPS Map Camera

ASD Government Degree College, Kakinada, India

Andhra Pradesh 533001, India

Lat 16.967873°

Long 82.238094°

02/12/22 03:45 PM GMT +05:30





ASD GOVT .DEGREE COLLEGE FOR WOMEN(A), KAKINADA

DEPARTMENT OF PHYSICS

ACTIVITY REGISTER 2022-23

Date	02/12/2022
Conducted through (DRC/JKC/ELF/NCC/NSS/Department etc...)	Department of Physics
Nature of activity (Seminar/Workshop/Extension lecture etc...)	Field trip to 33KV/11KV electrical substation near MSN charities, jagannaic pur ,kakinada
Title of the Activity	Field trip to 33KV/11KV electrical substation near MSN charities, jagannaic pur ,kakinada
Name of the Department committee	Department of Physics
Details of resource person Name,Designation etc...	Sri K.Venkateswara rao, Sri B.Surya Narayana devara, Smt K.Kranthi.
No of Students Participated	50
Brief report on the Activity	A field trip is conducted on 2/12/2022 to 33KV/11 KV at electrical substation, jaganaickpur ; Kakinada. They learnt about technology and procedures used in generation, transmission and distribution of electric power to houses from substation. They explained about feeders, different types transformers, circuit breakers.....used in the substation.Students are actively participated in the field trip. The faculty of physics department explains about electrical technology.The junior engineer Sri durga veer reddy explains about various technology used in electrical substations. The junior engineer interacted with students by asking questions in electrical basic concepts. Our studentsanswered them very actively
Name of the Lecture who planned & Conducted the Activity	Sri K.Venkateswara rao, Sri B.Surya Narayana Devara, Smt K.Kranthi.
Signature of the Department Incharge/Convener of the Committee	
Signature of the principal	

12/12/22

PRINCIPAL

A.S.D.GOV.T.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

ELECTRICAL SUBSTATION

A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and consumer, electric power may flow through several substations at different voltage levels. A substation may include transformers to change voltage levels between high transmission voltages and lower distribution voltages, or at the interconnection of two different transmission voltages.

Substations may be owned and operated by an electrical utility, or may be owned by a large industrial or commercial customer. Generally substations are unattended, relying on SCADA for remote supervision and control.

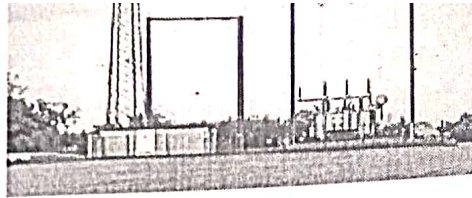
The word *substation* comes from the days before the distribution system became a grid. As central generation stations became larger, smaller generating plants were converted to distribution stations, receiving their energy supply from a larger plant instead of using their own generators. The first substations were connected to only one power station, where the generators were housed, and were subsidiaries of that power station.

Types

Substations may be described by their voltage class, their applications within the power system, the method used to insulate most connections, and by the style and materials of the structures used. These categories are not disjointed; for example, to solve a particular problem, a transmission substation may include significant distribution functions.

Transmission substation

A *transmission substation* connects two or more transmission lines. The simplest case is where all transmission lines have the same voltage. In such cases, substation contains high-voltage switches that allow lines to be connected or isolated for fault clearance or maintenance. A transmission station may have transformers to convert between two transmission voltages, voltage control/power factor correction devices such as capacitors, reactors or static VAR compensators and equipment such as phase shifting transformers to control power flow between two adjacent power systems.



Transmission substations can range from simple to complex. A small "switching station" may be little more than a bus plus some circuit breakers. The largest transmission substations can cover a large area (several acres/hectares) with multiple voltage levels, many circuit breakers, and a large amount of protection and control equipment (voltage and current transformers, relays and SCADA systems). Modern substations may be implemented using international standards such as IEC Standard 61850.

Distribution substation

A *distribution substation* transfers power from the transmission system to the distribution system of an area.^[2] It is uneconomical to directly connect electricity consumers to the main transmission network, unless they use large amounts of power, so the distribution station reduces voltage to a level suitable for local distribution.

The input for a distribution substation is typically at least two transmission or sub-transmission lines. Input voltage may be, for example, 115 kV, or whatever is common in the area. The output is a number of feeders. Distribution voltages are typically medium voltage, between 2.4 kV and 33 kV, depending on the size of the area served and the practices of the local utility. The feeders run along streets overhead (or underground, in some cases) and power the distribution transformers at or near the customer premises.

In addition to transforming voltage, distribution substations also isolate faults in either the transmission or distribution systems. Distribution substations are typically the points of voltage regulation, although on long distribution circuits (of several miles/kilometers), voltage regulation equipment may also be installed along the line.

The downtown areas of large cities feature complicated distribution substations, with high-voltage switching, and switching and backup systems on the low-voltage side. More typical distribution substations have a switch, one transformer, and minimal facilities on the low-voltage side.

Collector substation

In distributed generation projects such as a wind farm or photovoltaic power station, a collector substation may be required. It resembles a distribution substation although power flow is in the opposite direction, from many wind turbines or inverters up into the transmission grid. Usually for economy of construction the collector system operates around 35 kV, although some collector systems are 12 kV, and the collector substation steps up voltage to a transmission voltage for the grid. The collector substation can also provide power factor correction if it is needed, metering, and control of the wind farm. In some special cases a collector substation can also contain an HVDC converter station.

Collector substations also exist where multiple thermal or hydroelectric power plants of comparable output power are in proximity. If no transformers are required for increasing the voltage to transmission level, the substation is a switching station.

Converter substations

Converter substations may be associated with HVDC converter plants, traction current, or interconnected non-synchronous networks. These stations contain power electronic devices to change the frequency of current, or else convert from alternating to direct current or the reverse. Formerly rotary converters changed frequency to interconnect two systems; nowadays such substations are rare.

Switching station

A switching station is a substation without transformers and operating only at a single voltage level. Switching stations are sometimes used as collector and distribution stations. Sometimes they are used for switching the current to back-up lines or for parallelizing circuits in case of failure. An example is the switching stations for the HVDC Inga-Shaba transmission line.

A switching station may also be known as a switchyard, and these are commonly located directly adjacent to or nearby a power station. In this case the generators from the power station supply their power into the yard onto the generator bus on one side of the yard, and the transmission lines take their power from a Feeder Bus on the other side of the yard.

An important function performed by a substation is switching, which is the connecting and disconnecting of transmission lines or other components to and from the system. Switching events may be planned or unplanned. A transmission line or other component may need to be de-energized for maintenance or for new construction, for example, adding or removing a transmission line or a transformer. To maintain reliability of supply, companies aim at keeping the system up and running while performing maintenance. All work to be performed, from routine testing to adding entirely new substations, should be done while keeping the whole system running.

Unplanned switching events are caused by a fault in a transmission line or any other component, for example:

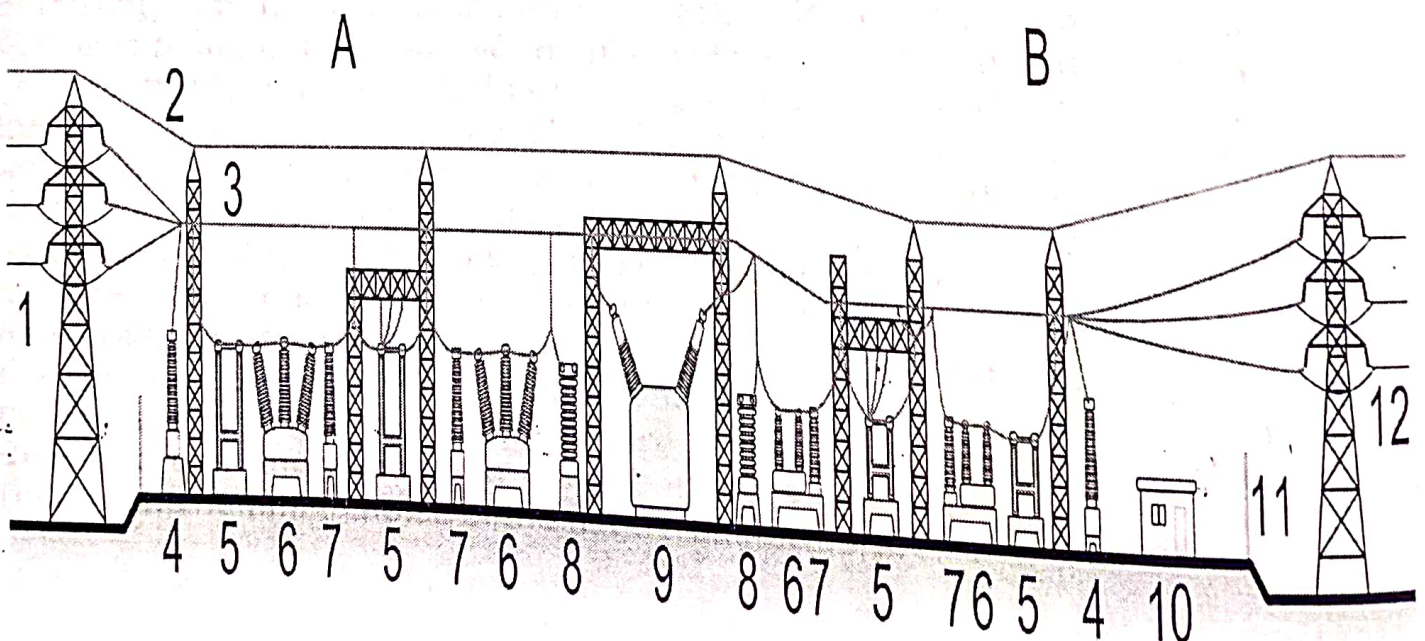
- a line is hit by lightning and develops an arc,
- a tower is blown down by high wind.

