



**TELANGANA TRIBAL WELFARE
RESIDENTIAL COLLEGE (GIRLS), KOTHAGUDEM**
Bhadradri Kothagudem District, Telangana State – 507101
(Affiliated to Kakatiya University, Warangal, Telangana)
Website: <https://ttwrdds.ac.in/.Kothagudem>



DEPARTMENT OF COMPUTER SCIENCE

ACADEMIC YEAR: 2018-19 to 2022-23



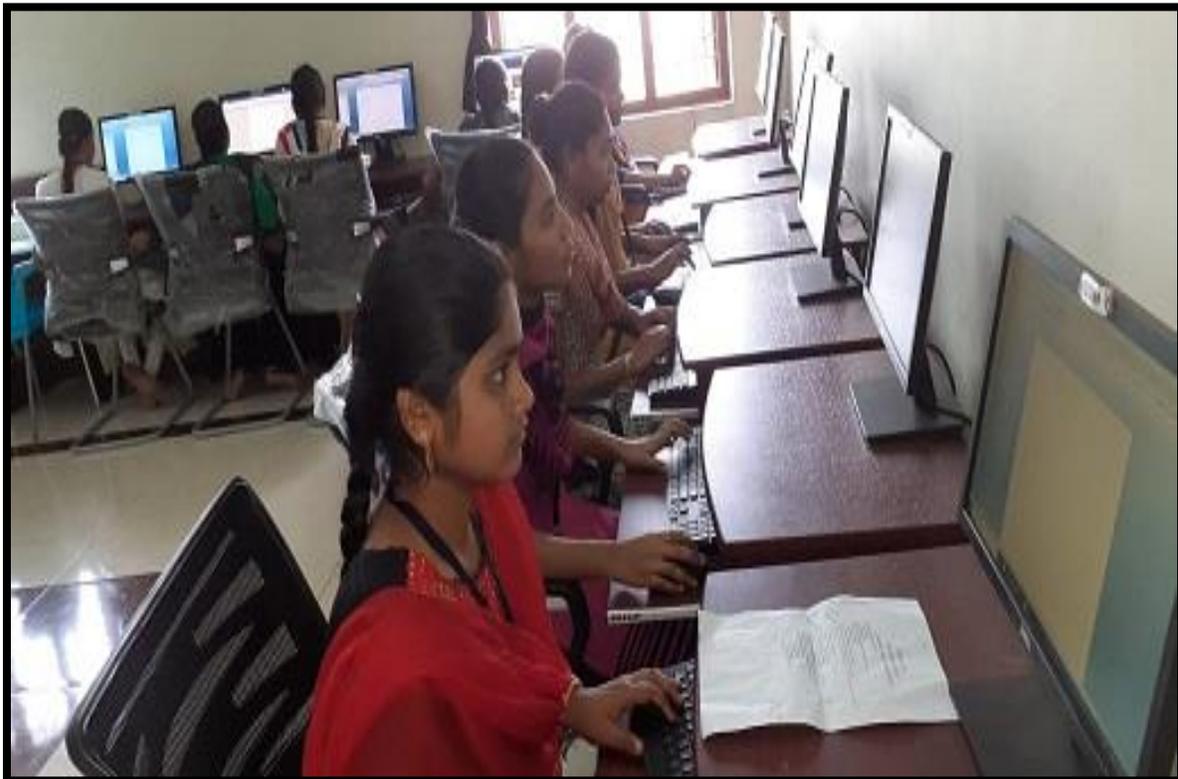
FIELD TRIPS

DATE: 31-08-2018

FIELD VISIT: TECH SHORE

LOCATION: PALVANCHA

PARTICIPANTS: I YEAR BS.C-MPCS & B.COM (CA)



- As a part of field trip, we went to TECH SHORE COMPUTER COURSE CENTER on 31-08-2018.
- KoteswaraRao sir explained about computer Software's like application software's and system software's and Computer components like hard disk, motherboard, RAM, Monitor, key board, monitor, printer and scanner etc.,

- KoteswaraRao sir demonstrated about Computer Lab LAN Connection and shown different types of buses, Routers and also explained about Network types like LAN, WAN and MAN.
- By end of this session students came to know about Computer Hardware components, Input devices and Output devices what are the software's used for general purpose, special purpose and all Computer Basics.

DATE: 17-09-2020

FIELD VISIT: BSNL OFFICE

LOCATION: PALVANCHA

PARTICIPANTS: I & II BS.C-MPCS



- AS a part of field trip, we went to Telephone exchange office on 17-09-2020.
- They demonstrated how telephone signals passes and also explained about LAN, WAN topologies.
- Students were felt very happy and acquire technical and practical knowledge.
- In addition to internet services, it offers phone and mobile services. The largest provider of communications services in India is BSNL.