The function of the switching station is to isolate the faulty portion of the system in the shortest possible time. De-energizing faulty equipment protects it from further damage, and isolating a fault helps keep the rest of the electrical grid operating with stability.

HOW DOES AN ELECTRICAL SUBSTATION WORK?

Why is it known as a “substation?” Normally stations are where we catch trains or buses. By the same analogy we can explain what a substation does. Electricity has to be transmitted over large distances as the place where the power is being generated and the place where it is consumed can be far apart. The electricity is transmitted at very high voltages and low currents to reduce the heat, eddy currents, and other transmission losses. The substations are where the voltages are increased to high values by using step up transformers, and after the transmission, they are again stepped down for distribution. In addition to changing the voltages the substations have, a variety of protective devices like circuit breakers and fuses are present to protect the distribution networks. These are designed in such a way that various distribution circuits can be isolated for repairs and load shedding. Substations are normally outdoors and are enclosed by a wire fence. However in residential or high density areas, the substation may be indoors and housed inside a building to restrict the humming noise of the huge transformers.

View of a Substation



Elements of a substation

- A. Primary power lines' side
- B. Secondary power lines' side

1. Primary power lines
2. Ground wire
3. Overhead lines
4. Transformer for measurement of electric voltage
5. Disconnect switch
6. Circuit breaker
7. Current transformer
8. Lightning arrester
9. Main transformer
10. Control building
11. Security fence
12. Secondary power lines

Function of Substations

While electric substations take part of the distribution of electricity, they have many other functions as follows:

1.
 1. Step up and step down of the voltage for transmission and distribution. As power is transmitted at a higher voltage over long distances, the current is lower. This results in lower transmission losses but doesn't provide the proper current for homes and businesses to use - thus the need of stepping up and stepping down the voltage.
 2. Switching and isolating the circuits for maintenance: Switching is also an important function of substations. Closing down a feeder circuit when the load demands are high needs to be done for the safety of the generating plants. Switching high voltages is dangerous work, and special circuit breakers like air circuit breakers and oil circuit breakers for reducing arcs have to be used.
 3. Load shedding: When the power demand is more than the supply, the substations do load shedding on distribution circuits to maintain balance across the electrical network.
 4. Correction of power factors circuits: The power factor has to be kept at the correct value when reactive loads are there to protect the generating plant and increase efficiency. Read this link for more information on how power factor correction saves power.

5. Safety devices like circuit breakers and fuses: These safety devices are provided for protecting the machinery on the distribution circuit as well as in the substation against high short circuit currents.
6. It contains bus bars for splitting the power for distribution: Thick bars of copper to which various distributing circuits are connected by nuts and bolts are known as bus bars.

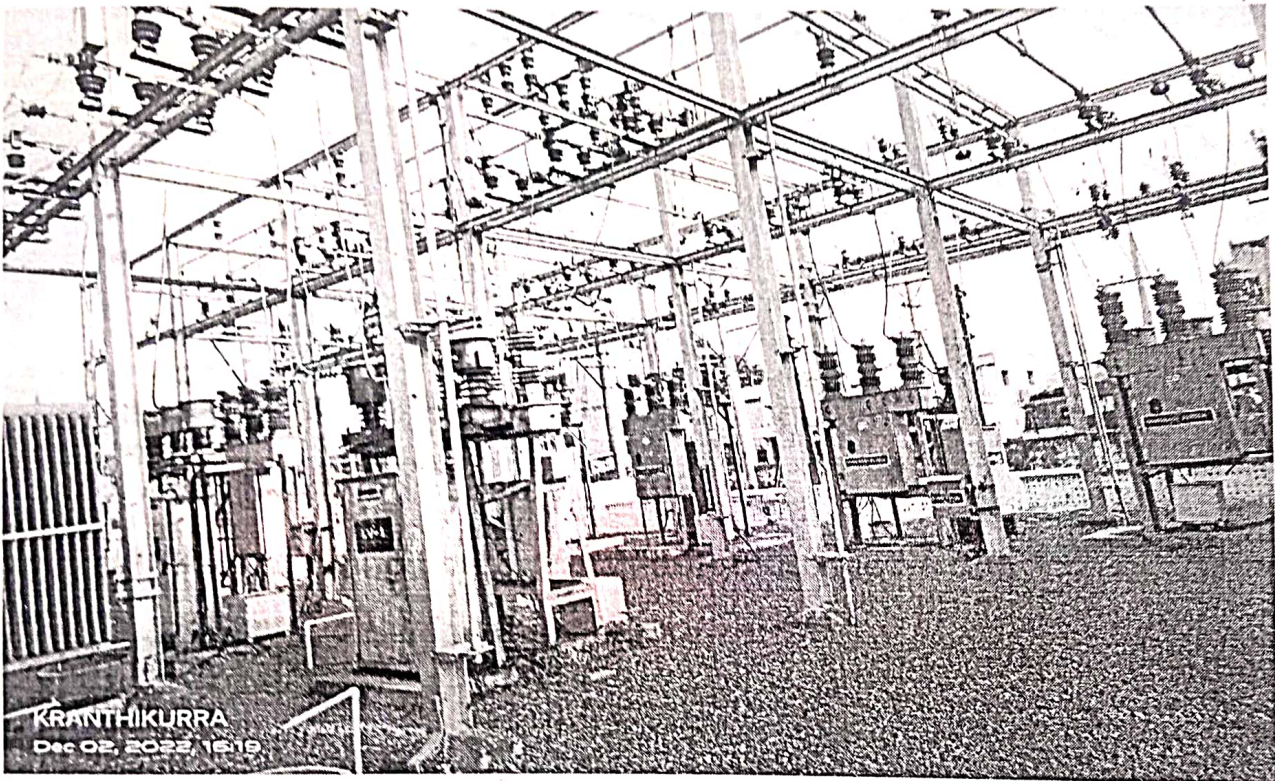
2. Operation of a Substation

3. Electricity is generated in a thermal power plant, hydroelectric power plant, and nuclear power plant, etc. This electricity is then supplied to a transmission substation near the generating plant. In the transmission substation the voltage is increased substantially using step up transformers. The voltage is increased to reduce the transmission losses over long distances. This electricity then is supplied to a power substation where it is stepped down using step down transformers and then supplied to a distribution grid. In the distribution grid there are additional transformers and voltage is further reduced for distributing further down the grid. From here the electricity is supplied to step down transformers near residential quarters that step down the voltage to 110/220 Volts as per each country's requirement.
4. In a less simple way, substation is the key part of electrical generation, transmission, and distribution systems. Substation transforms voltage from high to low or from low to high as necessary. Substation also dispatches electric power from generating stations to the consumption center.
5. Electric power may flow through several substations between the generating plant and the consumer, and the voltage may be changed in several steps.
6. Substations can be generally divided into three major types (according to voltage levels):

33/11 KV substation, working of the equipment used.

33/11KV, Air Insulated substation (AIS),

where 33KV-incoming line & 11KV -outgoing line



Substation: It is stationed where we can control the electrical supply of a particular area. There are different types according to voltage level, constructions, etc. Every substation has its Single line diagram where all details are denoted like rating of all equipment, connections, places, and locations.

Equipment In The Substation

Control room

where the operator sited to control substation here alarm is placed he knows every interruption. (Maybe fault, tripping, 33KV breakdown, and burning of cables)

Battery room

Batteries are connected in series to produce DC supply (maybe 110V or 220V only the control voltage of every substation) supply with a battery charger. It

Contains boost or float mode when we want fast charging of batteries to use boost mode if we want slowly charging of batteries to use float mode.

Switchyard

It contains the following equipment.

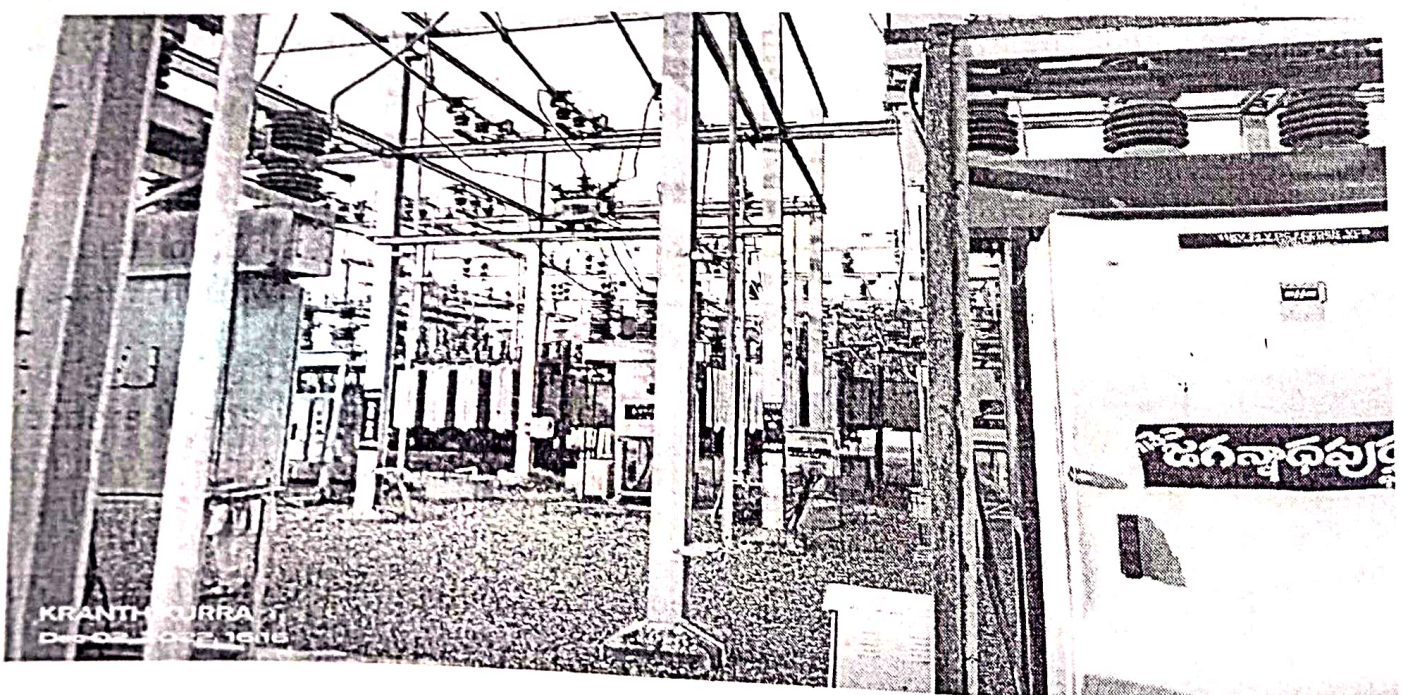
01. Power transformer: The transformer is the heart of the electrical system. Its work is to step down the voltage level from 33 to 11 kV.

02. Instrument Transformer: These are the transformer used for protection & measurement purposes. There are two types of instruments transformer: Current Transformer (CT) and Potential Transformer (PT). Here if we consider 11Kv to measure high current, the current transformer is used. To measure the voltage of the station, the potential transformer is used.

03. Circuit breaker: For making and breaking purposes, breakers are used. We can break (cut off) the supply of particular feeders by this. Also, breakers are tripped (off) in a faulty condition. Each feeder individual has a circuit breaker. Usually, here we use an Air circuit breaker

04. Bus Bar: These are bundled conductors where we can connect several feeders, loads, or connections. If there is one Bus bar 11KV on which we can connect Feeder -1, Feeder-2, Feeder-3(it may be the name of villages or particular residency), and so on.

05. Feeders: By using feeders we can control the electricity in a particular area.



LT Panels

For lightning of all switchyard, LT panels are used.

APEPDCL (Jagannaickpur), Kakinada



Kakinada, Andhra Pradesh, India
W6GP+WJR, Jagannaickpur, Kakinada, Andhra Pradesh
533002, India
Lat 16.927385°
Long 82.236375°
02/12/22 04:23 PM GMT +05:30

APEPDCL (Jagannaickpur)

Caption

33/11kv Sub station - D5

Since 1995

Contact Person AE Address:

Mekalagamela Road, Jagannaickpur, Kakinada - 02

Landmark

Behind Balayogi Statue Stre

Opening hours

8:00 a.m. To 7:00 p.m:

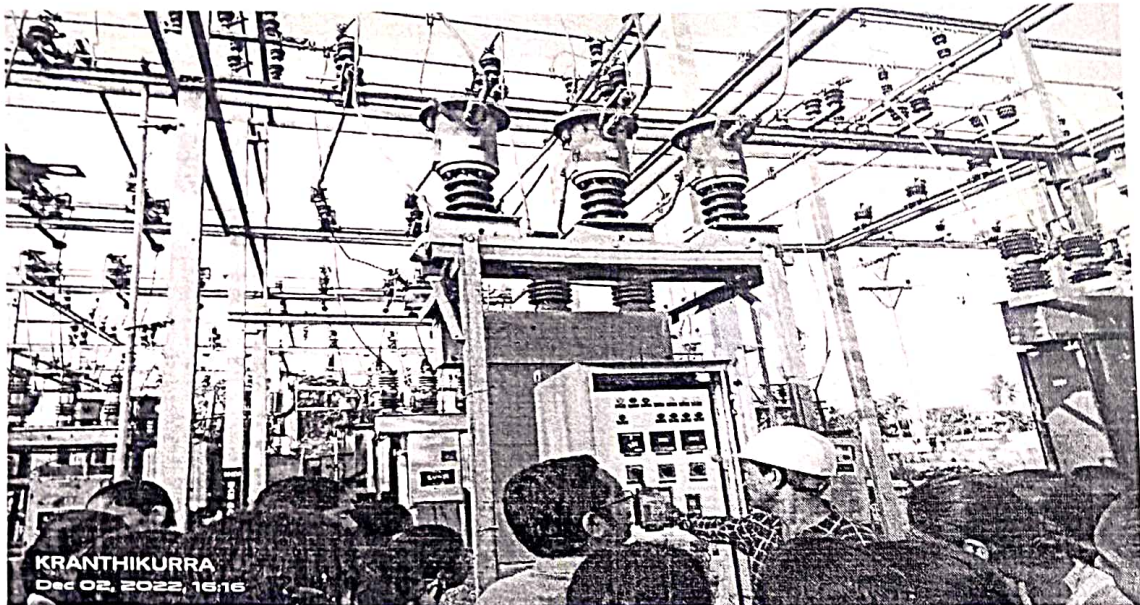
Description

33/11 KV substation and D5. Current supply for house and commercial purpose.

Electricity Complaint numbers are 0884-2372700 or 0884-2361530 and Toll free number is 180042555333.

Permalink

<http://www.inkakinada.com/list/aepedcl-jagannaickpur>



06. **Lightning arrester:** Used for protection. Located at incoming line i.e. 33KV one terminal connected to Ground & one is on the line. When there is a lightning stroke fall at that time it discharges from the ground terminal.

07. **Capacitor bank:** Used to maintain power factor unity to avoid penalties from the state electricity board. It must be maintained unity.

08. **Insulators:** Mainly two types of insulators used pin type for up to 11 kV and suspension type for above 33KV

09. **Mounting structure:** Used to carry conductors and jumpers also for mounting isolators.