DATE: 18-09-2020

FIELD VISIT: KOTHAGUDEM THERMAL POWER STATION

LOCATION: PALVANCHA

PARTICIPANTS: I & II BS.C-MPCS



- AS a part of field trip, we went to KOTHAGUDEM THERMAL POWER STATION AT PALVANCHA on 18-09-2020.
- Students came to know about Power production from coal and Boilers.
- Computers are used heavily by electric utilities for customer billing, employee payrolls, and record keeping. Computers are also used to plan, monitor, and in some cases control the power system and its components.

TOPIC: INTERACTION BETWEEN THE STUDENTS AND THE WORKING INDUSTRY

DATE: 05-05-2022

FIELD VISIT: IT HUB

LOCATION: KHAMMAM

PARTICIPANTS: I & II BS.C-MPCS



- We the department of Computer Science Staff, Lab Programmer & III B.SC-MPCS went to Industry visit, IT HUB at Khammam.
- The Students of III B.SC-MPCS Know about current opportunities in IT Companies and Start-up Entrepreneur.
- They taught us key points like, Communication Skills, Soft Skills, Personal Impact Skills, Technical Skills, Skills enhanced and Partnership division, How to face an Interview, Task Registration.
- At the end of this session, students came to know about technical skills and opportunities in IT sector.

DATE: 23-03-2023

FIELD VISIT: BSNL OFFICE POST OFFICE AREA

LOCATION: KOTHAGUDEM

PARTICIPANTS: III & II BS.C-MPCS





- AS a part of field trip, we went to Telephone exchange office at Kothagudem on 23-03-2023.
- They demonstrated how telephone signals passes and also explained about LAN, WAN topologies.
- Students were felt very happy and acquire technical and practical knowledge.
- Technology used in BSNL OFFICE is to provide fixed-line services and landline using CDMA technology and its own extensive optical fiber network. BSNL provides Internet access services through dial-up connections as prepaid, NetOne as postpaid, and DataOne as BSNL Broadband.

FIELD TRIP

TOPIC: CYBER CRIME Department

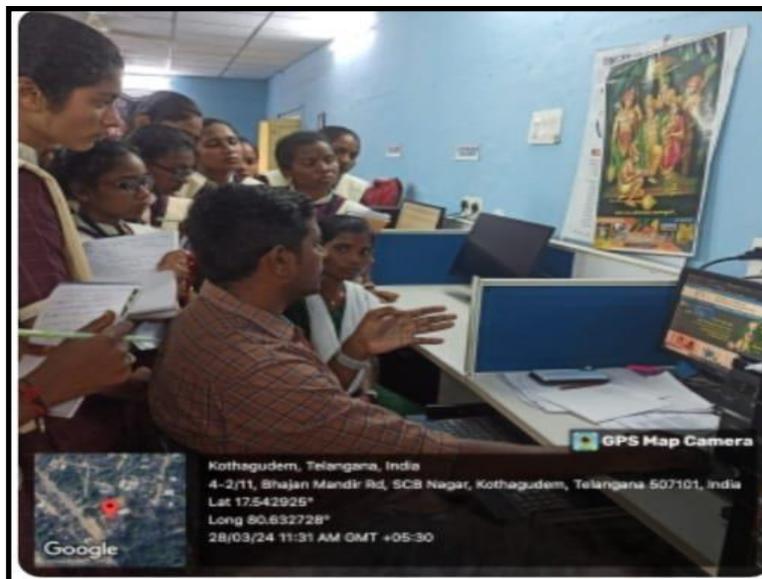
DATE: 28-03-2024

PARTICIPANTS: IIBCOM (CA) IIMPCS

LOCATION: SP OFFICE, KOTHAGUDEM

We department of computer science went to field trip along with final years B.S.C (MPCS) and BCOM(CA).

- In this visit Mr. B. Sravan Kumar, PC Demonstrated about Cyber Crime.
- How to register in Cyber Crime website.
- How to register CRT how to give complaint in Cyber Crime portal.
- Explained about crimes in social media like FACEBOOK, WHATSAPP, INSTAGRAM, WEBSITE URL, TWITTER, and YOUTUBE.
- Students also asked some questions regarding social media.





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FIELD TRIP - 2024-25

Department Of Computer Science

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From
P.Anuradha
Principal(FAC)
tgtwrde(g)
kothagudem

To
The Chief Engineer,ktps v&vi stages
Palvancha,
bhadradi kothagudem,
Telangana 507115.

Re.No.-----49-----/ Acad // 2024-25.Dated:-----

Sir,

Subject: Requesting to Grant Permission to Organize Educational Field Trip to Kothagudem Thermal Power Station V&VI Stage at Palvancha,

The Department Of Computer Science ,Economics, Requesting to grant permission to organize an educational Field Trip for B.Sc M.P.Cs & B.A Final Year Students, to Visit the Kothagudem Thermal Power Station V&VI Stage Palvancha. This trip helps to enhance Students Learning experience behind the Classroom.