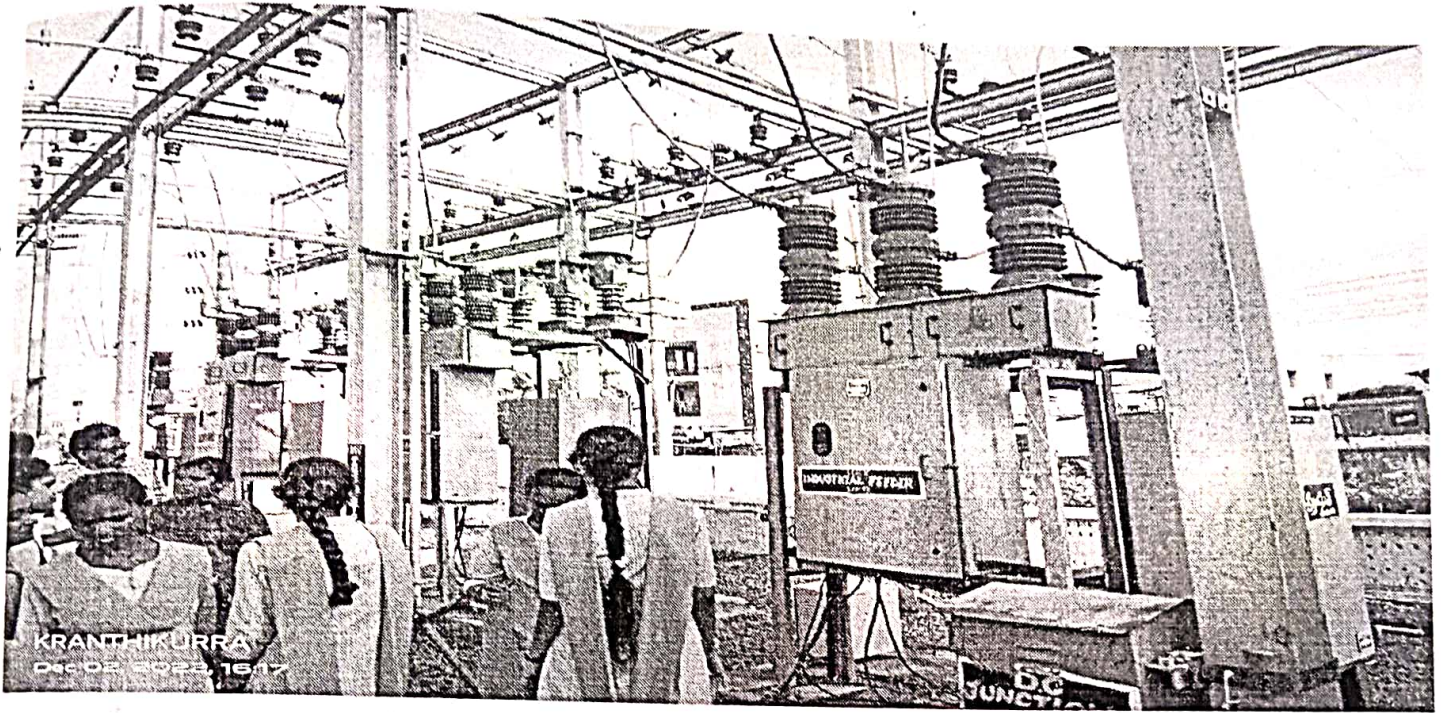
10. **Station transformer:** Used for building lighting as a Backup supply.

11. **Cables:** They are used to carry electricity from the battery room to feeders, measuring meters, transformer, control, and relay panels.

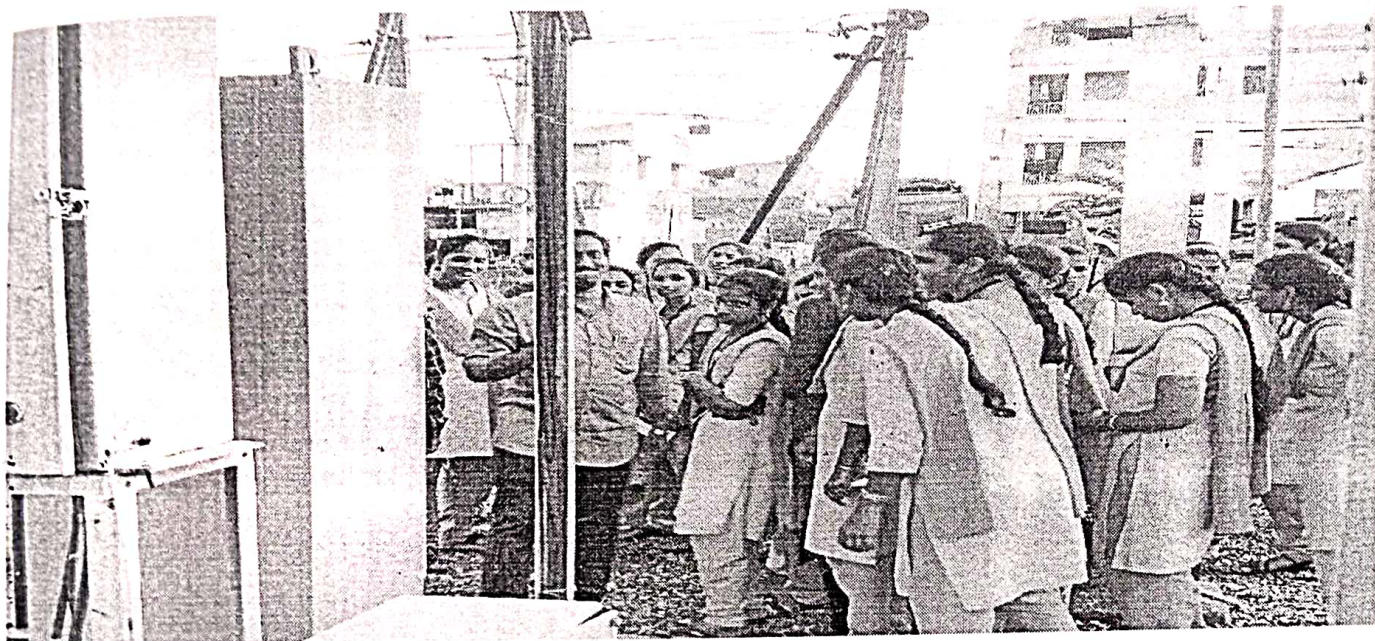
12. **Isolators:** These act as a switch. Located forward and backside of a circuit breaker. operates under no-load conditions manually.

Earthing

It is essential for the substation to discharge leakage current. There are two types of earthing, first is pipe earthing, and the second is Plate earthing. Earthing is made of charcoal, salt, and water. Earthing may be in a grid or individual. Usually, CU or AL metal is used for Earthing but due to the cost of Cu being high we prefer Aluminium.









ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
DEPARTMENT OF PHYSICS

Name of the activity: Field Trip
Topic: To 33kV/11kV Electrical substation, Kakinada,
Date/Time: 02/12/2022
(3-5) pm

The following students are participated in the programme

S.NO	Class/Group	Name of the student	Signature
1	MPCS	Relcadi Mani	R. Mani
2	MPCS	K. Kanya	K. Kanya
3	MPCS	P. Parvathi	P. Parvathi
4	MPCS	T. Sunitha	T. Sunitha
5	MPCS	G. Sarvani	G. Sarvani
6	MPCS	K. Aparna	K. Aparna
7	MPCS	Ch. Surya Bhavani	Ch. Surya
8	MPCS	M. Smita	M. Smita
9	MPCS	G. Anubha	G. Anubha
10	MPCS	P. Divya	P. Divya
11	MPCS	P. Sailaja	P. Sailaja
12	MPCS	P. Premajyothi	P. Premajyothi
13	MPCS	B. Sahithi	B. Sahithi
14	MPCS	P. Kanya Sri Satya	P. Kanya
15	MPCS	G. Sharon Grace	G. Sharon
16	MPCS	S. Kumari Sri Ganga	S. K. S. Ganga
17	MPCS	Ch. Vishnu Sri	Ch. Vishnu
18	MPCS	A. Madhuree Santhoshi	A. M. Santhoshi
19	MPCS	Ch. Sri Lakshmi Devi	Ch. Sri Lakshmi Devi
20	MPCS	D. Santha Kumari	D. S. Kumari
21	MPCS	P. Sailaja	P. Sailaja
22	MPCS	R. Jyothi	R. Jyothi
23	MPCS	K. Rama Tulasi	K. Rama Tulasi



ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
DEPARTMENT OF PHYSICS

Name of the activity: Field Trip

Date/Time: 02/12/22

Topic:

to
 33KV/11KV Electrical substation
 Kakinada

The following students are participated in the programme

S.NO	Class/Group	Name of the student	Signature
1	BSC MPCs	B. Bhavya Vijaya	B. Bhavya Vijaya
2	BSC MPC	ch. Maha Lakshmi	ch. Maha Lakshmi
3	BSC MPC	ch. Kumari	ch. Kumari
4	BSC MPC	M. Lakshmi Sri	M. Lakshmi Sri
5	BSC MPC	A. Divya Devi	A. Divya Devi
6	BSC MPC	P. Sowjanya	P. Sowjanya
7	BSC MPC	P. Jayalakshmi	P. Jayalakshmi
8	B.Sc-MPC	Y. Veera Mounika	Y. Veera Mounika
9	B.Sc MPC	R. Bhavana	R. Bhavana
10	B.Sc MPCs	D. Singara Lakshmi	D. S. Lakshmi
11	B.Sc MPCs	A. Devi	A. Devi
12	B.Sc MPC	M. Anusha	M. Anusha
13	B.Sc MPC	M. Harika	M. Harika
14	B.Sc MPC	S. Neelima	S. Neelima
15	B.Sc MPC	K. Reema	K. Reema
16	B.S.C (MPCs)	P. Lakshmi Sowjanya	P. L. Sowjanya
17	B.Sc (MPCs)	P. Sailaja	P. Sailaja
18	B.Sc (MPCs)	P. Divya	P. Divya
19	B.Sc (MPC)	B. Sai Kalyani	B. Sai Kalyani
20	B.Sc (MPCs)	P. Veeralakshmi	P. Veeralakshmi
21	B.Sc (MPCs)	P. Prema Jyothi	P. Prema Jyothi
22	B.Sc (MPC)	M. Keerthi	M. Keerthi



ASD GOVERNMENT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
DEPARTMENT OF PHYSICS

Name of the activity: Field Trip to Date/Time: 02/12/22

Topic: 33KV/11KV Electrical Substation Kakinada
 The following students are participated in the programme

S.NO	Class/Group	Name of the student	Signature
1	BSC MPCs	B. Bhavya Vijaya	B. Bhavya Vijaya
2	BSC MPC	Ch. Maha Lakshmi	Ch. Maha Lakshmi
3	BSC MPC	Ch. Kumari	Ch. Kumari
4	BSC MPC	M. Lakshmi Sri	M. Lakshmi Sri
5	BSC MPC	A. Divya Devi	A. Divya Devi
6	BSC MPC	P. Sravya	P. Sravya
7	BSC MPC	P. Jayalakshmi	P. Jayalakshmi
8	B.Sc MPC	Y. Veera Mounika	Y. Veera Mounika
9	B.Sc MPC	R. Bhavana	R. Bhavana
10	B.Sc MPCs	D. Singara Lakshmi	D. S. Lakshmi
11	B.Sc MPCs	A. Devi	A. Devi
12	B.Sc MPC	M. Anusha	M. Anusha
13	B.Sc MPC	M. Harika	M. Harika
14	B.Sc MPC	S. Neelima	S. Neelima
15	B.Sc MPC	K. Reema	K. Reema
16	B.S.C (MPCs)	P. Lakshmi Sowjanya	P. L. Sowjanya
17	B.Sc (MPCs)	P. Sailaja	P. Sailaja
18	B.Sc (MPCs)	P. Divya	P. Divya
19	B.Sc (MPC)	B. Saikalyani	B. Saikalyani
20	B.Sc (MPCs)	P. Varalakshmi	P. Varalakshmi
21	B.Sc (MPCs)	P. Prema Dyothi	P. Prema Dyothi
22	B.Sc (MPC)	M. Keerthi	M. Keerthi

ASD GOVT. DEGREE COLLEGE FOR WOMEN (A)
(Re- Accredited by NAAC with B Grade)
Jagannaickpur, Kakinada, East Godavari, AP-533002

DEPARTMENT OF ZOOLOGY & AQUACULTURE TECHNOLOGY

2021-2022



FIELD TRIP

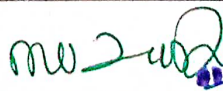
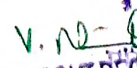
**PCR, MICROBIOLOGY, FEED AND WATER ANALYSIS
LAB, IN STATE INSTITUTE OF FISHERIES TECHNOLOGY**

ASD GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re- Accredited by NAAC with 'B' Grade)

Jagannaickpur, Kakinada - 533002, East Godavari, AP.

Field Visit 2021-2022

Date	19/02/2022 and 22/02/2022
Conducted through (DRC/JKC/NCC/NSS/Department)	Department of Zoology and Aquaculture Technology
Nature of Activity (Seminar/Workshop/Extn. Lecturer etc.)	Field Trip
Title of the Activity	PCR , Microbiology, Feed and Water analysis lab, In State institute of Fisheries Technology
Name of the Department/Committee	Department of Zoology and Aquaculture Technology
Details of Resource Persons (Name. Designation etc.)	K. Chalapathi Fisheries Development Officer
No. of Students Participated	17
Brief Report on the Activity	Students can acquire the skill of PCR , Microbiology, Feed and Water analysis lab, In State institute of Fisheries Technology
Name of the Lecturers who Planned & Conducted the Activity	M. Vasantha lakshmi HOD in Zoology S. Madhavi Lecturer in Zoology N. Veera Chanti Guest Faculty in Aquaculture Technology.
Signature of the in Charge	 M. Vasantha Lakshmi HOD in Zoology Department of Zoology ASD GOVT. COLLEGE FOR WOMEN KAKINADA-2
Signature of the Principal	 V. N. Srinivas Principal ASD GOVT. DEGREE COLLEGE FOR WOMEN KAKINADA
Remarks	ASD GOVT. DEGREE COLLEGE FOR WOMEN KAKINADA

From
M. Vasantha lakshmi
Lecturer In-charge of Zoology &
Aquaculture Technology,
A.S.D.Govt.Degree College (W) (A),
.Kakinada

To
The Principal,
A.S.D.Govt.Degree College (W) (A),
Kakinada.

Respected Madam,

Sub: Department of Zoology and Aquaculture Technology –Planned for a Field Trip to State Institute of Fisheries Technology –Kakinada – permission Requested - regarding.

I submit that the Department of Zoology and Aquaculture Technology is planning to conduct a field trip to State Institute of Fisheries Technology, Kakinada for the students of III B.Sc CZAqT on 19-02-2022 and 22/02/2022 to expose the students to various research labs and equipment related to aquaculture available at SIFT.

In this connection I request you to kindly permit the students and staff of Zoology and Aquaculture Technology to conduct the activity.

Thanking you madam,

Yours Sincerely,

MV Vasantha Lakshmi
17/2/2022
(M. Vasantha lakshmi)
DEPARTMENT OF ZOOLOGY
A.S.D. GOVT. COLLEGE FOR WOMEN
KAKINADA

From
The Principal,
A.S.D.Govt Degree College for W (A),
Kakinada.

To
The Principal,
State Institute of Fisheries Technology,
Kakinada.

Respected Sir,

Sub: A.S.D.Govt Degree College for Women [A], Kakinada- Department of Zoology and Aquaculture Technology- conduct of Field Trip for III B.Sc (CZAqT)\ (2021-2022) at State Institute of Fisheries Technology, Kakinada -permission requested - Regarding.

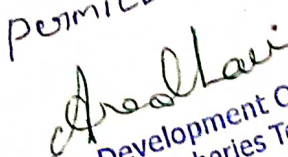
With reference to the subject cited above I request you to give permission for the field trip of Department of Zoology and Aquaculture Technology which is planned on 19-02-2022 and 22/02/2022 to expose the students to activities carried out in the research labs of SIFT and equipment related to aquaculture..

Thanking you Sir

Yours Sincerely,



(Dr. V. Arundhathi)
A.S.D.GOV.T.DEGREE COLLEGE (W)
AUTONOMOUS
KAKINADA

Permitted

Fisheries Development Officer
State Institute of Fisheries Technology
Kakinada

ATTENDANCE CERTIFICATE

The staff and students of Department of Zoology and Aquaculture Technology have visited the research labs, Museum and other facilities at SIFT on 19/02/2022 & 22/02/2022.