The Itinerary Includes;

1. Guided Tour of the KTPS Cooling Plant,
2. Interactive Session with the Officials,
3. Educational Activities aligned with the Curriculum,

We assure diligent arrangements for transportation, Supervision Safety and measures with utmost Care.

This Trip aligns with Our College’s Educational Objectives, Enhancing Students Understanding of Thermal Power Plants Significance and functioning.

We,kindly request your approval as well as Support.

Thanking You Sir .

Yours faithfully,
P. Anuradha
PRINCIPAL
TGTWR Degree College (GIRLS)
KOTHAGUDEM - 507115



TELANGANA POWER GENERATION CORPORATION LIMITED

KOTHAGUDEM THERMAL POWER STATION – V&VI STAGES, PALONCHA

Phone No:08744-255275 Fax: 08744-255272 Email:ce.ktps5@tggenco.com

From
The Chief Engineer,
Operation & Maintenance,
KTPS- V & VI Stages,
Paloncha, TG-507 115.

To
The Principal,
TGTWR Degree College (Girls),
Kothagudem,
Bhadradi Kothagudem(Dist), Telangana.

Lr. No. CE/O&M/ KTPS /V&VI /DE / Safety/ADE/VI / F. 18 / D. No.121 / 2025, dt 25.02.2025

Sir,

Sub: KTPS -V&VI stages – Safety Division - Permission for visiting KTPS -V&VI stages, Paloncha to B.Sc M.P.C & B.A Final Year Students of TGTWR Degree College (Girls), Kothagudem, Bhadradi Kothagudem(Dist), TS- Permission Accorded - Regarding.

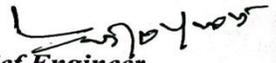
Ref: 1) Your request letter dated 24.02.2025 and received on 25.02.2025

With reference to your letter cited above, the permission for plant visit is granted to 100 Nos B.Sc, M.P.C & B.A Final Year Students and 10 Nos Staff from TGTWR Degree College (Girls), Kothagudem, Bhadradi Kothagudem(Dist), Telangana *on 28.02.2025* for visiting KTPS-V&VI stages

- 1). 1st Batch: 50 Nos Students & 05 Nos Staff from 03:00 P.M to 04:00 P.M**
- 2). 2nd Batch: 50 Nos Students & 05 Nos Staff from: 04:00 P.M to 05:00 P.M**

All necessary safety precautions are to be strictly followed during the visit. It may please be noted that TGGENCO will not be responsible for any kind of accident to the staff and students within the plant premises during the above said period. You are requested to complete your visit 1st batch before 04:00 P.M and 2nd batch before 05:00 P.M. This is also to inform that taking of photos is strictly prohibited in the plant and all the mobile phones shall be handed over to the SPF duty officer at main gate.

Yours faithfully,


Chief Engineer
O&M / KTPS -V & VI stages

Copy to: The Superintending Engineer / O&M / KTPS-V&VI Stages for information please
Copy to: The Duty officer SPF / KTPS-V&VI stages - is requested to depute two Security Constables to escort the visitors till they leave the site.

Introduction

A Field Trip To A Thermal Power Station Provides Valuable Insights Into How Electricity Is Generated From Heat Energy. This Report Details The Observations And Learning From Our Visit To KTPS On 28.02-2025

2. Objective The Primary Objective Of The Field Trip Was To Understand The Working Principles Of A Thermal Power Station, Including Fuel Combustion, Steam Generation, Turbine Operation, And Electricity Production.

3. Overview Of The Thermal Power Station

- **Location:** Paloncha
- **Capacity:** 500 MWH
- **Fuel Type:** Coal, Water
- **Year Of Establishment:** 1961
- **Operating Company:** KTPS

4. Working Principle The Thermal Power Station Operates On The Rankine Cycle, Where:

1. **Fuel Combustion:** Coal In A Boiler To Produce Heat.
2. **Steam Generation:** The Heat Converts Water Into High-Pressure Steam.
3. **Turbine Operation:** The Steam Drives A Turbine, Converting Thermal Energy Into Mechanical Energy.
4. **Power Generation:** The Turbine Is Connected To A Generator, Producing Electricity.
5. **Cooling System:** The Used Steam Is Condensed Back Into Water And Recycled.
6. **Emission Control:** The Plant Employs Various Methods To Reduce Environmental Pollution, Including Electrostatic Precipitators And Scrubbers.