A. S. Reddy
FDO, SIFT

Fisheries Development Officer
State Institute of Fisheries Technology
Kakinada

P. Sri Lakshmi
FDO, SIFT

Fisheries
State Institute

Development Officer
Fisheries Technology
Kakinada

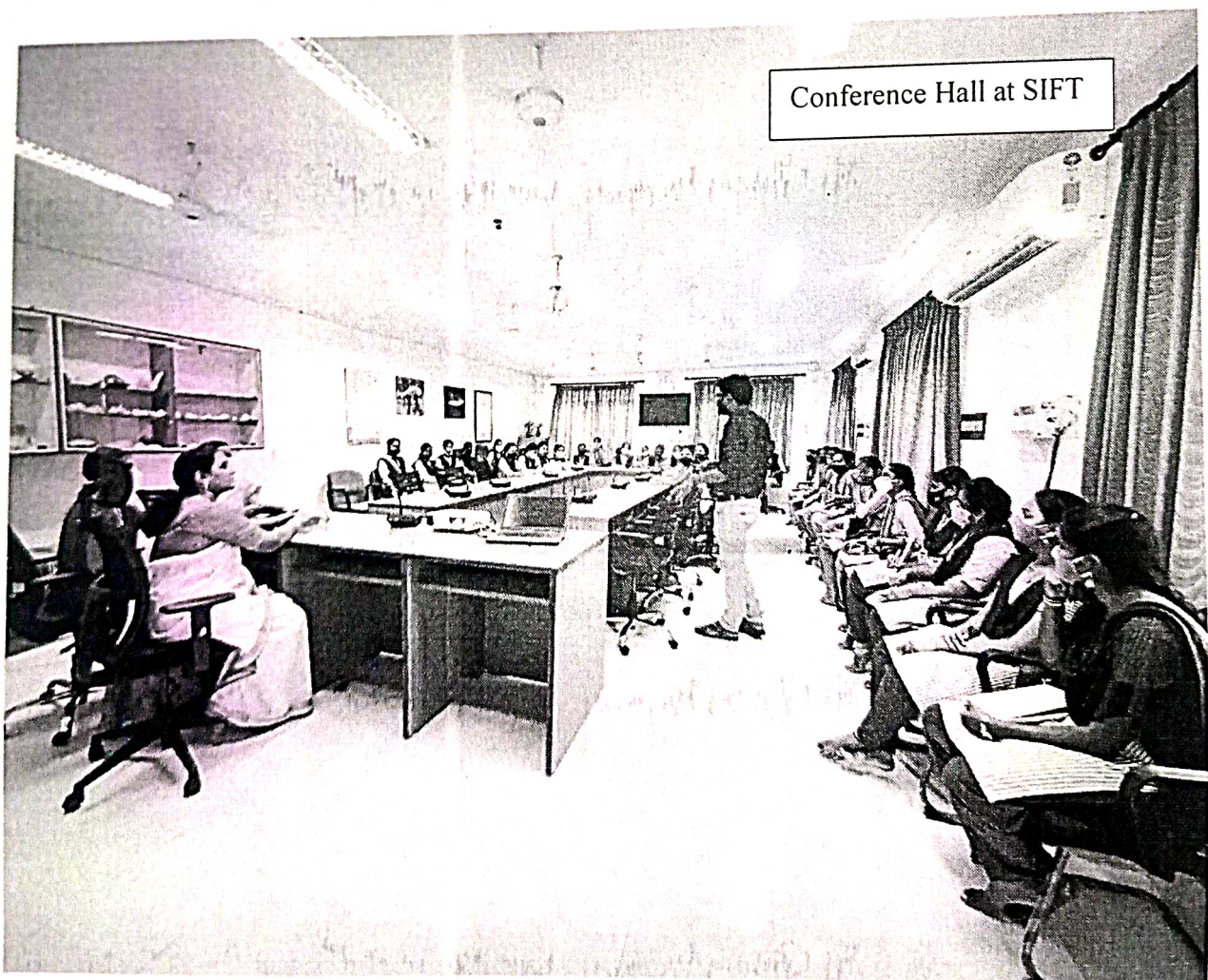
S. Chaitanya
FDO, SIFT

Fisheries Development Officer
State Institute of Fisheries Technology
Kakinada

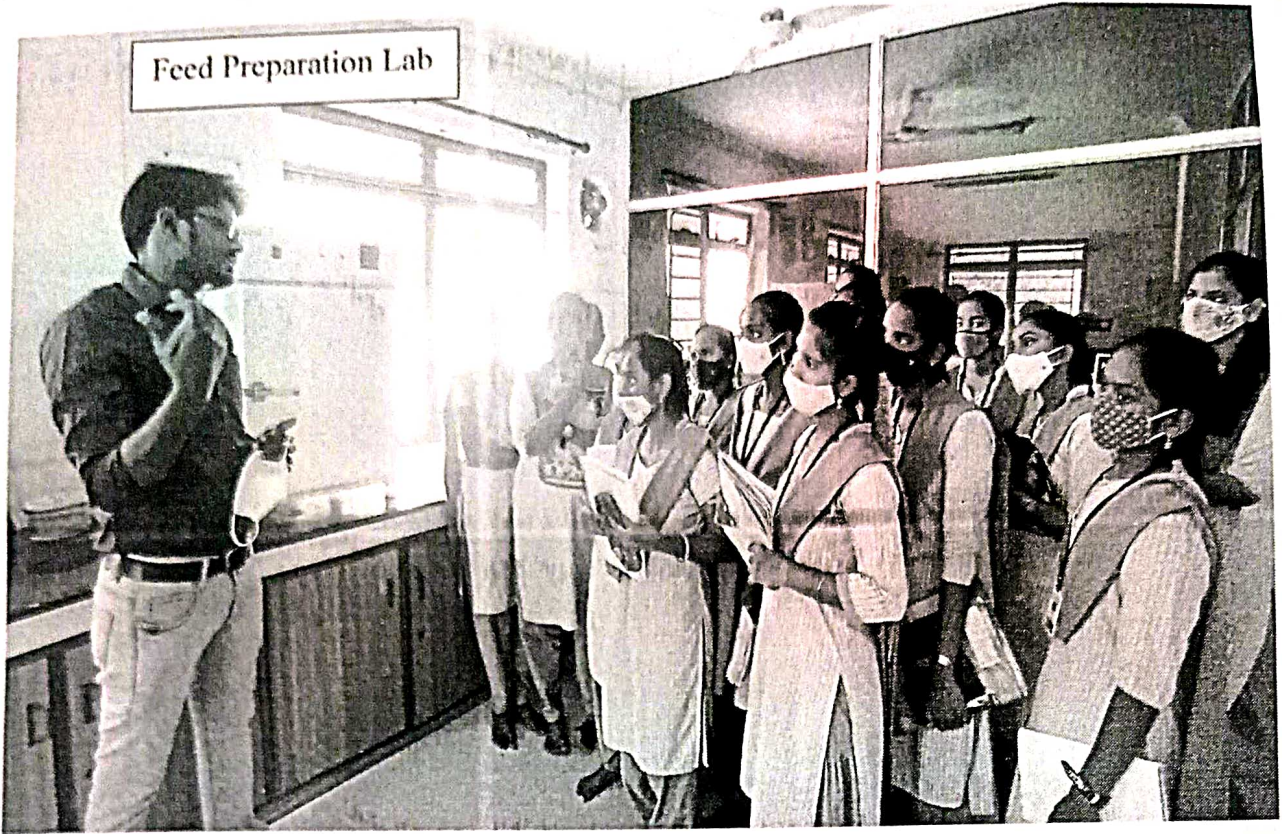
ASD GOVT DEGREE COLLEGE FOR WOMEN (A), KAKINADA
DEPARTMENT OF ZOOLOGY AND AQUACULTURE TECHNOLOGY

Field visit to SIFT (2021-2022)

The Department of Zoology & Aquaculture Technology, ASD GDCW(A) has conducted a field visit for III CZAqT students on 19-02-2022 and 22-02-2022 (Two days) at State Institute of Fisheries Technology (SIFT), Kakinada to expose the students to the latest diagnostic tools and techniques used in Aquaculture in assessing various quality parameters. The students visited PCR lab, Microbiology lab, Soil analysis lab, Feed analysis lab and Water analysis lab. Sri K. Chalapathi, FDO, SIFT has explained working mechanism of machinery used in these labs. 17 students from III CZAqT have participated in the programme. Students visited Aquaria maintained at SIFT and acquainted themselves with aquarium maintenance and different types of ornamental fish. They also visited museum and observed different types of culture and capture fishery.