5. Key Observations

- **Control Room:** Monitors And Controls The Entire Power Generation Process.
- **Boiler Section:** Generates Steam By Burning Fuel.
- **Turbine Hall:** Houses The Steam Turbine And Generator.
- **Cooling Towers:** Help In Cooling And Recycling Water.
- **Ash Handling System:** Disposes Of Ash Generated From Combustion.

6. Safety Measures The Power Station Follows Strict Safety Measures, Including:

- Personal Protective Equipment (PPE) For Workers.
- Regular Maintenance Checks.
- Emergency Response Protocols.

7. Environmental Considerations Thermal Power Stations Contribute To Pollution, But Mitigation Measures Include:

- Use Of Electrostatic Precipitators To Reduce Particulate Emissions.
- Proper Ash Disposal Techniques.
- Implementation Of Carbon Capture Technologies.

8. Conclusion The Field Trip To The Thermal Power Station Was An Informative Experience, Enhancing Our Understanding Of Large-Scale Electricity Generation. It Highlighted The Significance Of Energy Efficiency, Safety Measures, And Environmental Protection In Power Production.

9. Recommendations

- Adoption Of Cleaner Energy Sources Like Solar And Wind To Complement Thermal Power.
- More Advanced Pollution Control Technologies.
- Enhanced Safety Training Programs For Workers.

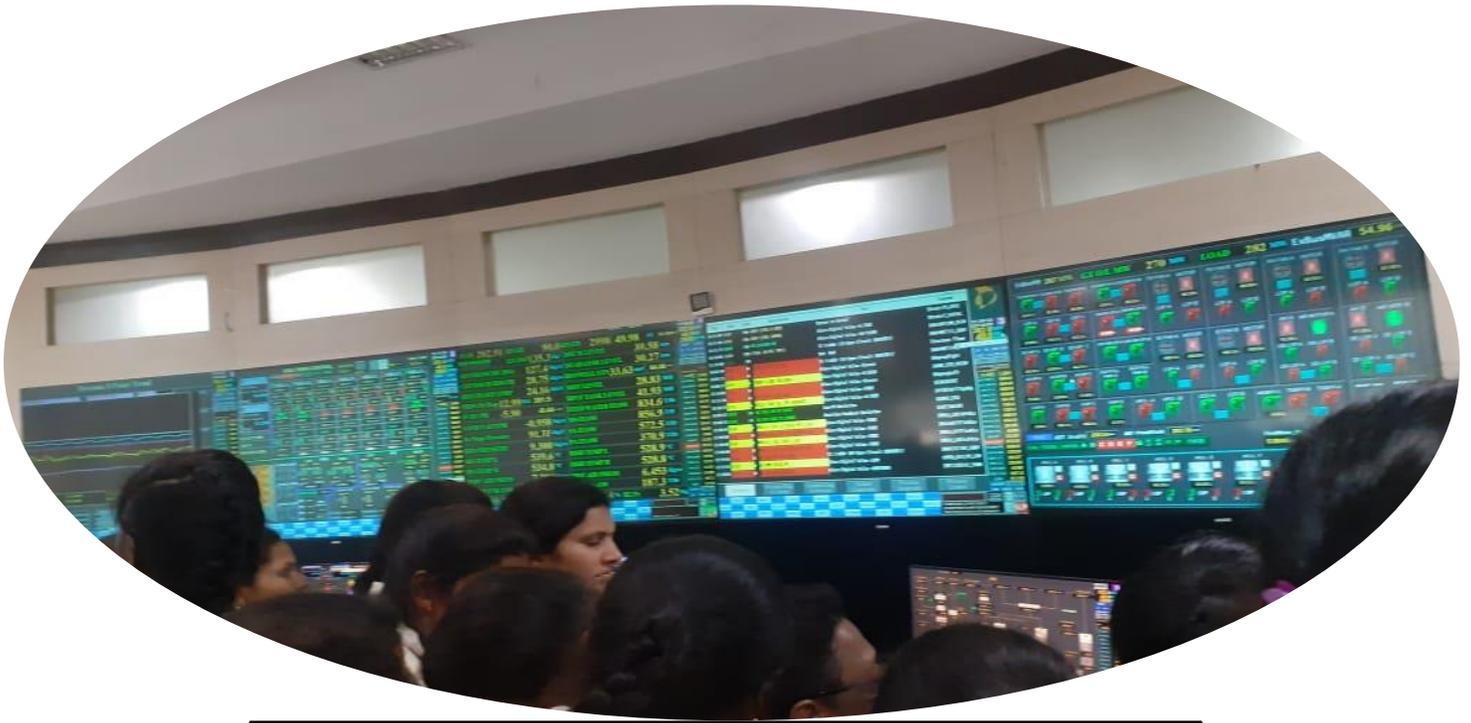
PHOTO GALLERY



COAL BURNER



CONTROL ROOM







 **GPS Map Camera**



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