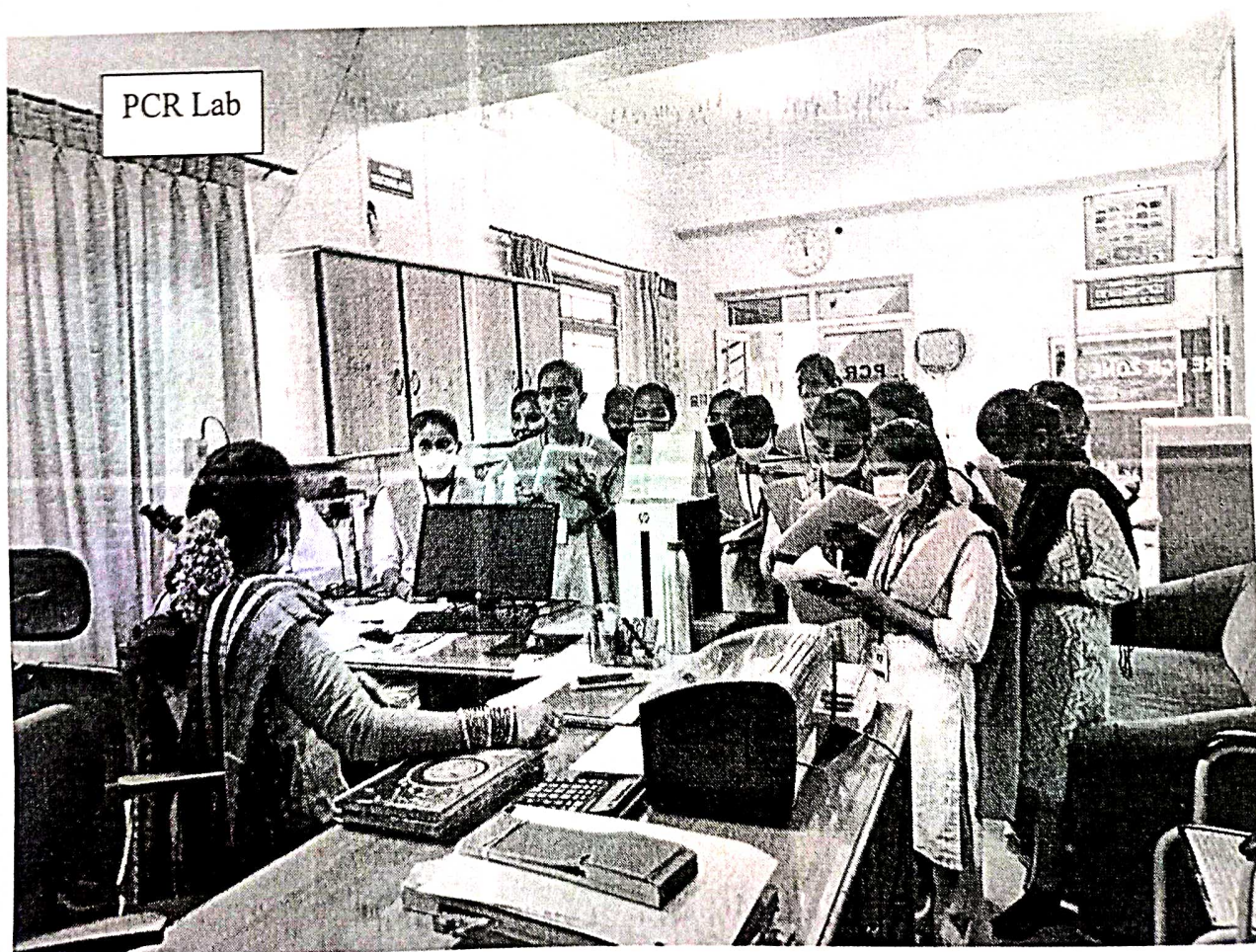


Sri K. Chalapathi, FDO, SIFT briefing about the activities of SIFT





Students Learning about the mechanism of HPLC





THE
RIGHT
THING

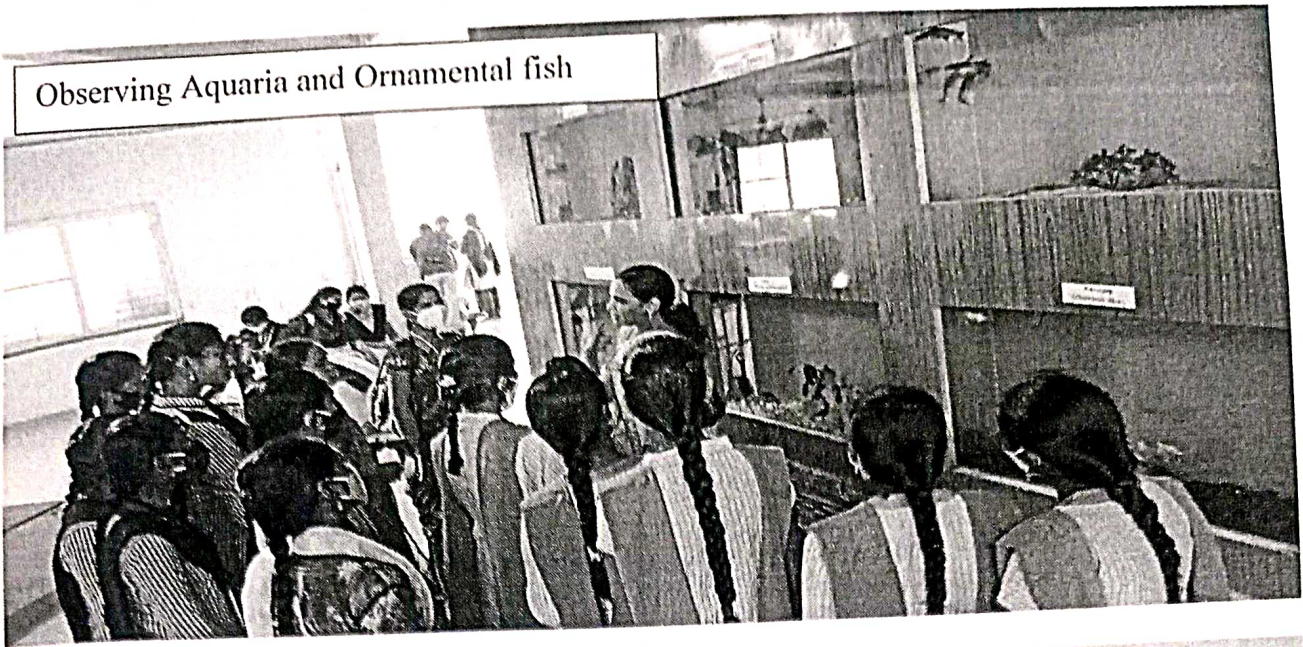
Microbiology Lab



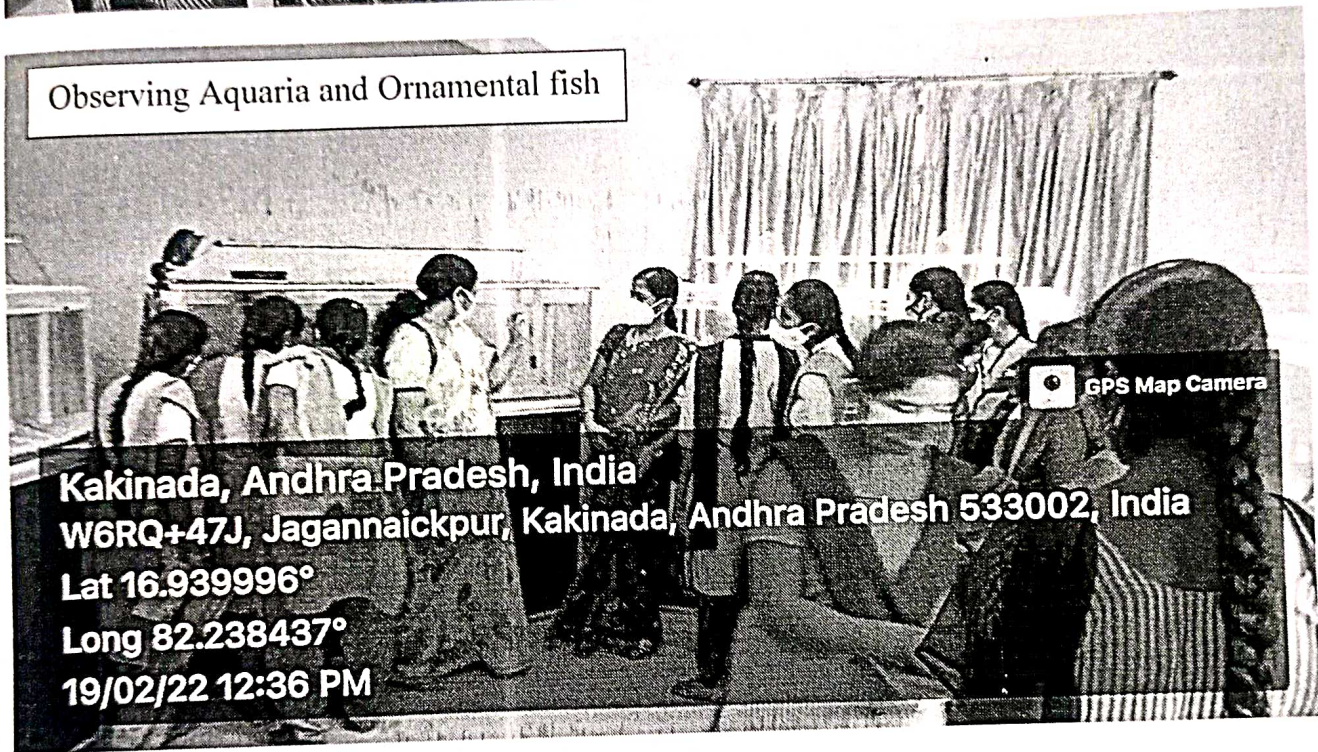
Water Analysis Lab



Observing Aquaria and Ornamental fish



Observing Aquaria and Ornamental fish



Museum visit at SIFT





REPORT

by,
Chandhini M
BSc. CZ Aqt
1936007.

Name :- M. Chandhini
College :- A.S.D. girl degree college [W] [W]
stream :- B.Sc CZ 1st
Name of the Institute visited :- State Institute of Fisheries Technology.
Address :- Jagannayakpur, Kakinada
girl women's college.

Report :-

Intro :-

- ⇒ fishery development office was started in 1958 for the welfare of aqua farmers.
- ⇒ Later it was named as "State Institute of Fisheries Technology" in 1995.
- ⇒ SIFT has the best management practices.
 - contains of 1 year linal - cum - driver training for fishery boys.
 - there are 68 pass out batches upto 3000 students till now in the institute.
- ⇒ Special Trainings :- community based cyclone disaster practices for fisherman

- => academic trainings, certificate courses are offered.
- => trainings for fisherman's society members.
- => "National surveillance programme on Aqua" deals with the new diseases facing in aqua and about the problems which are faced by the farmers.

description :-

There are 6 labs in SIFT

1. water & soil analysis.
2. Microbiology
3. feed analysis
4. PCR - polymerase chain reaction.
5. LCMSMS - Liquid chromatography Mass spectrophotometer.
6. GCMSMS - Gas chromatography Mass spectrophotometer.

Water & soil analysis :-

=> Totally there are 14 tests in water analysis.

4 tests in soil analysis.

water analysis :-

pH	COD	Nitrate
Salinity	BOD	Iron
alkalinity	Calcium	chlorin
hardness	magnesium	phosphate
Disolved O ₂	ammonia	

Soil analysis :-

pH
 Soil organic carbon
 Soil available Nitrogen
 Soil available phosphate.

Microbiology :-

deals with detection of bacterial diseases.

- ⇒ sterilization of glassware by hot air oven.
- ⇒ incubation.
- ⇒ sterilization of culture media in autoclave at 121°C at 15 lbs pressure for 15 mins.
- ⇒ colony counter.
- ⇒ confirmation of the disease in histopathology.

feed analysis :-

There are 6 tests in feed analysis.

- ⇒ ash content
- ⇒ fat content
- ⇒ protein
- ⇒ carbohydrate
- ⇒ fibre content
- ⇒ lipid content

There is also a shortcut method - IR method.
gives all accurate measurements at a time.

P.C.R. - polymerase chain reaction.

P.C.R. deals with virus detection in shrimp.

- ⇒ plucking the shrimp into the pond when it was 8 days old.
- ⇒ virus test is taken before the transfer of shrimp from nursery pond to growout tank.
- ⇒ it is of two types
 - ⇒ Nested PCR
 - 2. RT PCR
- ⇒ Nested PCR is a lengthy process & take much time.
- ⇒ RT PCR is a shortcut & gives the accurate result within 2 hours.

LCMSMS :- Liquid chromatography Mass spectrophotometer.

LCMS test deals with the banned antibiotic tests like chlorophenicol.
=> It also involves HPLC - high performance liquid chromatography.

GCMSMS :- Gas chromatography Mass spectrometry.

=> deals with testing of pesticides in soil & water.

=> also used to detect and measure the contaminants from
spoilage or adulteration, which may be harmful.

=> aflatoxins are also be tested.

S.No	Regd No	Name of the student	Signature of Students
1.	1936001	Adapa Santhi Rupa	A. Santhi Rupa.
2.	1936002	Kadali Lakshmi Sai Lalitha	K. Lakshmi Sai Lalitha
3.	1936003	Mosa Suguna	M. Suguna.
4.	1936004	Baddi Naga Durga Bhavani	B. Naga Durga Bhavani
5.	1936005	Gudipalli Hiranmai Vijaya Lakshmi Phaneendhra	G. Phaneendhra
6.	1936006	Lingala Durga Bhavani	Lingala Durga Bhavani
7.	1936007	Mediseti Chandhini	Mediseti Chandhini
8	1936008	Moka Lakshmi	moka Lakshmi
9	1936009	Mylapalli Bharathi	M. Bharathi
10	1936010	Badda Vennisha Rani	B. Vennisha Rani
11	1936011	Balla Purnakala Chinta Kumara	B. Purnakala Chinta Kumara
12	1936012	Donipati Srivani	Donipati Srivani
13	1936014	Harshitha Chekka	Harshitha Chekka
14	1936015	Maredumilli Usha Rani	M. Usha Rani
15	1936016	Pitta Suguna Kumari	P. Suguna Kumari
16	1936017	Pyla Pushpa Latha	P. Pushpa Latha

**A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN
(AUTONOMOUS), KAKINADA**

DEPARTMENT OF COMMERCE

2021-22



INDUSTRIAL AND ENVIRONMENTAL TOUR

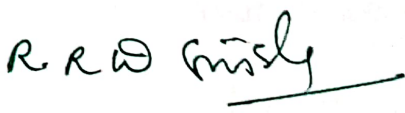
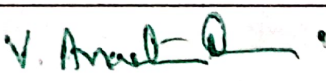
ON

30-03-2022

CONDUCTED BY

DEPARTMENT OF COMMERCE

**P.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN
(AUTONOMOUS), KAKINADA
DEPARTMENT OF COMMERCE**

Date	30-03-2022
Conducted through (DRC/JKC/ELF/NCC/NSS/DEPT.,etc)	COMMERCE DEPARTMENT
Nature of Activity (SEMINAR /WORKSHOP/EXTENSION LECTURE, etc.)	Extension Activity
Title of the Activity	INDUSTRIAL AND ENVIRONMENTAL TOUR
Students Participated	64
Name of the Department/ Committee	COMMERCE
Details of faculty member who organized the programme (Name, Designation, etc.)	N.P.V.Lakshmi Devi, Dr.G.Sowjanya, V.Srinivasa Rao Lecturer in Commerce.
Brief Report on the Activity	This Industrial Tour program me is organized for III B.Com students in the part of their project work on Retail Marketing. In this connection they has visited Uppada weavers and learned how they are bringing the pattu silk for making Uppada Pattu Saris and how much they were earning per sari what type of retailing skills they are using etc..
Signature of the Department Incharge/Convener of the Committee	
Signature of the Principal	
Remarks	

Date : 28-03-2022

KAKINADA

From
R.R.D.Sirisha
I/C Departement of Commerce
A.S.D.GOV'T DEGREE COLLEGE (W) (A)
Kakinada.

TO
The Principal
A.S.D.GOV'T DEGREE COLLEGE (W) (A)
Kakinada.

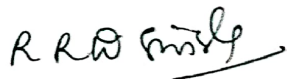
Respected Madam,

Sub : Req- Dept of Commerce is Planning to visit Uppada Weavers
as part of Industrial and Environmental Tour- Reg.

It is bringing to your consideration that as part of III B.Com Project work on Retail Marketing the Dept of Commerce want to visit Uppada Weavers to learn the Retailing Skills. So Madam, kindly permit us to visit the Uppada weavers.

Thank you madam,

Your's Sincerely



Smt.R.R.D.Sirisha

